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**The Role of Purchasing in the Management and
Performance of Supplier Relationships:
An Empirical Investigation in Service Organisations**

by

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A thesis submitted in partial fulfilment of the requirements for the
degree of Doctor of Philosophy

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C. P Cavafy (1863 - 1933)

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Declaration

I, Mihalis Giannakis, hereby declare that this thesis, submitted in partial fulfilment of the requirements for the degree of Doctorate of Philosophy represents my own work and has not been previously submitted to this or any other institution for any degree, diploma or other qualification.

Abbreviations used in the thesis

SCM- Supply Chain Management
SR – Supplier Relationship
PD – Purchasing Department
BR – Business Relationship
SD – Supplier Development
IOR – Inter-organisational Relationship
IMP – Industrial Marketing & Purchasing
TCA – Transaction Cost Analysis
TCE – Transaction Cost Economics
KPI – Key Performance Indicator
SLA – Service Level Agreement
CPO – Chief Purchasing Officer

Structural Variables

CLT – Calculative Trust
CT – Cognitive Trust
NT – Normative Trust
AP – Authority Power
CP – Control Power
IP – Influence Power
CI – Composition Involvement
SI – Scope Involvement
II – Intensity of Interaction
EC – Effort Commitment
LC – Loyalty (Commitment)
LEC – Length of Relationship (Commitment)

Abstract

This thesis investigates the role of purchasing managers (and departments) in supplier relationships (SRs) and assesses the impact of their role on SRs' performance.

Driven by the importance of outsourcing in organisations, there is an intense interest in academia in the study of SRs and an increased awareness that purchasing has an important role to play in their management. In the literature however there appears to be an incoherent view of the actual role of purchasing in SRs, which is limited to anecdotal accounts that take the vague assumption that purchasing managers and departments, by virtue of their position in organisations, manage the SRs. The aim of this thesis is to push theory forward by exploring this role in a systematic way and to investigate whether and how it varies across SRs that involve the exchange of products/services with certain structural characteristics. In that way it generates insights about how the purchasing function can be leveraged to better manage SRs.

A multiple case study research design is employed in order to achieve a deeper and greater understanding of the processes that define the actual role of purchasing. Empirical research is conducted in two large service organisations in the UK (a financial organisation and an airport operator), examining seven diverse SRs that involve the exchange of products and services with different levels of asset specificity and criticality. An integrated framework of various activities that purchasing managers are involved in for the management of SRs is developed initially. The way that purchasing managers conduct these activities in the different SRs is then examined to generate insights about the actual role of purchasing in the individual SRs that is defined in terms of four variables (level of contribution to the development of *trust* in the SR, level of *power* in the SRs, level of *involvement* in the SR and level of contribution to the development of *commitment* in the SR). With the use of a gap analysis model to assess the performance of the individual SRs, the impact of the role of purchasing on SRs performance is finally extrapolated. The results provide support for the following primary conclusion.

The widely held assumption that purchasing managers are in effect supply chain managers is tempered by the findings of this research, which observed a far more limited role for purchasing managers (and a negative impact) in the management of SRs relating to products/services which have high levels of criticality and asset specificity. Their negative impact in such SRs was also observed to have implications for the dyadic relationship of the purchasing department with the internal (customer) departments, which under certain conditions can create problems of coordination in the organisations.

From a managerial point of view this thesis demonstrates in a systematic way the contribution and role of purchasing to SRs. The framework of activities that is developed may provide a useful reference point for the auditing and improvement initiatives of purchasing professionals in SRs. From this, guidance about the types of situation in which certain activities may be more important than others will provide a useful guide to how purchasing departments may be involved in an effective and efficient way. Academically, this thesis utilises an innovative conceptual method in evaluating SRs by incorporating two major theoretical frameworks and provides with insights in delineating the actual role of the purchasing function in SRs. Finally, the thesis contributes to the ongoing debate of the establishment of a contiguous Supply Chain Management discipline, by investigating its problem domain.

Chapter 1 - Introduction

"I know nothing except the fact of my ignorance"
Socrates (469 - 399 BC)

The research presented in this thesis is about the activities conducted by purchasing managers in supplier relationships (SRs), the role that purchasing (managers and departments) have for their management and the impact that this role has on their performance. Its primary focus is the exploration and identification of the 'actual'¹ role that purchasing has in the management of SRs (which is extrapolated by identifying firstly their involvement in certain activities and by analysing the modus operandi whereby they conduct them). Interesting observations are drawn about the impact that purchasing has on the performance of SRs, however as this is not the main area of investigation in this thesis, the results are tentative and can be tested using statistical methods.

The issues that are addressed have received insufficient attention in the purchasing literature and constitute some of the challenges faced by purchasing professionals today. The thesis has the ambitious aim of beginning a research stream in the fields of purchasing and supply management towards exploring the role of purchasing in SRs, and investigating how SRs can be managed effectively to leverage a range of revolutionary advances in business performance.

The research reflects the *'thesis'* that the management of business relationships² (BRs) is (perhaps) the most important issue that needs to be addressed by purchasing managers today.

This view has been inspired by an extensive study of the literature of the academic fields of

¹ The word actual is used to differentiate the role that is observed by the empirical research to the potential role that purchasing may have that is advocated by the literature, or by the purchasing strategy of the organisations involved and does not imply 'scientific' objectivity.

² The term BRs has been synonymously used with the term Inter-organisational Relationships (IORs). In this thesis IORs refer only to relations that cross the boundaries of an organisation in order to distinguish them from other forms of BRs (i.e. intra-organisational) and the terms *relationships* and *relations* are used interchangeably referring to the same construct.

purchasing and SCM - which shaped my *weltanschauung* and at the same time my curiosity about the way organisations operate today - and can be reflected in the current research agenda of these fields (see for example Carter et al., 2000). It is contended that these fields traditionally focused mainly on the management of production and procurement processes. Following the technological and economic developments over the last fifteen years there has been a paradigm shift, to cover issues that traditionally concerned areas such as industrial marketing, strategy and institutional economics (as the management of BRs).

This chapter introduces the research problem and sets the scene for the rest of the thesis. Its aims are to demonstrate why the research topic is important in the academic and business worlds and worthy of study, and to establish the necessary foundations to understand the rationale for the research problem. It is organised in two sections:

- The first section begins with discussing the academic/industrial backgrounds and motivation for the study, presents the objectives of the research, outlines the basic themes that the thesis concentrates on, and positions it in the general management research area.
- The second section outlines the structure of the thesis by presenting the main issues covered in each chapter.

1.1 The nature of the research problem

1.1.1 Background of the study

SRs have attracted considerable attention in academia over the last two decades. To some extent, this is the corollary of the emergence of new forms of organisational structures that were accelerated by the latest technological, political and demographic changes in the global marketplaces. It is widely acknowledged today that business performance improvements (both financial and non-financial) that result from their effective management are significant and indisputable. The automotive industry in particular is full of anecdotal and documented evidence of such success stories that evangelise closer, more co-operative relationships

between suppliers and buyers, emanating from the immense success of the Japanese car manufacturers in the 1980s (see for example Helper, 1991a; Helper and Sako, 1995; Dyer and Chu, 2000; Lamming, 1993; Ford, 1997).

The role of purchasing merits particular consideration in the management of SRs due to its inherent interface with the suppliers of outsourced products or services. Until the early 1990s the purchasing function was usually presented in much of the Operations Management, Logistics and Industrial Marketing literatures as being a passive, clerical, and predictable activity. The realisation that the integration of supply chains could be a source of competitive advantage for organisations (which was again a natural evolution of the changing socio-economic, technological and political climate), and as a consequence the increasing importance of their management, gradually granted a more strategic role to purchasing in organisations, focusing on issues such as the management of SRs rather than the ordering and replenishing routines of the products and services supplied. In academia, it is only in recent years that the purchasing function has received attention. However, as chapter 3 discusses, today it attracts considerable attention in management research, as there is increasing awareness of its role in managing organisational resources in order to increase organisational performance (see for example Lamming, 1993; Cousins, 1994; Croom, 1996; Wynstra, 1998; Gadde and Hakansson, 2001).

1.1.2 Starting point of the thesis

The *terminus a quo* for this research has been the seminal book *'The Machine that Changed the World'* (Womack et al., 1990). This book is based on a five-year research project (IMVP³), in which researchers from both the USA and the UK investigated the differences between the most successful automotive companies and their competitors. The principal finding was that the success of some manufacturers was rooted in the implementation of Japanese innovative

³ International Motor Vehicle Programme.

production methods that did not espouse the traditional, mass production philosophy; these Japanese production methods were named *lean production*.

The work of Professor Lamming (Lamming, 1993) of the University of Bath (who also participated in the IMVP) has been influential in developing the research agenda for this thesis. Building on the work of the IMVP, in his book '*Beyond Partnership: Strategies for Innovation and Lean Supply*', Lamming studied the BRs that 'lean' manufacturers have with their suppliers, and developed a normative model for supply management which he called the *lean supply model*, positing that closer BRs between suppliers and buyers have significant opportunities for organisational success. His work coincided with that of researchers from the other side of the Atlantic, notably that of Professor Helper that studied the differences in supply management between Japanese and American manufacturers (Helper, 1991b), and in a later work the performance advantages that organisations have when engaging in long term closer relationships (Helper and Sako, 1995). A series of books, journal articles and doctoral dissertations have been addressing the issue of closer SRs since then.

The IMVP and the subsequent works of scholars that studied the *lean* concept represent arguably one of the most influential research streams in the field of Operations and Logistics Management. These works provide guidance, with detail and accuracy, in understanding how world-class manufacturers operated in the late 1980s and early 1990s, the relationships they had with their suppliers and the way they delivered their products. The lean production and supply techniques represented a *paradigm shift* in Operations Management research and in many ways the *lean* concept changed the way that companies in the western world managed their processes, their suppliers and their logistics networks.

The 'lean' researchers however did not take into account (and could not possibly anticipate) the major changes that revolutionised the way corporations and supply chains operate:

- the *electronic* revolution that took place in the early 1990s with the introduction of the World Wide Web, the internet, and the development of third generation digital technologies, that enable organisations to exchange information in virtual environments.
- the *knowledge* revolution in which in the more complex, service-oriented, volatile and uncertain global economic environment, success is driven by technological advances and innovations that rely more on the level of knowledge and skills of people.

The thesis is based on an explicit assumption that in most of the Operations and Strategic Management literatures, SRs are treated as developing between *monolithic* entities as firms. With the emergence of new forms of governance (like networks and virtual corporations), this traditional approach fails to address the underlying issues pertaining to their actual management. The role of the purchasing function in the present context of SRs set by the global knowledge-based and electronic new economic conditions in particular, has not been researched thoroughly. There has been limited research interest to demonstrate how individual purchasing managers interact with supplier managers and internal customers, what their role is in SRs, and how their actions can influence their performance. Previous research has examined the evolving roles and responsibilities of purchasing professionals within the organisations (see for example Johnson et al, 1998), but existing knowledge in understanding the 'actual' mediating role of purchasing managers in the new forms of inter-organisational co-operation is mainly characterised by anecdotal, descriptive accounts which take the vague assumption that purchasing managers and departments, by virtue of their position in organisations, manage the supply chains. Furthermore, most research in the area exclusively focuses on experiences in the manufacturing sector. The increasing trend of *servitisation* of economies and the peculiarities of services has made research in the service sector a substantial context for the study of buyer SRs in the current social and economic climate.

It is contended that there appears to be an incoherent view of the exact activities and responsibilities of purchasing managers in SRs, how these activities are conducted, and what the 'actual' mediating role of purchasing is in these relationships. The way in which this role influences the performance of SRs has not been thoroughly tested in contexts other than manufacturing. Against these gaps in the Operations Management and SCM literature, this thesis sets out to provide a systematic, detailed study of the contribution and the role of purchasing in SRs in service organisations.

Research objectives and questions

In this direction four principal research questions are explored.

1. How do purchasing managers contribute to the management of SRs?
2. How do contextual factors of the products/services exchanged influence the implementation of the activities conducted by purchasing managers and how does their significance vary across different SRs?
3. What role do purchasing managers (and PDs) have in the management of SRs?
4. How does the role of purchasing in SRs affect their performance?

The rationale for the sequence of the research questions that are presented in the thesis is illustrated in Figure 1.1 below.

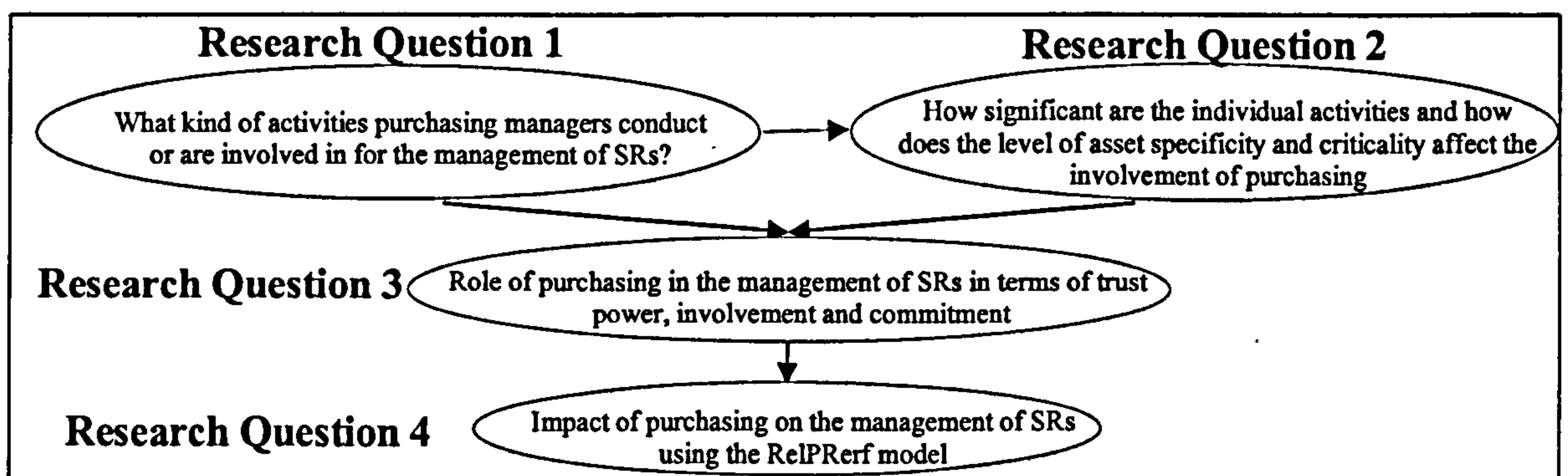


Figure 1.1 Rationale for sequence of research questions

1.2 Scope of the thesis

The research is conducted in two large service organisations in the UK. It explores the activities that purchasing managers conduct in several SRs that involve the exchange of products/services with different structural and organisational characteristics (and investigates the way they conduct them), in order to obtain insights about their mediating role in their management. It is thus a contextual research that is constrained by the peculiarities of the service organisations that participate in the study and the characteristics of the individual SRs. Its primary objective is to explore how purchasing managers contribute to the management of SRs but not to interpret their role, nor to explain their behaviour. The thesis does not rely on a large survey of service organisations, thus the results are not generalised to test a particular theory or verify earlier research. Its ultimate aim is to advance research in the purchasing and SCM fields by initiating a research agenda to focus on issues related to the *professionalisation* of the purchasing function and the more effective management of SRs. It intends to contribute to the body of knowledge of two academic/management areas:

- The purchasing and SCM literatures, by firstly providing an analytical integrated framework of activities that purchasing managers conduct in SRs. This framework could be used to benchmark the performance of purchasing managers and be a useful reference point for the implementation or auditing of SRs. Secondly by revealing the ‘actual’ mediating role of purchasing managers in SRs, thus contributing to the professionalisation of purchasing, and thirdly by investigating which of the activities they conduct are the most important in the management of SRs that involve the exchange of products/services with distinctive structural characteristics. In this way it provides an indication of the situations that necessitate the execution of certain activities and suggestions as to how to enable an organisation to conduct purchasing involvement in SRs in an efficient manner. As the research falls within the problem domain of the discipline of SCM, it contributes to its theoretical development by

providing a framework for conceptualising its scope and problem domain that draws on several bodies of literature.

- The BRs literature, by providing conceptual and analytical frameworks that can be used to understand the nature of SRs and evaluate their performance.

1.2.1 Relevant literatures and theoretical foundations of the research

To address these challenges, the research draws on a broad spectrum of different sub-disciplines and bodies of literature listed in Table 1.1, along with their relevance to this thesis.

Body of literature	Relevance to this research
Supply Chain Management	As the research concerns the management of SRs it falls within the broad SCM problem domain. The SCM literature is the overarching body of knowledge where this research is positioned.
Business Relationships	An emphasis on SRs reflects the need to consider an extensive spectrum of issues pertaining to nature and management of BRs.
Purchasing Management	As the thesis is about the role of purchasing in SRs, the purchasing management literature can provide insights on the existing knowledge and research gaps appertaining to the research problem.
Relationship Performance	The thesis is concerned with the impact of purchasing's role on the performance of SRs. The performance measurement literature can help develop an appropriate performance measurement tool for SRs.

Table 1.1 Relevant bodies of literature

Theoretical foundations

As the thesis deals with the role of purchasing in SRs, it is faced with three major conceptual challenges. Firstly, a framework that conceptualises the nature of SRs needs to be adopted or developed. Secondly, the *role* of purchasing needs to be defined in such a way for it to be operationally feasible to assess it with particular research methods. Thirdly, in order to examine the impact of the 'actual' role of purchasing on SRs' performance, a method of assessing the performance of SRs needs to be adopted or developed.

Nature of SRs: In terms of the notion of the nature of SRs it is posited in this thesis that the existing theoretical models for the study of the nature and management of SRs, which can be found in a broad spectrum of social sciences, are limited in the sense that they address only some of the issues that characterise them. Given the size and broad scope of the SRs literature,

the thesis adopts the *paradigmatic* stance that in order to obtain a holistic insight into the nature and management of SRs, it is necessary to consider the principles, the usefulness and limitations of several theoretical models. Theoretical models from the field of institutional economics such as the Transaction Cost Analysis (TCA) or the agency theory can be useful in generating insights in terms of the selection of the most appropriate governance structure for a SR. On the other hand, theories emanating from the organisational theory and network literatures, such as the Interaction Model of the Industrial Marketing and Purchasing (IMP) group, can provide useful sources for analysing the interaction of the trading partners and the decision making processes in industrial settings.

TCA for example can be used to answer how certain characteristics of the product or service that is exchanged in a SR can influence the role of purchasing managers in the management of this SR (research question 2). However it cannot be used alone to conceptualise the nature of a SR, as its unit of analysis is the product or service exchanged in a SR and not the relationship itself. In order to overcome this limitation, the Interaction Model of the IMP group which incorporates variables that influence the management of BRs can be utilised to develop a conceptual framework of the nature of SRs. This framework can be used then as the conceptual basis for assessing the role of purchasing in several SRs.

Role in SRs: The role of purchasing managers in a SR is conceptualised and assessed in terms of four structural variables that have been extensively used in various theoretical models in institutional economics and organisation theory: their contribution to the development of *trust* between the trading partners, the level of *power* they possess in decision making, their *involvement* to the SRs, and their contribution to the development of *commitment* to the SRs. As these variables are complex constructs, they are broken down into lower, measurable variables that are easier to assess. Each of the structural variables can be considered in this

sense to be dependent on and determined by a set of second rank variables. The role of purchasing managers/departments in SRs is then assessed against these second rank variables.

Performance of SRs: In order to assess the performance of SRs, an instrument is developed based on the Gap Analysis that considers several discrepancies between the involved managers' perceptions of the nature of their department's BR with their trading partners' department and their perceived performance to these BRs.

Figure 1.2 presents the bodies of literature incorporated in this research and the associated theoretical models. The 'synthesis', 'synergy' and 'synchronisation' dimensions of SCM involve distinctive bodies of literature that have different time horizon and strategic intent. The synthesis is concerned with the structure of the network of organisation (whether to make or buy a product and from how many sources), the synergy is concerned with the management of BRs between the companies that are involved in contractual agreements and the synchronisation is concerned with the coordination of processes and activities amongst trading partners. These dimensions are discussed more extensively in chapter 2.

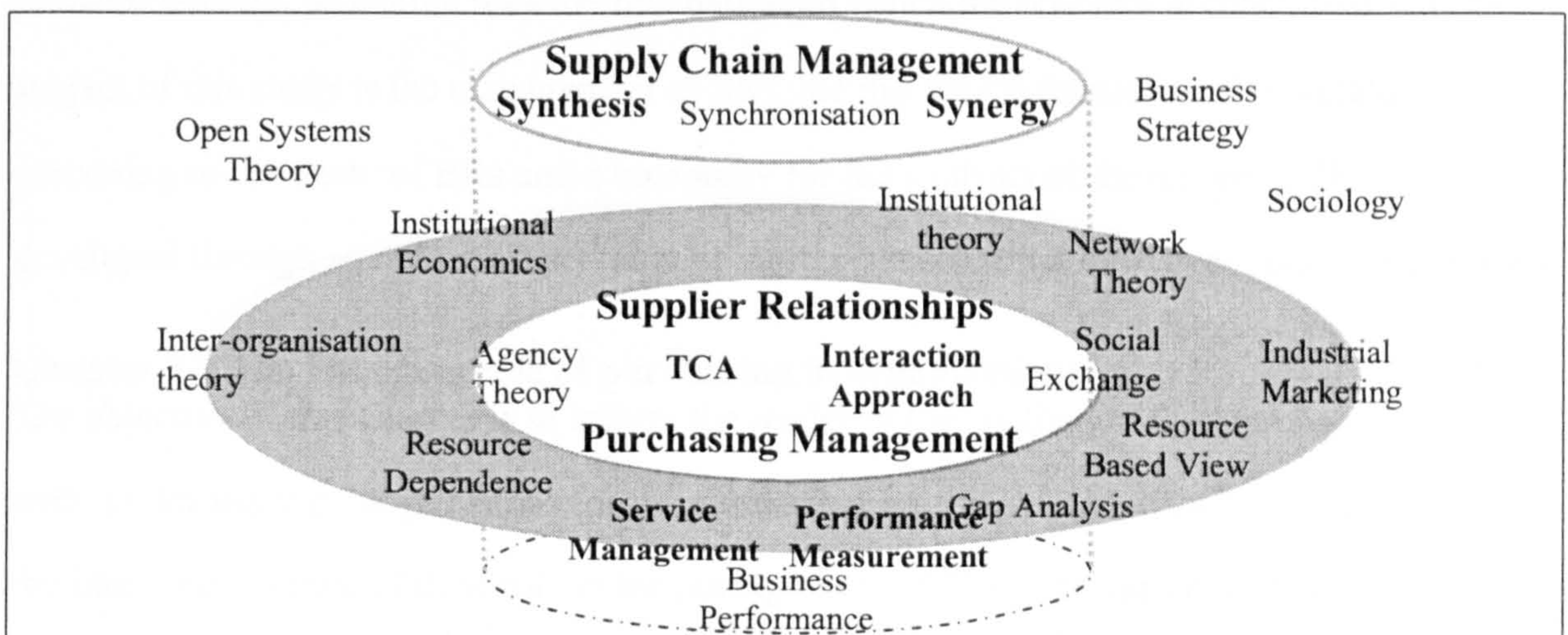


Figure 1.2 Theoretical foundations and literatures that this research is built on

1.3 Structure of the thesis

The thesis is structured in three parts. Part A sets forth the theoretical backgrounds of the research problem, presents different approaches and possible alternative methods that have

been used to examine it, and formulates the research questions and the conceptual framework that guides the empirical research. Part B discusses the philosophical underpinnings of the thesis, expounds the research methodology and research design, and presents the empirical research that is conducted to answer the research questions. In Part C the findings of the empirical research are presented, and through qualitative and quantitative analysis of the data collected, answers are given to the questions that are raised. The final chapter presents the conclusions of the research, discusses its limitations and potential areas for further research, as well as its implications for management practice.

Part A – The Literature

Chapter 2 – Academic positioning of the research and theoretical foundations for SRs

The objectives of this chapter are academically position the research by contextualising the thesis in the SCM discipline and to establish the theoretical foundations of the research in order to develop a conceptual framework of what the notion of SRs signifies in this thesis. The chapter begins with a thematic review of the broad SCM literature, identifies research gaps in the field, and develops a conceptual framework to understand its broad conceptual and problem domain, providing thus the foundation on which the research is contextualised. As the subject of this study is the management of SRs, the discussion focuses on the literatures pertaining to the study of BRs and a taxonomy for the analysis of the nature of SRs is developed through an *eclectic* discussion of various theories that have been used to study BRs.

Chapter 3 – The changing role of purchasing in organisations.

The objective of this chapter is to inform the reader of the challenges that purchasing is faced with, to discuss their implications for the purchasing profession and identify research gaps in the literature in terms of their role in the management of SRs. The current purchasing management literature is reviewed and existing studies pertaining to the research problem are presented and assessed critically, in order to provide a synopsis of the current understanding and future challenges of the role of purchasing in SRs.

Part B – Conceptual Foundations and Methodology

Chapter 4 – The research problem: conceptual & analytical frameworks

The objective of this chapter is to raise specific research questions and propositions that guide the empirical research of the thesis and develop the conceptual and analytical frameworks that will be used to answer these questions. Prominent issues arising from the literatures that were reviewed in previous chapters are synthesised and, incorporating insights mainly from the Interaction model of the IMP group and the TCA, as well as models from the newly formed purchasing and supply management literatures, a framework for conceptualising the role of purchasing management in SRs is developed. Four dimensions that characterise the role of actors in SRs are identified and structural characteristics of the products/services that are exchanged in SRs are identified as potential adjustors of the nature of SRs. Based on that model, and performance measurement models in the service management literature, notably the Gap Analysis, an analytical model for evaluating the performance of BRs is developed. Research propositions are then raised in terms of the contribution and the ‘actual’ role of purchasing in the management of SRs.

Chapter 5 – Methodology, research design and empirical research

This chapter reviews the use of different philosophical concepts of epistemology and assumptions about the nature of social science to reason the selection of the appropriate methodologies, research design and research methods for this thesis, and the research strategy is presented with the selection of the most appropriate research design and research methods and techniques for data collection. The study is positioned in the paradigm of critical realism, using abductive reasoning as the methodology for conducting the research and the multiple case study design is considered as the most appropriate strategy to address the research problem, using semi-structured interviews as the primary mode of data collection and triangulating these with structured surveys and archival analysis.

This chapter also presents the contextual background in which the research is undertaken, the research process and research instruments for collecting the data that are used to answer the

research questions posed. The research is conducted in two large service organisations in the UK, involving the study of seven individual SRs that involve the exchange of products or services with different structural characteristics.

Part C – Research Findings and Implications of Results

Chapter 6 – Activities that purchasing managers conduct in SRs

This chapter presents the findings for research questions 1 and 2. The activities that purchasing managers or conduct or contribute to various SRs are presented and an integrated framework of purchasing contribution to the management of SRs is developed first. The chapter also examines how certain product/service characteristics may influence the conditions under which activities need and can actually be performed by purchasing managers in various SRs.

Chapter 7 – Role of purchasing in SRs and its impact on their performance

This chapter presents the findings for research questions 3 and 4, by investigating and identifying the ‘actual’ role of purchasing managers and departments in the management of SRs and its impact on their performance. Initially the activities that purchasing managers conduct in SRs are analysed using theoretical reasoning, to identify the potential role that these activities may grant to purchasing managers. Then, considering the contribution of purchasing managers in certain activities, the way that these activities are carried out in separate cases, how (and how well) these activities are performed in each of the SRs, and how well purchasing managers handle or implement certain factors that can potentially influence their nature, the chapter demonstrates the ‘actual’ role of purchasing in the management of SRs. In order to identify the impact of the role that purchasing managers have on SR performance, the chapter investigates the association between problematic and successful SRs and the role of purchasing departments in these relationships in terms of the various management areas and specific activities purchasing managers carry out.

Chapter 8 – Conclusion and implications for future research.

This chapter discusses the results of the research and evaluates the thesis in terms of its contribution to the current research agenda of purchasing and supply management. It discusses the significance of the findings and the implications for purchasing managers and organisations, its limitations and potential ways in which the research can be improved, and suggest further research avenues for academics. The structure of the thesis is presented in Figure 1.3.

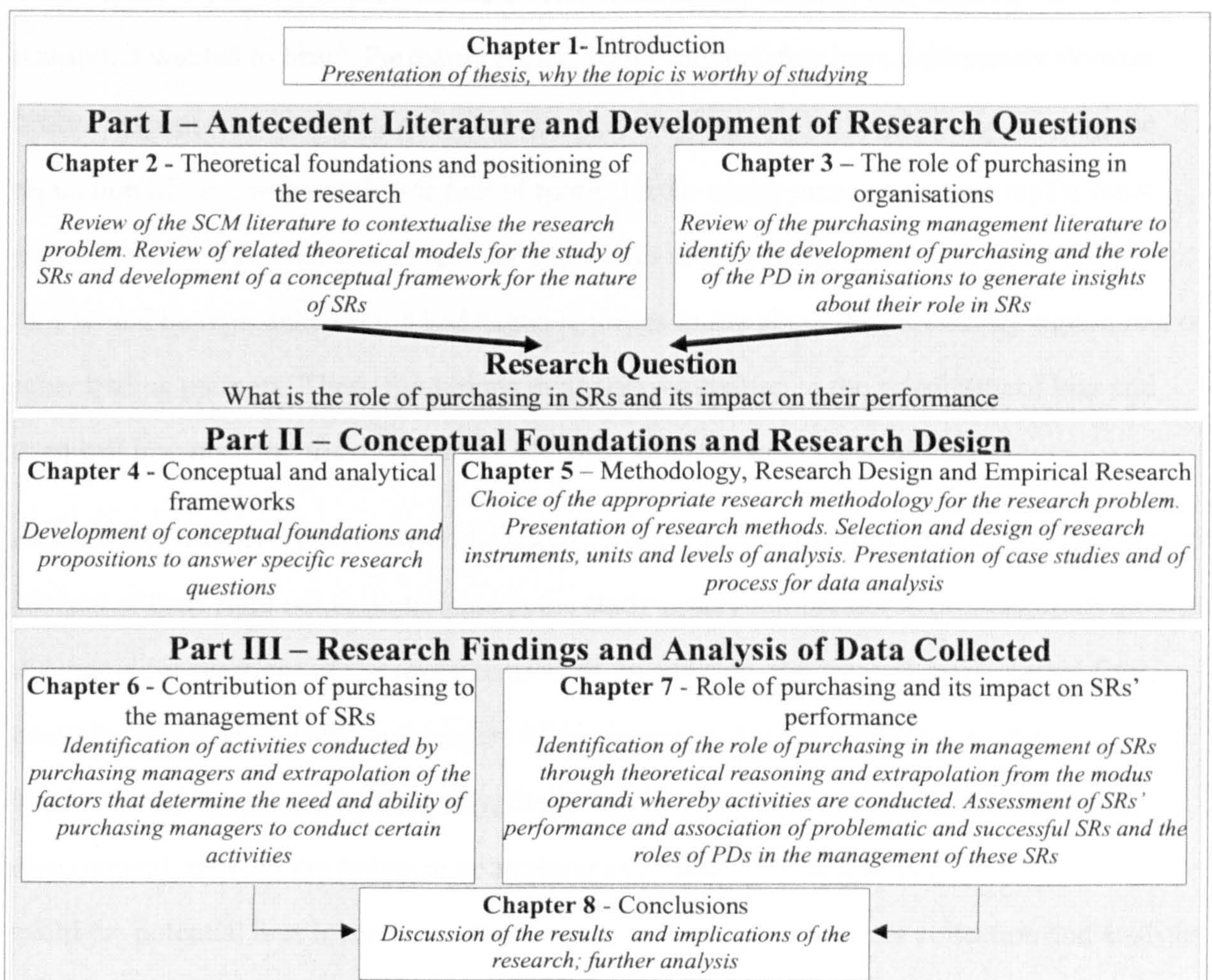


Figure 1.3 Structure of thesis

1.4 Limitation of the study

The primary delimitation of this study emanates from the use of case study as a research design for data collection. Although the case-study design presumes that the cases under study reflect similar entities, the results cannot be easily generalised to other contexts.

It was felt throughout the empirical research that some participants would not trust the purpose of the study. Regardless of informed consent with its emphasis on confidentiality, participants were expected possibly to provide biased responses if they thought they figured out 'what the researcher wanted to hear'. Furthermore, a research subject may have deliberately skewed his/her responses to interview questions for the following reasons: (a) to avoid tainting the reputation of the company (b) for fear of reprisal from senior management, or (c) for other personal reasons. In addition, in spite of guarantees to the contrary, they may have felt that they would be reproached if they had negative things to say about the purchasing department or other trading partners. These limitations might draw attention to the possibility of bias and even call into question the reliability of the data collected from the subjects.

Recognising this, every effort was made to minimise these limitations. All of the subjects were advised of their right not to participate in the study if they felt pressured or uncomfortable with the interview questions of the research process. In addition, the researcher, requested firm commitments from the senior managers of the company that the research subjects would not be pressured in any way. Additionally, the researcher worked closely with the company management to avoid the presence or appearance of bias, pressure, or prejudice. In order to avoid the potential bias inherent in interviewing the managers, the data collection and analysis was triangulated with the use of two surveys that enable convergence (or not) of the results.

1.5 Personal reasons for conducting doctoral research in SCM

My personal interest in conducting research in the broad field of SCM can be traced back to my postgraduate studies seven years ago, when as an M.Sc. student at the University of

Warwick, I decided to undertake a research project (part of the curriculum) in studying the logistics strategy of an electronics company, a subsidiary of a large European corporation. My interest in SCM research was enhanced when, during my national service in the Hellenic Airforce in Greece, I was involved in organising a programme for training high rank officers in new logistics management practices. This hands-on experience of the way managers and military officers approached real management problems (in a completely different way) and the teaching experience in the airbase, were the *raison d'être* that motivated me to undertake research at a doctoral level.

At the outset of my doctoral studies my supervisors at Warwick Business School encouraged me to investigate the problem domain of SCM and to understand its meaning. I thought at that time that the research process would be very easy. All I had to do was to open some text books, study what authors had to say about SCM, select a research topic and eventually this would lead me smoothly to the goal of a PhD. As Socrates, I realised very soon however that I knew nothing about SCM except the fact of my ignorance. The more I investigated the literature, the more obscure (and at the same time interesting) the concept became. A year later and after three small academic research projects (Croom et al., 2000; Giannakis, 2001; Giannakis & Croom, 2004) that had the objective of deconstructing the semantics of SCM, to identify its problem domain and underlying dimensions (synthesis, synergy and synchronisation), I came to believe that SCM represents one of the most important paradigm shifts in the management of organisations.

Chapter 2 - Academic positioning of the thesis and theoretical foundations of SRs

"No man is an island; every man is a piece of the continent, a part of the main."
John Donne (1572-1631)

This thesis is concerned with the contribution and role of purchasing (managers and departments) to the management of SRs. This chapter reviews the literatures relevant to the study of SRs to academically position this thesis, identify research gaps and theoretically establish the study by developing a framework of conceptualising the *nature* of SRs.

- Given that the study of SRs and purchasing are central themes in the SCM discipline, the SCM problem domain is discussed first in order to identify the current developments in SCM thinking and position this research in the broad SCM discipline.
- Antecedent theories relating to the nature and scope of BRs are discussed next in order to establish the theoretical foundations upon which this thesis is based. Theoretical models of SRs from the institutional economics, industrial marketing and SCM literatures are reviewed, to identify the coverage and research gaps in terms of the management of SRs.
- The framework upon which the nature of SRs is conceptualised in this thesis is presented in the third section.

2.1 The SCM literature: a conceptual analysis and critical review

SCM is described by many authors as one of the most important developments in business management and as a multivariate discipline encompassing a large number of different literatures and research areas (Harland, 1994; Cooper et al., 1997; Croom et al., 2000; Lambert and Cooper, 2000). In the business world, SCM is recognised as being a successful strategic concept in the make or buy decision of a product/service by a firm, and a good practice to link all the trading partners and ensure cost effective and timely movement of materials and information from the inception of a new product/service to its final consumption. It has been

claimed that with product life cycles shortening and technologies becoming increasingly imitable, effective SCM can be a major source of competitive advantage for firms (Simchi-Levi, 2000). Moreover, the benefits will not be at the expense of a company's partners but rather will make the supply chain as a whole more competitive (Christopher, 1992).

The concept of SCM has been examined from different perspectives, encompassing a multidimensional field of research. Research associated with SCM phenomena advanced from the Logistics / Operations Management area (which are the seminal areas of SCM), by incorporating issues traditionally being investigated in fields such as Strategic Management, Industrial Organisation, Institutional Economics, Marketing, Knowledge Management, etc. (Cooper et al., 1997; Croom et al., 2000; Giannakis, 2001). This is understandable because the SCM philosophy cuts across the physical, functional and legal boundaries of companies, by examining not only a single function, or a firm as the unit of study and analysis, but a set (chain, or network) of interrelated functions or firms that interact and are involved in the provision of an offering to end customers. This shift in the externalisation of the study of business operations extended the original scope of operations management by incorporating issues from other management disciplines. Each one of these viewpoints provided a different understanding of SCM, based on the adoption or extension of established theories. As a result a very large body of literature has been developed.

Even though the concept of SCM is relatively mature, there is still confusion around its semantic nature. Different meanings have been ascribed to SCM, some of which are related to management processes and consider it as *'a set of techniques dealing with planning and control of the total materials flow from suppliers through end users'* (Christopher, 1992), others to the structure of organisations which understand it as *'an alternative form to vertical integration'* (Ellram, 1991), and yet others to IORs which define it as *'the management of a network of organisations'* (Christopher, 1992). It is evident that SCM is an umbrella term to

describe practices and strategies for streamlining the supply and delivery processes of entire supply chains (raw materials to end customer), through effective utilisation of internal and external organisational resources. However few organisations apply SCM principles, with the majority focusing on logistics management that involves one - or maybe two echelons - in some of their supply chains rather than embracing a holistic SCM approach (Harland, 1996). Hence the scope and exact problem domain of SCM is by no means very clear from the literature. In order to bring clarity to the SCM area and facilitate the purposes of this research, a conceptual model is developed that demarcates the underlying objectives of SCM.

2.1.1 A model for conceptualising the SCM philosophy

A structured analysis of theoretical developments in the field of SCM and a survey amongst a large number of academics around the globe has been conducted to develop the conceptual model called the '3S Model' (Giannakis and Croom, 2004). The model highlights three dimensions of interest to supply chain scholars and practitioners alike: the *Synthesis* of the business and resources network; the characteristics of *Synergy* between different actors in the network and the *Synchronisation* of all operational decisions related to the control of the production and delivery of goods and services.

- ***Synthesis***: Research on the synthesis of supply chains involves corporate strategic decisions regarding the '*anatomic*' aspects of the organisational structure of supply chains as well as the governing principles that constitute them. It deals with issues such as the strategic position of the firm in the supply chain (what boundaries a firm should establish in its activities and whether to make or buy a product/service), how much of the chain the firm should occupy (vertical integration vs. pure market), and the number of suppliers the firm should have for a particular component or service (its sourcing strategy). This stream of research draws primarily on the Institutional Economics (notably the transaction cost theory (Williamson, 1981), Industrial Organisation (e.g. value analysis (Porter, 1985), social theory (Granovetter, 1985) and network theories (Thorelli, 1986). In these approaches SCM represents a network of

firms interacting to deliver a product or service to the end customer (Ellram, 1991). SCM is viewed therefore as a governance mechanism of exchanges or transactions. The key argument is that since the majority of transactions between organisations are repeated, the prospect for future exchanges with the same organisation (supplier or customer) affects the behaviours of firms and suppliers; hence they build collaborative SRs to deal with uncertainty.

- ***Synergy***: Research on the synergy between organisations involves strategic business decisions regarding the harmonisation of contrasting interests and objectives of different actors (agents) in a supply network. It covers the management of the intra and IORs with issues including supplier selection, contract terms creation, supplier management, relationships dynamics, and the social aspect of SRs. This stream of research draws on the inter-organisational theory (Van de Ven et al., 1980), industrial purchasing and marketing (IMP Group, 1997) and strategic management literatures (Freeman, 1984; Ouchi, 1980). The central tenet in this perspective is that since organisations are required to form BRs with their suppliers and customers (as a result of environmental forces), they should manage these BRs in the most effective way in order to promote organisational learning, continuous improvement, and adaptation to economic environments.

- ***Synchronisation***: Research on supply chain synchronisation involves the management of the flow of resources (physical, human, information, knowledge), of organisational assets (organisational intelligence) and of operations / activities / processes that are entailed in the production and provision of goods/services to the final customer. It includes the day to day management of the flows of goods and services for the provision of the final offering bundle to the end customer, and co-ordination of the operations / activities of the involved actors. The operational character of the synchronisation of supply chains is the area that has been mostly researched as it relies on the seminal disciplines of research that dealt with supply chain phenomena such as Operations Management (Slack et al., 2001), Logistics (Christopher, 1992),

Operational Research and Systems Engineering (Forrester, 1961), and draws primarily on resource-based theory (Wernerfelt, 1984) and contingency theories (Lawrence and Lorsch, 1967). This stream of research is efficiency and effectiveness oriented, having as a central focus the development of best practice models for the everyday management of supply chains. Table 2.1 illustrates the conceptual framework of SCM underlying dimensions and research streams, identifying the theories and best practices models from adjacent disciplines that could be utilised by scholars that work in the broad SCM problem domain.

SCM Objectives	Research Streams	Associated Theories
Synthesis <i>Corporate Strategy</i>	Network Analysis	Embeddedness, Governance, Social Networks Theories
	Institutional Economics	Institutional Theory, Theory of the Firm (Coase Theorem), Transaction Cost Theory , Property Rights, Value Systems
Synergy <i>Business Strategy</i>	Strategic Management	Agency theory, Resource Based theory, Value Analysis, Game theory, Fuzzy Logic, Contingency theories
	Business Relationships Purchasing Management	(Open) Systems Theory, Interaction Model , Resource Based Theory, Group Dynamics, Chaos Theory
Synchronisation <i>Operations Strategy</i>	Operations Management Logistics	Resource Based theory, Transformation model, Inventory theory
	Systems Engineering	Industrial Dynamics (Forrester Effect, Burbidge Effect)

Table 2.1 The conceptual framework for the SCM discipline (Giannakis and Croom, 2004)

2.1.2 Locating the research in the literature

In light of the findings of the thematic and conceptual analysis of the SCM literature, this research aims at advancing the theoretical and empirical knowledge of the fields of SRs and purchasing management as illustrated in Figure 2.1 below conducting research in service organisations that deal with the management of SRs that are developed with the exchanges of both tangible and intangible resources.

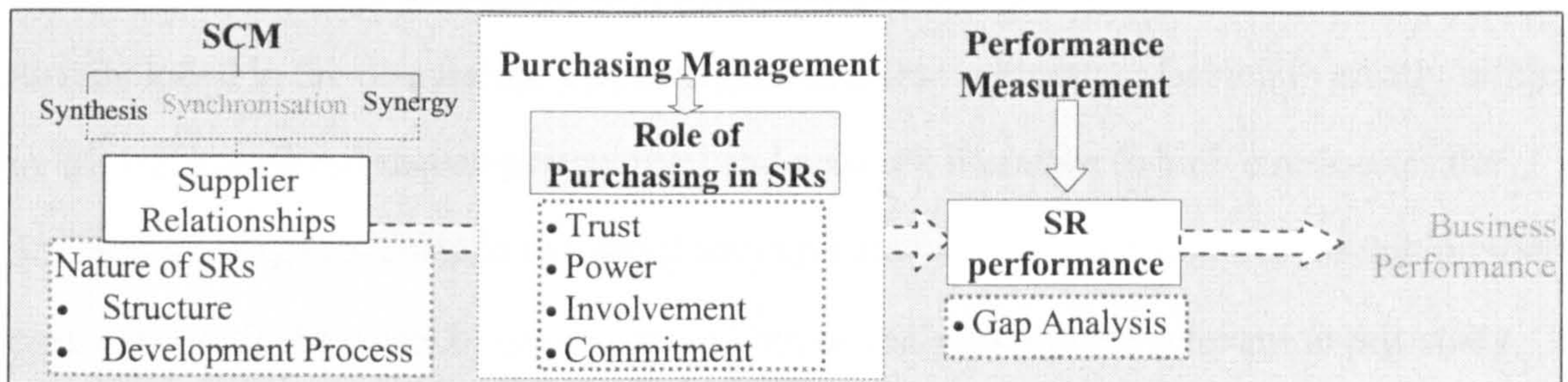


Figure 2.1 Positioning of the research in the broad SCM discipline

As this thesis focuses on the synthesis and synergy levels of SCM in the study of SRs, a broad spectrum of theoretical literatures regarding SRs are explored in the next sections, in order to

identify research coverage and to establish the theoretical foundations upon which the treatise is based. By obtaining a deeper understanding of the way SRs are considered in various literatures, their nature and management practices can be better informed.

2.2 Antecedent theory to the study of SRs

As discussed in the analysis of the SCM discipline, research in SRs has received extensive attention in academia over the last 30 years, reflecting changes in the economic climate (Ebers, 1997). Scholars have approached the analysis of interactions among and within organisations by following different perspectives and using different levels of analysis. As a result, the literature pertaining to issues on SRs is enormous, from the principal management disciplines to economics, political science, sociology and psychology.

In addressing the conceptual issue of the nature of SRs, salient theoretical models that have been used extensively for the study of BRs (with a focus on SRs) in such diverse disciplinary fields as institutional economics, strategic management and industrial marketing are presented. These models reason the determinants, the establishment of SRs, as well as the interaction amongst individuals in organisations. The field of institutional economics offers perhaps the richest and most established area of theoretical developments in studying the economic activities between organisations, especially transaction cost and agency theories. Theories emanating from the strategic management literature however, which emphasise strategic aspects of genesis and management of SRs, are equally important for the study of SRs and are thus included in the discussion. The industrial marketing literature (which is greatly influenced by the organisational theory perspective) and network literature (which emphasises the decision making processes in industrial settings) are two more academic areas that provide useful theoretical models of organisational buyer analyses and are relevant to this study.

2.2.1 Theoretical differences for the study of SRs

The theoretical foundations of SRs in various literatures can be traced to two different approaches. The first is *efficiency oriented*, studying the economic activities between organisations and focusing on achieving efficiency through their administration. This perspective includes models mainly from the institutional economics, social theory, strategic management and purchasing management literatures. The second is *behaviouristic*, dealing with the interaction amongst social actors and focusing on issues such as the relationship of individuals with their environment, social structuring, motivation and conflict resolution. This perspective includes models mainly from sociology, psychology, game theory and organisational theory. From these two epistemological foundations, various researchers have approached the analysis of interactions among organisations using different dimensions of analysis, considering the strategic appropriateness and the economic advantages deriving from SRs. In the discussion that follows selected models from both approaches are reviewed.

2.2.1.1 Efficiency oriented approaches

Efficiency oriented approaches can be further divided into three distinctive schools of thought. The first perceives SRs as strategic institutions of organisations that are a product of exogenous and endogenous environmental factors. Representative models investigate the antecedents and management of SRs. This school of thought can be found in the purchasing and strategic management literatures, drawing on theories such as the resource based view of the firm, resource dependence, rational (strategic) choice theory, institutional theory, stakeholder theory, and structural contingency theories. The partnership models discussed earlier are positioned in the efficiency oriented approaches as their concern is the maximisation of organisational efficiency through closer more collaborative relationships. The line of reasoning is that organisations, driven by environmental forces, form SRs and manage them strategically in order to improve their efficiency, their strategic position in marketplaces, and their adaptability to environmental and technological uncertainty (Table 2.2).

Perspective / Theory	Description	Rationale for SRs	Academic Field	Primary Focus	Unit of Analysis	Appropriate Applications	Representative Authors / Studies
Resource Based View	Emphasises that the firm is a bundle of capabilities and competencies, both human and physical. The competitive advantage of each firm is tied to how these resources are organised	SRs can improve the strategic position of firm by providing resources that the partners alone do not possess, and by sharing the associated costs and risks	SCM, Operations Management, Strategic Management	Structure of SRs / Processes of interaction	Organisation	<ul style="list-style-type: none"> How resources are shared between firms Optimal types and amounts of resources shared in SRs interaction processes 	(Penrose, 1959; Wernerfelt, 1984; Peteraf, 1993)
Resource Dependence	It argues that organisations can not generate all of their needed resources. They must depend on their environment (other organisations) for resources.	Organisations form SRs to exert power or control over organisations that possess scarce resources, or may enter a SR in an effort to fill a perceived resource need	Organisation Theory	Structure of SRs	Organisation	<ul style="list-style-type: none"> How SRs help firms acquire resources How SRs help firms manage uncertainty 	Pfeffer and Salancik, 1978; Das and Teng, 1998)
Stakeholder Theory of the Firm	Maintains that organisations are at the centre of an interdependent web of stakeholders, having the responsibility to consider the legitimate claims of their stakeholders when making decisions and carrying out business transactions	Organisations form alliances, also called networks or constellations, to align their own interests with the interests of stakeholders and also to reduce environmental uncertainty	Strategic Management	Structure of SRs	Organisation	<ul style="list-style-type: none"> Supplier Identification Assess suppliers' behaviour 	Freeman, 1984; Donaldson et al. 1995; Harrison and St. John, 1996)
Rational Choice Theory (Strategic Choice)	Views organisations as rationally self-interested agents seeking to maximise their particular ends which are principally profit and growth. Studies factors that provide opportunities for firms to increase in competitiveness or market power	A company will outsource a product / service only if the financial benefits of doing so exceed the costs. This will improve its ability to produce better products/services, or decrease competition	Strategic Management, SCM	Structure of SRs / Processes of interaction	Organisation	<ul style="list-style-type: none"> Supplier Selection Outsourcing Decisions 	(Porter, 1985; Coleman, 1990; Zey, 1992; Harrigan, 1988)
Institutional Theory	A general economic theory that maintains that organisations are embedded in institutional environments and that the shape, practices and change in organisations is determined by changes in the institutional environment	It explains the different types of legitimacy an organisation can attain by engaging in SRs	Economics, organisational theory	Structure of SRs / Processes of interaction	Organisation	<ul style="list-style-type: none"> Identification of factors that motivate and sustain SRs 	(DiMaggio and Powell, 1983; Powell and DiMaggio, 1991; North, 1990)
Contingency Theory	Advocates that there is not one best way to manage an organisation. Instead there needs to be a fit between the organisation's structure, its size, its technology, and the requirements of its environment	SRs require procedural coordination which can be affected by a number of diverse contingent variables	Organisational Science	Structure of SRs / Processes of interaction	Organisation	<ul style="list-style-type: none"> Portfolio management of SRs Interaction processes management practices 	(Lawrence and Lorsch, 1967; Galbraith, 1974)

Table 2.2 School of thought of SRs as strategic institutions of organisations

The second school of thought views SRs as governance mechanisms of transactions between organisations. Representative approaches can be found in institutional economics and law which draw on theories such as transaction cost theory, agency theory and contract law. Its underlying principle is that since most transactions between firms are repeated, the expectation of future exchanges affects the nature of SRs. Organisations are considered profit maximising institutions, therefore their concern is to identify and adopt the most economical governance structure for the transactions that the exchange of products/services entails (Table 2.3).

Perspective/ Theory	Description	Rationale for SRs	Field of Study	Primary Focus	Unit of Analysis	Appropriate Applications	Representative Research
Transaction Costs Economics	Its main focus is to identify the most economical governance structure (pure market to vertical integration) for each abstract description of a transaction	SRs can minimise the sum of production and transaction costs, reduce uncertainty caused by market failure and reduce costs associated with establishing a hierarchy	Economics, SCM	Structure of SRs	Transaction	– Economic benefits for organisations – Governance structure of SRs	(Coase, 1937; Williamson, 1975; Williamson, 1979)
Contract Law	Deals with how the contractual purposes between organisations should be better served	SRs exist within commercial contracts that need to be designed and managed in the most effective way	Law / Contract Management	Structure of SRs	Transaction	– Design of the most appropriate contract	(Macneil, 1980)
Agency Theory	Deals with relationships between actors (companies) who are engaged in co-operative behaviour but have different goals and attitudes to risk	In a SR an organisation (principal) engages another organisation (agent) to perform some service on their behalf which involves delegating some decision making authority to the agent	Economics / Strategic Management	Structure of SRs	Individual / Organisation	– Governance structure of SRs – Effective processes of monitoring partner's behaviour	(Jensen and Meckling, 1976; Grossman and Hart, 1983; Eisenhardt, 1989a)

Table 2.3 School of thought of SRs as governance mechanisms

The third school of thought centres on exploring the organisational outcomes of SRs. SRs are viewed from this perspective as mechanisms that enhance the organisational learning and adaptation of organisations to external environments. Representative works can be found in the organisational buyer behaviour and organisational development literatures, drawing on network and inter-organisational theories (Table 2.4).

Perspective / Theory	Description	Rationale for SRs	Field of Study	Primary Focus	Unit of Analysis	Appropriate Applications	Representative Research
Organisational Learning Theories	Deal with how to structure and coordinate learning processes between collaborating firms. SRs are viewed as a portfolio of core competencies and the emphasis is on the transfer of knowledge between firms/individuals	SRs are viewed as associated with the acquisition of certain skills. Firms' aim is to absorb as much knowledge as possible from their partners, thus increasing their competencies	Human Resources, Organisation theory, Psychology	Processes of Interaction	Individual / Organisation	– How knowledge is transmitted between firms – How knowledge is institutionalised	(Levitt and March, 1988; Hamel, 1991; Nonaka, 1994)
Industrial Buying Behaviour Models	Focus on the study of the motives and activities of, and the influences upon, industrial buyers while engaged in the purchasing of goods and services	SRs are viewed as the institutional system within which industrial buying takes place (as well as the outcome of the buying process)	Strategic Management, Industrial Marketing	Structure of SRs / Processes of Interaction	Individual / Organisation	Analysis of factors which can affect the decision making process	(Webster and Wind, 1972; Sheth, 1973)
Interaction Model of IMP Group	It studies the way companies interact in complex interorganisational networks and how this interaction can be managed, considering a broad array of different factors	It views SRs as external resources that develop & operate within complex social networks, existing in environmental contexts which may vary in diverse cases, industries and cultures	Industrial Marketing	Processes of Interaction	Individual / Organisation	– How appropriate structures of suppliers can be developed – How SRs can be managed efficiently	(Hakansson, 1982; Hakansson and Shenota, 1995; Ford, 2002)

Table 2.4 School of thought for the organisational outcomes of SRs

2.2.1.2 Behaviouristic approaches

Behaviouristic approaches can be also classified into two distinctive schools of thought. The first comprises of those that study the way individuals arrive at their decisions and actions in SRs and how individuals feel about their relationships with others. Representative works in this school can be found in models deriving from game theory or social exchange models. The SRs in this school of thought are perceived as exchange mechanisms that entail unspecified obligations (Wayne et al., 1997). When one party performs an act that has an impact on the other party, there is the expectation of corresponding return on behalf of the other party. Therefore the concern of organisations regarding the SRs management is to find ways of cooperation within this context of exchange. The prisoner's dilemma scenario is a typical model of social exchange that can be found in game theory (Carlisle and Parker, 1989).

The second views SRs as part of complex networks of interaction among actors and focuses on studying the information that is exchanged within and among its members, providing insights into how knowledge is spread throughout the network. Representative studies can be found in the social network analysis and group dynamics theories. These theories use sociometric analyses to study organised patterns with which the thoughts and perceptions of humans are structured in the management of SRs, utilising qualitative and quantitative techniques (Table 2.5).

Theory	Description	Rationale for SRs	Field of Study	Primary Focus	Unit of Analysis	Appropriate Applications	Representative Research
Social Network Analysis	It studies the information that is exchanged between and among the members of a social network and provides insights into how knowledge is spread throughout the community	It uses qualitative and quantitative measures to better understand the structural characteristics of a SR	Sociology, Networks	Processes of Interaction / Structure of SRs	Individual / Organisation	Role of participants in SRs	(Granovetter, 1979; Jones et al., 1997; Scott, 2000)
Group Dynamics Theories	Study the nature of groups, the laws of their development and their interrelations with individuals, other groups and larger institutions, as well as how individuals' behaviour changes in group situations	Uses case studies and sociometric methods to better understand the behaviour of individuals or groups in a SR	Sociology, Social Psychology	Processes of Interaction	Individual / Groups	Negotiation Techniques	(Cartwright and Zander, 1968)
Game Theory	It is used to explain, to predict and to evaluate human behaviour in contexts where the choices of individuals depend on what others choose to do	Deals with decision making in conditions which the outcome of an organisation's decision is a result not only of its choice but also the choice of other organisations	Mathematics, Strategic Management	Structure of SRs	Individual / Organisation	Assessing partner's behaviour Effective processes of monitoring	(von Neumann and Morgenstern, 1944; Axelrod, 1984)
Social Exchange Theory	Maintains that although SRs are economically driven, they are actually made up by relations of social exchange between individuals. It emphasises the process that lead to satisfaction for the exchanging parties and the techniques to deal with dependency and uncertainty	Assumes that trust emerges through the repeated exchange of benefits between actors in a SR and examines the motivational mechanisms underlying the initiation of trustworthy behaviour	Psychology	Processes of Interaction / Structure of SRs	Individual	How much do gatekeepers matter What are the dynamics of equity and reciprocity	(Blau, 1964; Scanzoni, 1979; Wayne et al., 1997; Emerson, 1962)

Table 2.5 Behaviouristic theories of SRs

2.2.1.3 View of SRs in this thesis

This thesis adopts an efficiency approach to the study of SRs. By exploring the contribution and role of purchasing in their management, its ultimate aim is to identify how (and in which situations) effective purchasing involvement can lead to advances in SRs' performance. Given the lack of a unifying theory of the nature of BRs (Galaskiewicz, 1985), the thesis adopts the *paradigmatic* stance that in order to obtain a holistic insight into the nature and management of SRs, it is necessary to consider the principles, the usefulness and limitations of several theoretical models from all three schools of thought in the efficiency oriented approach.

In terms of the synthesis of the SRs, it relies on a model developed by Oliver (1990) to conceptualise the determinants of SRs, but also on the transaction cost and agency theories to gain insights about their governance mechanisms. It is contended that although these theories consider SRs from different perspectives, their focus, their conceptualisation of SRs, and their levels of analysis are different. They can therefore be used complementarily to gain a holistic view of the synthesis of SRs. In terms of the synergistic function of SRs (to enhance organisational performance for all the parties that are involved), the interaction model of the IMP group is considered, as it integrates different theoretical perspectives of the interaction processes and management of SRs.

2.2.2 Theoretical models for the 'synthesis' of SRs

2.2.2.1 Determinants of SRs - Oliver's classification

In an attempt to identify why IORs are established, Oliver (1990) synthesises various theoretical models (primarily the resource based view of the firm and resource dependence theory) and proposes a comprehensive framework that could be applied across a broad range of IORs. Within this framework she takes the perspective that organisations take conscious decisions to enter into IORs. She distinguishes between an organisation's motives (rather than an individual's or a group's motives) to establish IORs, and the external factors which may initiate or deter the formation of such relations. The determinants she utilises are:

Necessity	Refers to the desire of one organisation to acquire resources of the partnering organisation which it doesn't possess (or opts not to produce). It considers not only the need to acquire resources, but also environmental pressures to interact
Asymmetry	Relates to relationships driven not just by resource scarcity (which is the condition of necessity) but also by the potential of an organisation to exert its power over other organisations and acquire the needed resources
Reciprocity	Refers to the aim to have mutual advantage or the aim to share mutual risk. In contrast to asymmetry, this dimension emphasises cooperation between organisations rather than the exercise of power and control
Efficiency	Refers to the objective of improving internal performance and not the need to conform to the dictates of a more powerful organisation or environmental forces
Stability	Refers to the desire to minimise the effects of environmental uncertainty, which is generated by resource scarcity and the lack of perfect knowledge about environmental conditions
Legitimacy	Refers to the aim of an organisation to improve its reputation and image by conforming to the prevailing norms and values imposed by the institutional environments in which the organisation is embedded

Table 2.6 Determinants of IORs (Oliver, 1990)

The thrust of her framework is that while these contingencies are all sufficient conditions to initiate a BR, a BR is normally initiated by a combination of multiple contingencies.

According to the criteria discussed by Oliver, the underlying driving force to engage in a BR can be said to be determined by the structural, infrastructural and economical characteristics of the candidate organisations. Oliver's approach to the determinants of IORs adopts an approach that is closer to that of organisational theory.

2.2.2.2 Theoretical models for the governance of SRs

2.2.2.2.1 Institutional economics perspective: the transaction costs theory

The nature and scope of firms and their boundaries, as well as the way SRs are structured and managed, is determined to a large extent by the decision of a firm to *make or buy* a product or service. Institutional economics, notably transaction cost theory, provides a rich source of theorising about the synthesis and governance of SRs by considering this issue. Transaction cost theory logic postulates that firms, as profit maximising institutions, need to identify and adopt the most economical *governance structure*⁴ (from pure market to vertical integration) for each abstract description of a transaction and argues that the critical determinants of an organisation's governance structure are the transaction costs inherent in any exchange. Its core argument is that both production and governance costs should be considered by firms in their pursuit of the optimum governance structure. In transaction cost analysis (TCA), Williamson (1985) posits that the decision for the optimum governance structure depends primarily on the

⁴ *'The institutional matrix within which contracts are negotiated and executed'* Williamson (1996a).

characteristics of the exchange and identifies three critical dimensions for characterising transactions: the degree of *asset specificity*, the level of *uncertainty* that exists in transactions, and the *frequency* with which transactions recur.

The level of asset specificity in particular refers to the extent to which the resources (material, financial, capital) exchanged between firms are dedicated to a specific SR. If for example a particular transaction involves the exchange of assets that have little or no value outside the dyadic exchange and would not be recoverable in the case of termination of the relationship, one party's *transaction-specific* or *relationship-specific* investment could possibly leave them vulnerable to opportunistic behaviour by the non-investing party, and this vulnerability would be exacerbated in situations in which there are high levels of *uncertainty* (Williamson, 1993a).

		Investment Characteristics		
		Non-Specific	Mixed	Idiosyncratic
Frequency	Occasional	Purchasing Standard Equipment	Purchasing Customised Equipment	Constructing a Plant
	Recurrent	Purchasing Standard Material	Purchasing Customised Material	Site-specific transfer of intermediate product across successive stages

Table 2.7 The Transaction Cost Analysis framework (Dietrich, 1994)

The TCA framework rests on two main assumptions about human behaviour which are related to the uncertainty that exists in transactions, and which also influence the decision of firms in their choice of governance structure: the fact that trading actors make decisions under conditions of *bounded rationality*⁵, and the fact that actors are profit seeking and may resort to 'guile' in order to accomplish their interests. TCA explains that in order to safeguard specific assets and obtain control, firms may resort to *ex ante* actions to extenuate the opportunistic behaviour which trading partners could possibly pursue. This could be done by either vertically integrating or engaging in contractual relationships (Williamson, 1975, 1979, 1985). In the latter case, unless the investment in *idiosyncratic* assets is balanced, monitoring of the

⁵ It refers to the fact that economic actors are faced with *informational complexity*, as they are not able to assess, understand and manipulate all the data, and *informational uncertainty* as they are not able to identify and assess all cause-effect relationships because that they are faced with incomplete information Simon (1955). Williamson's TCA is based on informational uncertainty.

transaction process and the trading partner may be necessary to mitigate potential opportunism (Heide and John, 1988). Safeguards may also take the form of *mutual hostages* (Williamson, 1983), or other forms of interdependence (Bleeke and Ernst, 1993). In cases where neither vertical integration nor contracting is viable, it becomes a necessity to acquire control of the transaction process and create what (Heide and John, 1992) name *quasi-integration*, a state where control is acquired not from ownership of assets but from the ability to exercise influence over partners' decisions (Grossman and Hart, 1986).

Limitations of TCA

The major contribution of TCA in the study of SRs is its prediction regarding the relative efficiency of various forms of governance of inter-firm transactions under conditions of uncertainty, opportunism and asset specificity. It has been criticised however for presenting a simplistic and incomplete set of prescriptions for the establishment of governance structures. (Heide and John, 1992) for example argue that although it considers opportunism and asset specificity as determinants for trading partners to engage in exchange relationships, these conditions themselves are not sufficient antecedents for the existence of a SR in the first place.

Another limitation of TCA is that it focuses only on the selection of the optimum governance structure of a SR. It does not reflect on issues regarding the processes that influence transactions or the context in which they take place once contracts are established. For example it does not take into account the *embeddedness* of the transactions within SRs, or their market and social contexts, and does not give any explanation of why decision control is handed over by one trading partner in the case of vertical control. The construct of trust in SRs is not the main focus of its analysis, and the concept of power in SRs is not addressed at all; instead there is an assumption that both parties will dedicate the same effort and investment⁶.

Since the main focus is the transaction itself, the characteristics of partners and how they may affect its nature are not addressed. The size, reputation, and past behaviour of partners for

⁶ The concepts of trust and power in SRs are instrumental in this thesis and discussed in more detail in chapter 4

example, identified in contingency theory (Lawrence and Lorsch, 1967), could have a profound influence upon the nature of SRs. Finally, it is difficult, if not impossible, to apply TCA to the transactions of intangible goods (i.e. the transfer of knowledge) where the transaction itself is very difficult to isolate and value.

These criticisms illustrate that a unilateral transaction cost based analysis of the nature of SRs is incomplete, as some of its deficiencies are considered to be in the very critical dimensions that characterise SRs. Agency theory, which is discussed next, can provide some insight however on how these limitations may be overcome.

2.2.2.2 Agency Theory

Agency theory uses the metaphor of a contract to describe BRs in which one party (the principal) delegates work to another (the agent) to undertake some action on the principal's behalf (Eisenhardt, 1989a). Similar to transaction cost theory, its focus is on specifying the most efficient governance structure of a particular BR. It can be also applied however to study the interaction processes between agents in cases where parties may be presumed to be motivated by conflicting self-interests (positivist agency theory) and where existing information asymmetries may complicate effective delegation both *pre-contractually* and *post-contractually* (Bergen et al., 1992). Pre-contractual problems may arise before the principal decides to offer a contract to an agent. A major issue is whether a particular agent has the characteristics the principal is looking for. The agent for example may hold information before the contract, which if known may influence the principal's decisions. Post-contractual problems may emerge when environmental uncertainty and the costs of obtaining information make it impossible for the principal to fully monitor the actions of the agent.

The rationale for the establishment of an agency relationship is that theoretically it will increase the utility of both parties. According to the theory however, several costs are incurred by both parties which need to be taken into account. Overall these costs are affected by the

risk attitudes of both parties and the degree to which information asymmetries prevail (Mishra et al., 1998). Jensen and Meckling (1976) classify these costs into three categories:

Monitoring	They are incurred by the principal to screen and control the agent's behaviour. These costs also include incentive schemes intended to entice the agent to behave in the way that the principal would, if (s)he had the information available to the agent.
Bonding	They are incurred by the agent to assure the principal that (s)he will not take inappropriate actions
Residual	They are incurred by the principal and involve the loss to the principal due to the actions of the agents that the principal would not have undertaken.

Table 2.8 Costs incurred in an agency relationship

Agency theory has been extensively used in accounting to explain the behaviour of managers (as agents of shareholders) in organisations (Jensen and Meckling, 1976), and in political science and organisational behaviour (Eccles, 1985). In purchasing management literature however, research using this theory has been scarce (Zsidisin, 2000). The conflicting interests between a client firm (principal) and one of its suppliers (agent) could nevertheless be seen as a classic example of a principal-agent problem. By taking the agency theory assumption that both firms are utility maximisers (Jensen and Meckling, 1976), there is good reason to believe that the supplier will not always act in the best interests of the buyer. As the interests of the supplier diverge from those of the buyer, an agency problem is said to exist since the supplier may be reluctant to share information, or may be enticed to give false information.

If the buying firm has complete information regarding the suppliers' activities, it could design a contract specifying and enforcing the managerial and operational actions to be taken. The actions and interests of the supplier however may not be perfectly observable by the client firm; indeed in a competitive free market, the buyer often does not know what actions suppliers can take or which of these actions will maximise their utility. Furthermore, in addition to the supplier's behaviour, the outcome of actions taken is partly influenced by environmental contingencies such as changes in the economic climate, the action of other stakeholders, and technological changes that neither the buyer nor the supplier could predict. In these situations agency problems can be minimised, according to agency theory, by

imposing rigid control structures upon the supplier, which would however incur monitoring costs for the buyer. These monitoring costs could involve for example frequent visits to the supplier's site by a contract manager, or production of reports. When these systems are in place the buyer can write a contract that evaluates the supplier on the basis of his behaviour. Alternatively, the buyer may design a compensation policy which will potentially give the supplier incentives to select and implement actions (Eisenhardt, 1989a).

Limitations of Agency Theory

Eisenhardt (1989a) argues that the main contribution of agency theory to the study of SRs as opposed to other economic theories, is in its conceptual basis that organisations (and individuals) in a economic environment are motivated by self-interest and that the establishment of incentives has a major role to play in the alignment of conflicting interests. Furthermore, it incorporates variables such as the assessment of risk, information asymmetries and environmental contingencies that many behavioural organisational theories do not take into account (Hirsch et al., 1987).

The origins of agency theory in economics could be a source of conceptual strength, but at the same time the cause of some of its inherent limitations, in gaining insights for SRs phenomena. As Hirsch et al. (1987) persuasively posit, it is dominated by a single paradigm, price theory, and a single view of human nature, self-interest. This *ex parte* perspective of human nature however limits the theory's usefulness for understanding SRs phenomena that are often affected by a variety of human motives other than self-interest.

2.2.2.3 Shared ideas of transaction cost, agency and Oliver's classification

The differences between these approaches to the strategic genesis of SRs and the choice of the most appropriate governance structure are reflected in their epistemological roots. The unit of analysis in transaction cost theory is the transaction itself, or the exchange of products/services between organisations. It is founded on the economic efficiency perspective that views organisational success in terms of maximising efficiency through conducting transactions.

TCA thus assumes the feasibility of the transaction and investigates only its enforceability (Barringer and Harrison, 2000). Agency theory, on the other hand, does not assume the feasibility of the exchange, takes the organisation as the unit of analysis and focuses on how to align the strategic intents of participant agents (organisations at this level) in order to make exchanges more effective. It is however similar to transaction cost theory in that it is concerned with how organisations can maximise their economic utility through SRs. Oliver utilises notions from both theories; the main focus of her classification is on organisational issues of IORs, reflecting its foundations in organisation theory.

In some instances these three perspectives may be applied to study the same phenomena. Transaction cost theory for example emphasises specific (*idiosyncratic*) resources and their tendency to require monitoring and contractual safeguards to mitigate opportunistic behaviour. Similarly, agency theory emphasises the self-interested intents of organisations and identifies the areas where monitoring and establishment of incentives are needed to mitigate the levels of uncertainty arising from opportunistic behaviour. In a conceptually different way, the specific resources that are subject to *ex ante* or *ex post* barriers are a central source of value and power creation for organisations in Oliver's classification. Consequently both perspectives highlight the value that specific resources gain when incorporated in IORs. Agency theory and Oliver's classification furthermore can be both used to identify the conditions that lead organisations to behave opportunistically.

2.2.3 Theoretical models for the 'synergy' of SRs

2.2.3.1 The interaction approach

The work of the Industrial Marketing and Purchasing (IMP) Group in SRs merits particular consideration in this thesis as their conceptual nucleus, the *interaction approach*, represents one of the principal theoretical models in studying the interaction between partners in industrial BRs. Its focus is on how companies interact and how this interaction can be managed. Its theoretical basis can be traced both in interorganisational theory (in particular the

work of Van de Ven et al. (1980) as well as the ‘new’ institutional economic theory, chiefly in transaction cost economics.

The interaction approach predominately considers long-term SRs involving a complicated mesh of interaction within and among organisations instead of ‘one-off’ purchases, and regards both partners as being active in the SR instead of considering the buyer to be passive and only reacting to the seller’s stimuli by buying or not buying (IMP Group, 1997) (p.4). Its main components to the study of SRs are classified in four groups of variables (Figure 2.4).

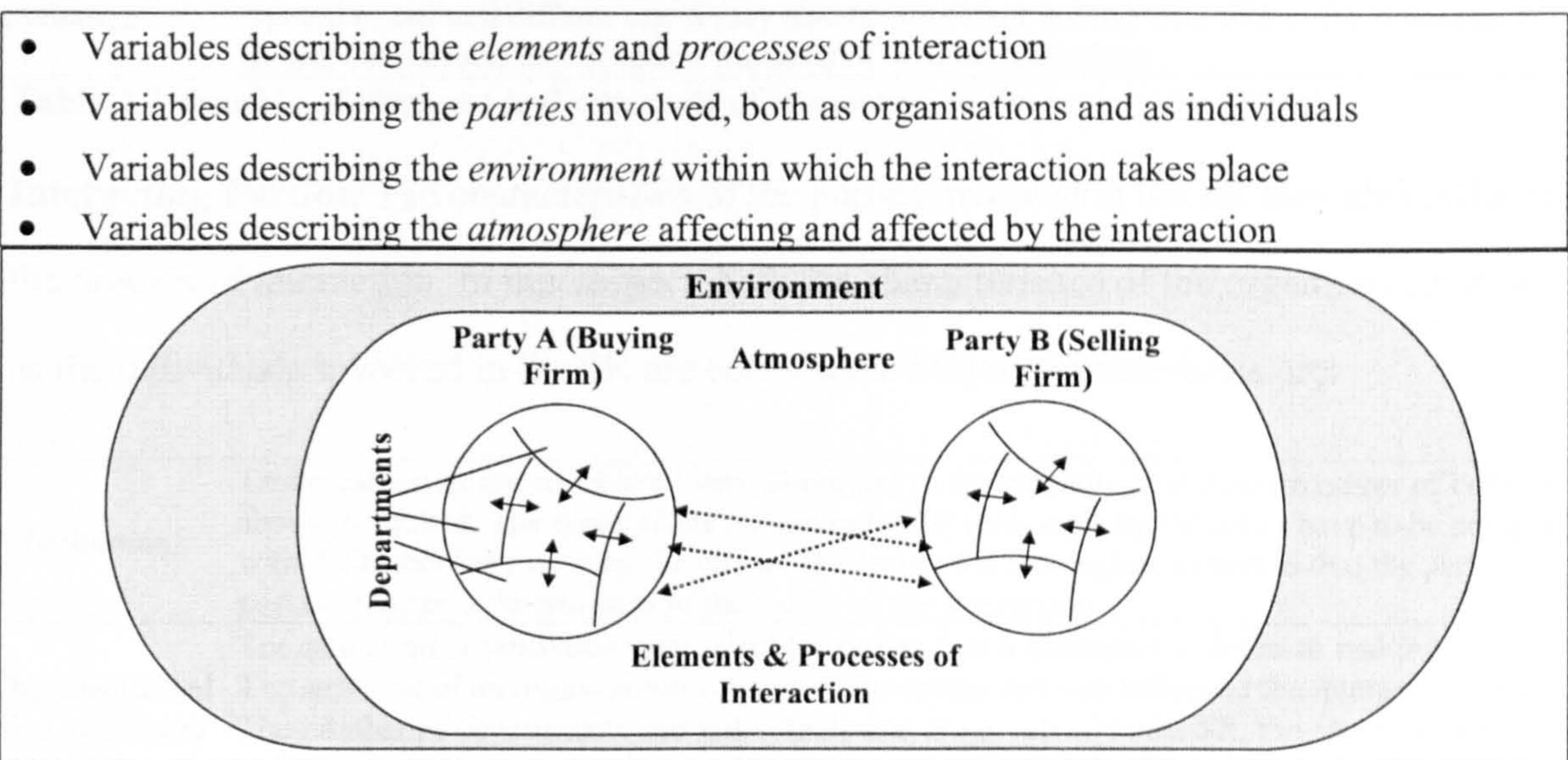


Figure 2.2 The interaction approach of the IMP group (source: (IMP Group, 1997)

The major strength of the interaction model is that it encompasses a comprehensive nexus of variables that could potentially influence the nature (structure) of SRs. The variables of the groups of elements and process of interaction and the interacting parties in particular merit consideration in this study in order to identify the salient characteristics of the structure of SRs and thus are discussed in this section.

The Interaction Process: As the interaction model predominately studies long-term SR, a distinction is made between the individual ‘*episodes*’ (e.g. a single order) and the longer-term

aspects SRs. An ‘episode’ is an occurrence that involves some form of exchange between two parties⁷. Four types of exchange are identified:

Product/service exchange	The products or services exchanged represent the core of the SR and as a result their individual characteristics could influence the type of the SR and the pattern of the interaction process.
Information exchange	Four aspects of information exchanged are identified as being critical to the nature of the BR: (a) the content of the exchange (involving the type of technical, economic or organisational information which is exchanged), (b) the ‘width’ and ‘depth’ of the information, (c) whether information is transferred through personal or impersonal communication, and (d) the ‘formality’ of the information exchanged.
Financial exchange	It relates to the quantity of financial resources exchanged. The volume of transactions, the financial investment in the SR, the cost of managing the SR are all indicators of the importance of the SR and could potentially influence its type and managerial style.
Social exchange	It is viewed as an important function in reducing uncertainties between parties by bridging spatial or cultural differences. It may also be important in long term SRs in the sense that it bonds the partners and develops the basis of trust between them.

Table 2.9 Variable of elements and processes of interaction in the Interaction Model

Interacting Parties: The characteristics of the parties involved in the SR may also influence the process of interaction. In this respect, both the characteristics of the organisations as well as the individuals involved in the SR are considered. Major characteristics are:

Technology	Technical issues are considered very important as the technological infrastructures of both parties should be linked. The types of the equipment or IT tools used by the seller have to be compatible with the technology used by the buyer. The level of technological expertise that the parties possess may be a determinant of the nature of the interaction.
Organisational size, structure and strategy	The size of an organisation may affect the power that it possesses in decision making. The structure of an organisation is another dimension that can influence the interaction process. The number of departments and individuals that are involved in the SR, the centralisation of authority and the formalised procedures that need to be followed to take a decision are all factors that could have an impact on the way that parties interact.
Individuals involved in the SR	The rank (role or position) of an individual in the organisation is an indication of the importance of the SR ⁸ . Furthermore, the behaviour, skills, personalities and personal goals of individuals are all factors that shape the social exchange element of the interaction process and can have a major impact on the nature of the SR.
Organisational experience	A company’s experience of participating in similar SRs and the knowledge that it possesses from this experience may have an impact on relationships

Table 2.10 Variables related to the interacting parties

The interaction environment

Congruent with the open system, population and institutional theories, the interaction model acknowledges that it is not sufficient to analyse SRs in isolation; the wider context within

⁷ This set of variables can be seen as considering the effects of the notion of *asset specificity* (that is found in transaction cost theory) on the interaction processes of the relationship

⁸ This is a very important element of analysis in this thesis, given that it investigates the role of purchasing managers in SRs.

which these SRs are embedded must be considered as well. The wider environment of the interaction is thus considered in terms of several factors:

Market structure	The structure and norms of the market may have an impact on the way the parties interact. For example the degree of buyer and supplier concentration, the stability or rate of change in the market and its constituent members, and the extent to which the market is international can affect an organisation's strategies and in effect its behaviour in a SR
Dynamism	This is related to the concept of relational embeddedness (Uzzi, 1997) and may affect SRs in terms of the <i>closeness</i> of the parties, which includes issues related to the predictability of the other party's actions, but also in terms of the reliance upon one supplier in a dynamic market, since this naturally incurs opportunity costs.
Internationalisation	It may affect the motivation of organisations in developing international SRs, which in turn may affect its marketing strategies, its structure, and the particular skills needed for operating in an international environment
Position in the supply chain	This is related to the structural embeddedness of SRs in extended networks and considers the impact of SRs at one link in the supply chain upon other SRs. In manufacturing supply chains, for example, the SR that a particular supplier of raw materials has with a component manufacturer will be affected by the strategies and the SRs that the component manufacturer has with an automotive manufacturer.
The Social System	The regulations and constraints on business and the norms and values (such as shared expectations, understandings and a common language) of different social and cultural environments can affect the willingness of organisations to engage in SRs.

Table 2.11 Variables related to the interaction environment

The atmosphere: This refers to the power-dependence relationship that exists between interacting parties, and the state of conflict or co-operation, the overall closeness or distance of the SR, and the mutual expectations of companies. (Hayes and Wheelwright) 1984 identify two main reasons/dimensions why different atmospheres in interactions may be advantageous or disadvantageous (pp. 288-296).

Economic dimension	It is based on TCA, and considers costs which could be reduced via closer interaction between suppliers and customers. When there is a closer collaboration between parties, it is argued that the transaction costs arising from negotiations, distribution and administration may be handled more efficiently. Production costs may be also reduced with closer collaboration, through the opportunity for a more optimal division of production processes between supplier and customer.
Control dimension	This dimension deals with the possibility that through closer collaboration an organisation can reduce uncertainty, by increasing its control over the other party. Increased control is perceived to improve a firm's chances of anticipating its partner's actions. The ability to exert control over the elements of the interaction is considered to be related to the perceived power of the parties.

Table 2.12 Variables related to the atmosphere of the SR

2.2.4 The relationship between the interaction approach, transaction cost and agency theory

In order to aid the development of a conceptual model of the nature of SRs for this thesis, several similarities and differences in the conceptualisation of SRs between these theoretical

models are discussed. All these models offer related conceptual approaches (as they fall within the same stream of research that views SRs as mechanisms aimed at improving organisational efficiency), despite the fact that they look at SRs from different perspectives. TCA and agency theory focus on the identification of the most economical governance structures of SRs (synthesis of SRs), and the interaction model focuses on the management of SRs in order to enhance organisational outcomes (synergistic effect). In this sense all these perspectives can be complimentary and may be applied to generate knowledge about diverse SRs phenomena.

The first major difference is that TCA and agency theory assume that the parties involved in a SR are motivated by economic self-interest and will engage in opportunistic behaviour. The interaction model however takes a slightly different approach in assuming that the nature of individuals could potentially affect the SR. The unit of analysis is also different in these approaches. Whereas the transaction is the basic unit of analysis in TCA, and the agent (organisation or individual) in agency theory, in the interaction model it is the SR itself. TCA primarily examines the basic dimensions in which transactions differ (e.g. asset specificity) and the implications of those differences for designing appropriate governance structures. In contrast, the focus of the interaction model is how to achieve the best fit of SRs to the environment they are embedded.

TCA also focuses on how to reduce *ex post* transaction costs⁹ by aligning transactions with appropriate governance mechanisms. In contrast, agency theory and the interaction model adopt an *ex ante* view of relations between parties. Their emphasis is on precluding or minimizing *ex post* costs through an *ex ante* alignment of incentives (Bergen et al., 1992).

Some of the differences between them have begun to blur in the recent years. Studies that use TCA for example examine a wider range of governance structures between organisations (such as networks) and focus on the characteristics of the individuals and the relationships

⁹ *Ex post* costs include (i) maladaptation costs, (ii) haggling costs, (iii) setup and running costs, and (iv) the bonding costs of effecting secure commitments (Williamson, 1988) (p.572).

they form, operationalising ‘softer’ characteristics of SRs such as the concept of trust as an incentive to build appropriate governance structures (Heide and John, 1992). Scholars from the IMP group on the other hand use extensively the theoretical pillars of TCA to illustrate the importance of the degree of uncertainty and asset specificity into determining the governance structure of SRs (Ford, 1997).

As all these theoretical models are concerned with similar phenomena in SRs, it appears that they are converging into a common conceptual ground and therefore the utilisation of constructs and propositions from all of them may possibly enhance further our understanding of SRs’ phenomena.

2.3 Purchasing and SCM models of SRs

As this research studies the role of purchasing in SRs from a SCM perspective, the SRs models as represented in the purchasing and SCM management literature are discussed and critically evaluated in this section.

2.3.1 The growth of importance of SRs

During the 1980s western companies surged by the environmental changes in the economic climate that required greater flexibility and efficiency and inspired by the success of Japanese manufacturers that were using a distinctive production model (Womack et al., 1990), started focusing their attention on the development of closer, more collaborative SRs. Following the Japanese manufacturing paradigm, SRs were transformed in the western world. Companies started reducing their supply base with only very few suppliers providing each type (product/service) required by companies, contracts with outside suppliers were increasing in length and exchange of information became more frequent. World class companies started abolishing the in-house production of many products/services that they considered were not part of their core business and preferred to buy them from specialist companies that could offer them at a price lower to the cost of producing them themselves, adopting the concept of the “*focused factory*” (Skinner, 1974). The increased international competition signified new

opportunities and challenges for firms. New forms of organisations like networks emerged (Thorelli, 1986). Alliances and partnerships became the strategy to compete in most industries¹⁰. This increased the strategic role of certain suppliers in many companies and thus the management of SRs became a crucial issue for many companies.

2.3.2 Partnership models for SRs

In the late 1980s, academics from USA and the UK, inspired by the Japanese manufacturing model, developed a *partnership* model between buyers and suppliers as a ‘best practice’ to the challenges faced in a global marketplace (Womack et al., 1990). Since then various analogous models have been developed that all have two major common characteristics. They all centre on the antecedents of firms moving from arms-length SR towards closer, more co-operative relationships and emphasize long term (as opposed to short term) SRs (Table 2.13).

Traditional model	New model	Proponents
Mass	Lean	Womack et al. (1990), Lamming (1993)
Exit	Voice	Helper (1991a, 1991b)
Arm’s length contract relations	Obligational contract relations	Sako (1992)
Adversarial	Collaborative	Macbeth (1994)

Table 2.13 Various partnership models of SRs¹¹

2.3.2.1 The lean supply model

The lean supply model (probably the most influential of all the partnership models) is a normative model of supplier management that was developed during the five year IMVP programme (ibid p.3). Drawing on production and supply practices of Japanese automotive companies and their relationships with their suppliers, Lamming (1993) proposes the *lean supply* concept as a means of obtaining better value from suppliers, achieving better quality, more efficient services and continuous improvement. The tenets of the lean supply model are:

¹⁰ Speckman et al. (2000) for example, point out that the rate which alliances are formed has exploded and is estimated to run into the tens of thousands worldwide by 2010.

¹¹ There is a plethora of different versions of *partnering* SRs (Landeros and Monczka, 1989; Hines, 1994). Although there is a difference in terminology these models share the same principles as those presented here.

- a small number of large and culturally similar supplier companies that are able to provide products and services according to the organisation’s designs and standards
- close collaboration on new product development and R&D initiatives with early supplier involvement
- stronger vertical and horizontal relationships (higher interdependence)
- global sourcing to obtain the best possible product or service and
- a continuous improvement philosophy and ability to collaborate
- implementation of best practice models in all aspects of business operations
- cost transparency between partners
- a narrow supply base in which a small group of suppliers maintain close relationships with a central large customer that controls and coordinates their own supply chains.

Table 2.14 The tenets of the lean supply model

For the development of the model Lamming (1993) uses different factors which include the nature of the competition, the basis for sourcing decisions, the interchange of data and information, administration of the level of capacity, delivery practices, position regarding price, quality, research and development (R&D) and the level of pressure in the relationship. The result is a classification of different practices in SRs customers which, according to the model, are necessary in order to face the challenges of global markets (Table 2.15).

Factor	Lean supply Characteristics			
Competition	Global operations and local presence	Contribution to product technology	Organic growth and merger & acquisition	Dependent on collaboration
Sourcing Decisions	Early involvement in new products	Predetermined sources	Based upon long term	Single and dual sourcing
Data / Information Capacity	Target Costing	True transparency of costs	Electronic data interchange	Kanban system for production
Delivery	Heijunka Smoothing	Synchronised capacity	Regional strategic investment	Flexible operations
Price Changes	Just In Time	Local or long distance / international	Synchronised	
Quality	Price reductions from order onwards	Mutual agreement on quality targets	Continual interaction and <i>kaizen</i>	Perfect quality goal
R&D	Supplier vetting schemes become redundant	Long-term development of components	Supplier expertise, customer integration	
Stress Level	Integrated: assembler and supplier	Self imposed	Non culturally specific	
	Very high: both from customer and self-imposed			

Table 2.15 The lean supply model (adapted from (Lamming, 1993), p.194)

2.3.2.2 The exit – voice model

In the exit-voice model of SRs Helper (1993) adopts Hirschman’s (1970) exit, voice and loyalty concepts to study the supplier management strategies in US and Japanese automotive organisations. She posits that (at least until the early 1990s) US automotive SRs were characterised by the exit model, whilst the voice model was more common in Japan. US

companies would *exit* SRs for a more preferable one in cases of deterioration, whereas Japanese companies would *voice* concerns and deal with the same supplier in order to rectify the situation (Table 2.16).

US exit model	Low information exchange	Low commitment	Adversarial Relationships	Sole - sourcing	Switch suppliers with ease	Competition is price based	Search for new suppliers if problems arise
Japanese voice Model	High information exchange	High commitment	Close Relationships	Numerous suppliers	Long-term relationships	Competition over quality, delivery, engineering & price	Work with existing suppliers to resolve problems

Table 2.16 Helper’s exit-voice model between US and Japanese SRs

In describing the options available to SR strategy, Helper provides a 2x2 matrix for the level of commitment to the SR and the level of information exchanged between the parties (Figure 2.3), and concludes that both options of exit and voice are feasible because they are internally consistent (Helper, 1991a). In the other two boxes, box 4 represents a stagnant strategy (a monopoly or a vertical integration that is not badly managed), whereas box 1 is an infeasible option, as with the level of information exchange increasing the level of commitment increases. From all the four available options she posits that the voice model is superior.

Information Exchange		1 Infeasible	2 Voice
	Low	3 Exit	4 Stagnant
		Low	High
		Commitment	

Figure 2.3 Dimensions of supplier relations (Helper, 1991a)

2.3.2.3 Partnership sourcing

Another version of a partnership model of SRs is the ‘*partnership sourcing*’ model by Macbeth and Ferguson (1992) in which the authors also describe the contrast between the traditional (adversarial) SRs of western companies and the collaborative SRs of Japanese companies. Building on Carlisle and Parker’s (1989) work on partnering SRs they discuss the necessary actions, processes and procedures that enable relationships to deliver customer satisfaction. In the partnership sourcing model the authors describe purchasing’s role as evolving into SRs’ management with a high-visibility, strategic context (Macbeth, 1994).

2.3.2.4 Arms length or obligation contracting

Along the same lines as the lean supply and the exit-voice models Sako (1992) proposes a model of studying SR along two divergent extremes characterised as arm's length contractual relations (ACR) and obligational contract relations (OCR) that form two ends of a spectrum along which SRs can be classified. ACRs - which are analogous to the exit, mass and adversarial models of SRs - are based on an explicit and clearly defined contract, whereas OCRs – which are analogous to the Japanese/voice model - are based on reciprocal trust, which is required to make a close more collaborative relationship more effective.

The contribution of Sako's model to the study of SRs is the incorporation of the concept of trust in the continuum between arm's length and obligational SRs. By synthesising the dimensions of the concept of trust she proposes three different types of trust along which SRs are built on: *competence* trust, *contractual* trust and *goodwill* trust. Contractual trust refers to the belief that the other member(s) will adhere to the contractual obligations, competence trust refers to the perceptions of one party of the capability, the expertise and knowledge of the other member(s) in the SR and the confidence they have in them, and goodwill trust refers to the belief that the other member(s) will perform tasks in excess of the contracted terms based “on mutual expectations of open commitment to each other” (p.38) (Sako, 1992).

2.3.2.5 Critique and implications of the partnership models

The partnership models – apart from the general similarities on the contrast between western and Japanese SRs – share two general fundamental notions. The first is that the contrast between the old and new modes of supply is mutually exclusive. In other words, a company cannot choose to adopt a partnering approach (lean/voice/obligational) in certain areas of the SR and at the same time maintain a traditional (mass/exit/adversarial) behaviour in others, for this would undermine the foundations of their choice and their subsequent effectiveness of the partnership¹². Womack et al. (1990) for example are critical of the companies that choose

¹² This view is obvious in Helper's exit/voice model (box 1) and is congruent with the strategic choice theory

elements from both types of SRs. The result is as Dyer et al. (1998) report that in reality '*many firms tend to dichotomise this issue when considering a model for SCM choosing either the arm's length model or the partnership model*' (p.58).

The second shared similarity is a categorical preference for the Japanese model. The strong arguments of theoretical studies for superior logistics, enhanced product quality, better cost control, improved knowledge transfer and higher margins and the evidence of empirical studies in Japan (Nishiguchi, 1994), in America (Helper and Sako, 1995; MacDuffie J. P. and Helper, 1997) and the UK (Turnbull et al., 1992; Sako et al., 1995) made the partnership model an orthodoxy of SRs in the 1990s for academics and practitioners.

Although the partnership models have been very influential in shaping a school of thought in purchasing and supply management that is rooted in the philosophy of continuous improvement and the value of close and collaborative SRs, their main criticism is their normative nature itself and their potential value in real settings. Even though closer SRs are viewed as a panacea for competitive advantage, in reality the majority of SRs are not necessarily required to reach the level of lean supply. This leads to the idea of *a portfolio of SRs on the part of the customer* (Lamming, 1993) (pp.242-243), with commodities exchanges preferably running on a more arms-length basis and a critical supplier being part of a lean supply initiative (Dyer et al., 1998). They cannot be used therefore to analyse those SRs that run on a more arms-length basis.

A second criticism stems from the fact that the partnership models assume rational decisions on behalf of the partnering organisations. Organisations however often adopt policies on an ad hoc basis that originates from individual experiences and opportunistic behaviour, rather through a rational process of considering the mutual advantage of the partners involved in a BR and on many occasions companies are resistant or indifferent to cooperate (Ramsay, 1996).

A third criticism is that they take for granted that the SR is built upon the existence (or not) of mutual trust, equality and openness. There is strong evidence however, even on close partnerships that inequalities of power, trust and openness exist (Burnes and New, 1996).

Finally a fourth criticism is that in studying the efficiency of SRs, the partnership models take the organisational boundaries determined by legal entities as companies as the unit of analysis. In the industrial buying behaviour and organisational theory literatures however there is evidence that SRs are extremely intricate constructs that are developed through systems that are not always the same as firms (Barringer and Harrison, 2000; Gulati, 1998). Limited attention has been given in purchasing and SCM literatures for example to the study of inter-departmental or interpersonal relationships as part of a holistic model of the nature of SRs. For the purposes of this study it is contended therefore that the inter-organisational level of SRs is an insufficient perspective that does not capture the totality of their hypostasis.

2.4 Conceptual framework for the nature of SRs

Given the lack of a unifying theoretical framework that addresses issues regarding the synthesis of SRs and synergistic collaboration between partners¹³, a framework that classifies the nature of SRs according to two typologies is developed for the purposes of this thesis: one based on their level of analysis and one based on the characteristics of their development. The underlying principle of this framework is that it views SRs as evolving processes of collaboration, rather than abstract entities created by collaborating parties or any form of governance structure. This *process-oriented* view of SRs facilitates primarily the need in this thesis for a systematic analysis of SRs' structural and infrastructural characteristics upon which the role of purchasing managers is assessed.

¹³ The lack of an integrated theory of IORs that bridges these perspectives has also been discussed by other researchers. (Lamming, 1993) (p253) for example discusses the need for an analytical framework to assess relationships between organisations.

2.4.1 Levels of analysis of SRs

The first typology considers the level of complexity of SRs processes that is reflected in the level of analysis of different theories. Inspired by the interaction approach that acknowledges SRs as extremely intricate constructs developed through systems that are not always the same as firms, this thesis considers SRs as developing between the individuals involved in the exchange (inter-personal level), between business units (for example, marketing and purchasing departments) from the same or the partnering organisations (inter-departmental relationships) and between entire organisations (inter-firm relationships). These various levels of analysis relate to different issues in the SRs studied, and thus require separate consideration.

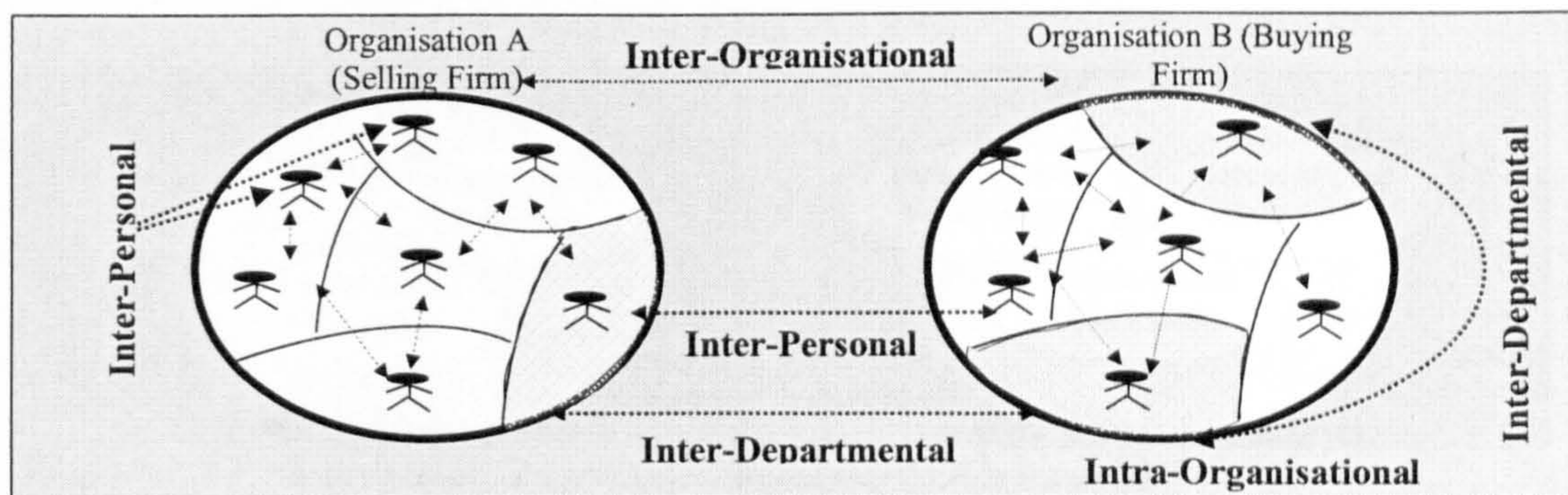


Figure 2.4 Different levels of analysis of SRs

Furthermore, although most SRs involve three or more members for the sourcing, making and delivery processes, as well as the use of the product or service that is exchanged, most of the research in SCM that deals with SRs has examined the dyadic relationships between two adjacent organisations (Harland, 1996; Wren and Simpson, 1996; Croom et al., 2000). It is contended in this thesis that the triadic level is more accurate in analysing SRs in cases where the direct consumers/users of the product/service exchanged are internal departments of organisations (these could be individual departments, or subsidiary companies that do not have full independence from the parent organisation). Other researchers also have argued that the analysis of SRs requires a multilevel analysis. Fichman and Goodman (1996) for example posit that in order to fully understand the behaviour and dynamics of SRs the *individual* evaluations of transactions between firms, the dyadic *relation* between a customer and

supplier, and the *network* of relationships in which these dyadic relations and transactions are embedded should be considered.

At the inter-personal level in particular, the reciprocal BR that purchasing managers have with internal customers (individuals that use the product or service exchanged, or their representatives) and with the supplier's managers, introduces a triadic SR as illustrated in (Figure 2.5). Similarly, at the inter-departmental level the BR that the PD has as an entity with other departments in the buying organisation (or separate business units from the same organisation, as subsidiary firms), and with supplier's various functional units (marketing or sales departments) can be seen as a triadic SR at a higher level.

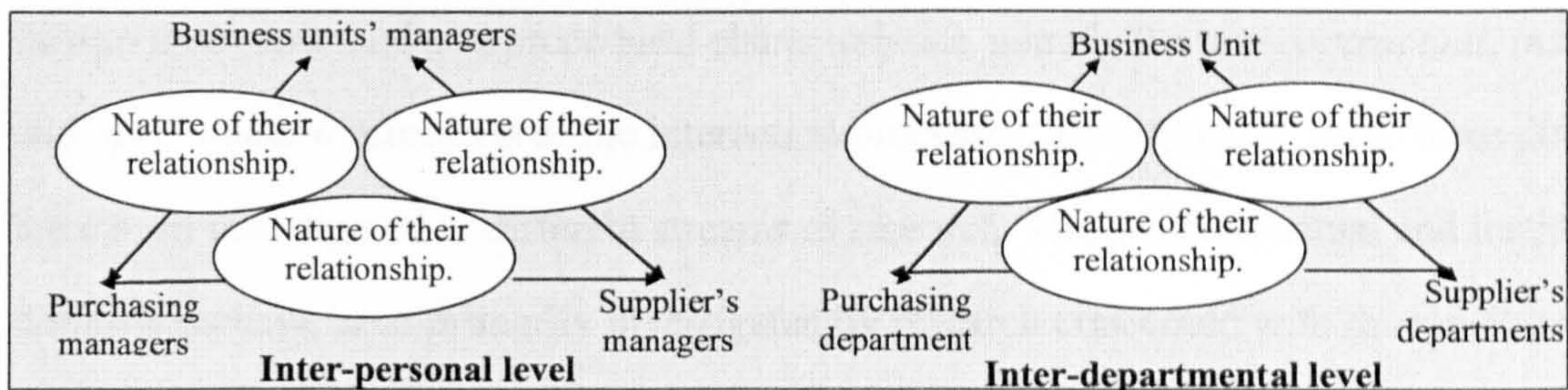


Figure 2.5 Triadic inter-personal and inter-departmental relationships

It is reasonable then to assume that an IOR (SR) is an extension of inter-personal and inter-departmental BRs. As cooperation at any level is however ultimately dependent on the BRs between managers, the boundaries of these levels are very blurred. Thus, research at the macro (inter-firm) level could be better informed if greater understanding of BRs at the micro (inter-personal) level it is achieved. The conceptual position in this research is that in investigating the role of purchasing in SRs it is necessary to examine all these different levels of analysis¹⁴. In this study therefore, a fundamental distinction is made between these three *situational dimensions* in which interaction takes place, and the role of purchasing is explored on the following three levels:

¹⁴ An interesting topic would be for example to examine at the interpersonal level the extent to which the relationships of purchasing managers with internal customer managers and supplier managers influence the selection of particular governance structures.

- The *organisational* level, exploring the role of the PD in the organisation with respect to the activities they contribute or conduct for the management of SRs,
- The *departmental* level, exploring the role of the PD in the BRs with equivalent departments of the supplier and internal departments of the focal organisation, and
- The *individual* level, exploring the role of purchasing managers in their BRs with their counterparts from the supplier and the internal customer side.

2.4.2 Development of SRs

The second typology for the nature of SRs considers the procedural dimensions of their genesis and development. SRs may be conceptualised in terms of three dimensions which inform their structural and procedural characteristics, namely the *pre-contractual*, *institutional* and *operational* dimensions of the interaction processes. Traditionally, these three dimensions have been investigated in different streams of research. The pre-contractual and institutional dimensions have been primarily investigated by research concerned with the structural characteristics of a SR. They include all the factors that affect the genesis of a SR, the role of participant organisations and their strategic intents, the arrangement of resources dedicated to and available to the SR, and the allocation of activities and determination of responsibilities of different actors within the SR. The interaction dimension has been the focus of work concerned with how firms or organisational departments create and manage their SRs, i.e. how they align their processes through organisational mechanisms such as communication processes or conflict resolution.

2.4.2.1 Pre-contractual dimension of SRs

The pre-contractual dimension refers to the factors that lead organisations to engage in SRs. Research in this area concerns the factors that condition the selection of potential partners. The major issues are whether an organisation (or particular individuals from that organisation) has the characteristics the buying organisation is seeking and what strategy the buyer should employ to find this out. Economic theories such as agency theory and game theory can be used

to shed light on these issues. Major theoretical models that study issues related to pre-contractual characteristics are thus institutional theory, population ecology, strategic choice theory, and the classification provided by Oliver (1990) on the determinants of IORs.

2.4.2.2 Institutional dimension of SRs

The institutional dimension refers to the establishment of the SRs and the distribution of rights amongst the partners, reflecting the notion of the hierarchical contractual elements proposed by (Stinchcombe, 1985a). Institutional characteristics therefore can be seen as determining the setting up of an appropriate governance structure for the SR. The governance structure of a SR encompasses contractual and non-contractual binding agreements between the partners in the SR. Contractual commitments involve legal issues such as selection of the legal form governing the SR (e.g. partnership or strategic alliance, market or hierarchy), the appropriate type of contract (MacNeil, 1978), the length of the SR and contractual safeguards (exclusivity clauses, penalties, etc.) to determine the extent to which partners will be bound to the agreement. It also involves the delegation of roles and responsibilities of the parties, such as formal or informal definitions of the decision rights and authority systems between the involved parties to govern the exchange. Non contractual (informal) agreements may consist of an agreement in spirit of fellowship to devote managerial expertise and attend as many meetings as possible in order to support the relationship's objectives (Bleeke and Ernst, 1993), or to provide unconditional help to the partners in case of need.

Accordingly, these commitments prefigure the setting up of operating procedures of the SR (such as the monitoring and performance measurement) and may help to resolve potential disagreements among the partners. The choice of the most appropriate governance structure is regarded as an important dimension in structuring IORs. As discussed earlier theories such as transaction cost theory and agency theory (but also the resource dependence and network related theories) can be used to generate insights.

2.4.2.3 Operational dimension of SRs

The characteristics of the operational dimension of SRs (i.e. the interaction processes) refers to the actual exchange of resources between the partners. This defines how organisations set up to co-ordinate their activities and how they interact, within the arrangements agreed through the institutional characteristics that were decided upon at the beginning of the SR.

The coordination of the institutional characteristics of a SR provides the foundation for achieving the synchronisation of strategic intents amongst its partners. These foundations however cannot *de facto* stipulate the effective coordination of the partners' actions. In other words, even if two organisations establish strong institutional agreements, this does not mean that they will necessarily coordinate their actions. As Doz et al. (1989) argue, actual coordination is not achieved through institutional mechanisms but, rather, is accomplished through the everyday interaction of the actors involved in the SR. The way that this interaction amongst the partners takes place can be understood for example by looking at the frequency of transactions, the frequency of communication between the interacting parties, the number of operations shared between the partners, the level of personal contact between the partners, and the number of people involved in the SR. More importantly however the examination of the way that managers conduct certain activities in their everyday life can provide a more accurate realisation of the degree of coordination amongst the trading partners. The constitutional dimensions of the nature of SRs are illustrated in Figure 2.6.

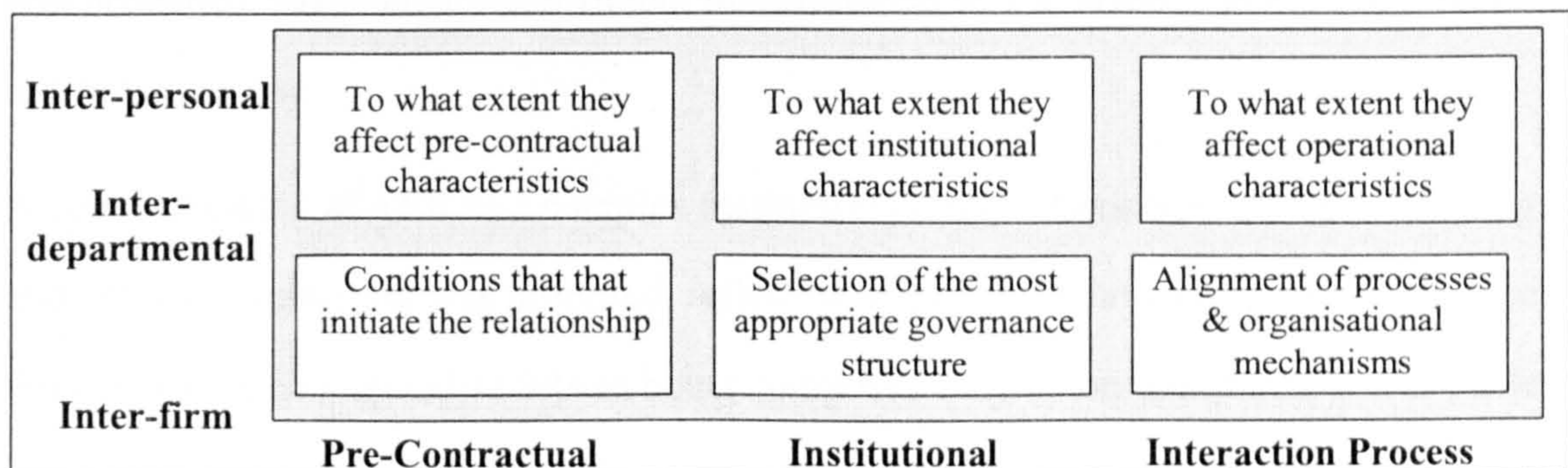


Figure 2.6 Constitutional dimensions of the nature of BRs

From the above discussion it is evident that the coordination of interaction processes between partners does not substitute, but rather complements, the choice of management governance structures defined by the institutional characteristics.

2.5 Chapter Summary

This chapter positioned the research presented in this thesis in the broad SCM discipline and review the theoretical literatures of the study of SRs in order to develop the conceptual bases that guide this study. From the discussion of the different theoretical contributions to BRs it was observed that two major approaches to the study of SRs exist in the literature: an efficiency oriented approach and a behaviouristic approach. This thesis takes an efficiency oriented approach to the study of SRs as it is concerned with how purchasing managers can optimise the performance of SRs by investigating their involvement and their role in their management.

It was contended that whilst each of the efficiency oriented theories that were reviewed is useful to study SRs phenomena, each is also insufficient to capture the inherent complexities the formation and management of SRs, or to provide a holistic view of the nature of SRs. Given the lack of an integrated framework to theorise about SRs phenomena, this chapter suggested a blending of the theoretical approaches to provide a more useful means of conceptualising the nature of SRs. An alternative approach to understanding the nature of a SR was presented, suggesting that it should be considered as a developmental process rather than a structural entity.

An understanding of a SR as a complex institution of interactions between individuals, groups and entire organisations was proposed, reflecting a shift from the view found in economic theories which conceptualise SRs as being composed only by organisations. It was contended that a triadic level view of SRs which includes the BRs that purchasing managers and PDs have with internal customers as well as supplier managers is more appropriate for the purposes

of this study. Finally, a conceptualisation of three distinctive phases in the genesis, formation and management of SRs was proposed to study pre-contractual, institutional and operational issues in SRs.

The distinction between these aspects of SRs fulfils three primary roles in this thesis. Firstly, from an academic viewpoint, it facilitates an understanding of the nature of SRs by breaking them down into three fundamental facets of governance and interaction processes, addressing issues with respect to the coordination problems that arise when activities are distributed among several actors. Secondly, it enables these dimensions to be easily identified and empirically studied in the context of SRs, as they are pertinent to the study of the role of purchasing in SRs because they describe the distribution of rights and the coordination of information flows amongst the interacting parties. Finally, from a managerial point of view, these typologies can provide purchasing managers (as the thesis has a purchasing management focus) with clear directions for managing their SRs.

Chapter 3 - The changing role of purchasing in organisations

“If you want to understand something, observe its beginning and development”
Aristotle (384-322 BC)

The objective of this chapter is to trace the development of purchasing and its involvement and role in SRs as it is presented in various literatures and to identify (and substantiate) certain research gaps found in these literatures. As this study is about the organisational role of purchasing managers and the PD in SRs, the foci of the discussion are the development of the purchasing profession and the role of the PD in the organisation and in SRs.

- The discussion begins with a historical analysis of the evolution of the purchasing function, tracing the conditions that led to its development, in order to underscore its developmental stages and pinpoint its current position in organisations.
- The role of purchasing managers and the PD in the organisation, and more particularly in the management of SRs as presented in the literature, is critically evaluated and then several models that deal with the development of purchasing in organisations, drawing on the organisational development literature, are discussed in order to identify research gaps and salient issues about its future challenges.

In studying the role of purchasing managers in SRs, some clarifications need to be made initially in terms of the terminology that is used in this thesis. In order to be congruent with most of the purchasing management literature a distinction firstly needs to be made between purchasing as a *function*, purchasing as a *department* and purchasing as a *profession* (Lysons and Gillingham, 2003). In this study the definitions given in their book are adopted. They define the purchasing function as *‘the function responsible for obtaining by purchase, lease or other legal means, equipment, materials, components, suppliers and services required by an*

undertaking for use in production or resale' (p.3); the PD is *"that organisational unit responsible for the purchasing function"* (p.4); the purchasing profession involves all the activities that are conducted (and roles that are performed) to fulfil the purchasing function. A second clarification is made between the terms purchasing and procurement, as both terms are used in the literature. Lysons and Gillingham (2003) posit that purchasing implies the acquisition of goods and services in return for a monetary payment. Procurement on the other hand refers to the actual process of obtaining these goods/services and not just the payment. From that perspective procurement is a 'blanket term' to describe both the purchasing and supply processes. In this thesis however the terms purchasing and procurement will be used to interchangeably, as the term purchasing is more commonly used in the literature¹⁵.

3.1 A historical perspective on the evolution of purchasing

Academic fields in social sciences emerge because there is a need to satisfy the demand for new knowledge necessary to explain phenomena created by ever-changing political, demographic, economic and technological conditions, and because individuals and organisations are interested in funding and doing research to explain these phenomena (Berry and Parasuraman, 1993). In this fashion, the academic field of purchasing evolved as a result of major developments that took place over the second half of the 20th century which had an impact on purchasing practices.

In the modern academic world the attention paid to the procurement function as an essential organisational function can be traced back to the turn of the 20th century when marketing started concerning academics¹⁶. In 1900 professor Diemer published an article in the USA in which he discusses several issues concerning the practices of the purchasing function (Diemer, 1900), and Shaw (1916) observed that procurement was an inseparable element of the marketing process. A year earlier Twyford (1915) had published one of the first books on

¹⁵ The term purchasing will henceforth refer to the profession of procurement unless otherwise stated.

¹⁶ Although several works before referred to the purchasing function, their focus was on specific industries.

purchasing methods and practices, and in 1933 professor Lewis of Harvard University published the first textbook on purchasing (Lewis, 1933). These approaches however were more practitioner oriented, giving guidelines on how to buy in a more cost effective manner rather than focusing on the importance of purchasing in organisational processes.

3.1.1 Product and process orientation– Post war era

Until the end of World War II the purchasing function had not received any academic or managerial attention. In a study of the history of the purchasing function, Hill (1975) points out that before the war the perception of managers and industrialists about purchasing was that *'it is an inescapable cost of doing business which no one could do much about it'* (p.18). After the war the political and economic environments changed drastically and the western world and Japan experienced great economic growth. The demand for new products was very high, the supply of resources was plentiful and there were not many suppliers in the same localised markets. In that economic environment a company was not seen to gain competitive advantage by excelling at purchasing. The companies that excelled were those that managed to market their products or services effectively, or managed their finance efficiently. Academically, the attention of many scholars towards marketing left little space for any recognition of purchasing. As most products or services purchased went into production, during that period the belief was that production departments should handle all purchases (Hill, 1975).

Purchasing was seen an assistant clerical function of the production department with a major role in the ordering and replenishing routines of the products that were outsourced.

This economic growth led to a gradual erosion of trading barriers between countries, and as a result competition increased steadily. Customers demanded supplementary services to the products they were buying (like technical support, maintenance and warranties), and large companies directed their strategies towards greater choice for the consumer. The importance of the purchasing function, whose role was to buy these additional products/services,

accordingly started rising¹⁷. The extended economic growth and major technological developments in automation and robotics that speeded up the manufacturing processes enhanced the scope of the purchasing function; companies increased their production capacities and as a result the volume of products/services they outsourced. The role of purchasing, apart from getting the best price for outsourced products or services, was gradually extended to the management of inventory (Dobler and Burt, 1996).

3.1.2 Transaction costs and logistics management - Computerisation era

The development of materials resource planning (MRP) technology helped data processing become cheaper, easier and faster. But even with automation purchasing personnel was required to monitor and coordinate procurement processes until the first computers were introduced for procurement. In the early 1970s computers started appearing in the most technologically advanced businesses and computer aided materials handling technologies were developed (MRPII), which helped in the management of inventory. As the cost of computing declined, and as computers also became more reliable, smaller, faster and easier to use, by the end of that decade many companies (especially in the US) were using computers to manage their inventory levels (Cortada, 1996). The inventory management responsibilities of purchasing were transformed to the operation of MRPII systems (which was less labour intensive) and, as the cost of material and transportation increased because of oil embargos and inflation pressures, its main role was directed to the management of the transaction costs for outsourced products. The use of computers (which brought production unit costs down) and the gradual decline of air freight¹⁸ at the end of the 1970s, together with the stabilisation of the oil prices, made companies realise that the transaction costs for outsourcing a product (even from a remote supplier) might be cheaper than costs for making it in-house. Companies

¹⁷ One of the first complete academic works on the purchasing function was that of (Fearon, 1963) who studied the purchasing processes of American companies in the early 1960s and concluded that organisations can achieve competitive advantage through major cost savings when they conduct research within their PDs.

¹⁸ Its use increased over 500% from 1960 to 1981 (source: Transportation facts and trends, 17th ed. Washington D.C.: Transportation Association of America, 1981).

directed their strategies to improve their inbound logistics systems, so that they could minimise the total transaction costs and at the same time improve their manufacturing and delivery lead times. The management of inbound logistics turned out to be a new role for purchasing.

These transitional stages in logistics and production management had a significant impact also on the development of the purchasing profession. For the first time purchasing was seen as a value-creation activity that could make a visible contribution to the success of an organisation, rather than as cost saving function. Despite these developments the roles and responsibilities of purchasing managers were still more tactical than strategic. The routine ordering and reception of purchased items were the most common tactical responsibilities of purchasing managers, and the most senior representative of a PD (in the organisations where there was one) was hardly ranked higher than director level (Dobler et al., 1990). Without senior management representation, the PD was often overridden by the finance or operations departments in the interface with suppliers when particular issues in the transactions arose.

3.1.3 Supply Management – Globalisation era

In the late 1970s and beginning of the 1980s, rapidly changing technological achievements, mainly in the telecommunications sector and in IT, coupled with a stable economic and political environment, instigated governments in the western world to deregulate many sectors of the economy in order to boost growth. The increasing decline of trade barriers between countries, coupled with a decrease in transportation costs, maintained the trend for outsourcing and brought about drastic changes in national and international marketplaces.

The deregulation of economies in the western world paved the way for Japanese companies to enter national markets in the western world. By reaping the benefits of a differentiated production and supply system that had been developing since the early 1950s together with cheap labour, Japanese companies had become significant players in the world economy. This

system changed the way companies organised their functions and heralded the most important change in the purchasing function. The success of the Japanese automotive companies like Toyota and Nissan made companies in the western world realise that in order to become world leaders, they required not only low cost production but also excellent quality, speed and efficiency in their supply and distribution processes.

The growth of global competition and emergence of new international markets marked a new era of development in the importance of purchasing in organisations, and concepts as the more strategic 'supply management' instead of purchasing emerged in the literature (Kraljic, 1983). Globalisation entailed foreign sourcing in procurement, flexibility of manufacturing processes, and effective inventory and materials management (Slack, 1983, 1987). Transportation became very complicated in terms of standardisation and scheduling. Hence the logistics operations became more complex and required efficient management and Operational Research techniques. Best Practice models emerged in the literature in order to streamline the logistics processes (e.g. vendor inventory management, manufacturing postponement and time compression). At the end of the 1980s, when the impacts of globalisation became more pronounced, purchasing costs made up approximately 60% of the total costs of organisations and logistics was ranked among the top priorities of businesses (Dobler et al., 1990).

As a result purchasing became a strategic tool for companies as the increased competition and adoption of lean production techniques affected the way firms selected, developed and managed their suppliers (Giannakis et al., 2004). PDs were not only responsible for placing orders, but for the first time they started having a vital role in the selection of suppliers, participated in new product development, implementing cost management techniques for transactions (e.g. total cost of ownership) and developing and maintaining supplier development (SD) programmes. At the same time, the traditional roles of purchasing such as

placing orders, managing inventory levels, and keeping production lines running were maintained (Dobler and Burt, 1996).

In much of the purchasing management literature that discusses the developments in the 1980s it is documented that the purchasing function did away with its traditional role as a clerical function in the organisation and gained a more strategic role. (Lamming, 1985) for example states of the purchasing profession: *“The new strategic function will probably not be called purchasing – that is much too limited a word. The connotations of purse strings and spending money have no relevance to the setting up and management of strategic inter-firm relationships. This task is concerned with ensuring the correct external resources are in place to complement the internal resources. Perhaps external resource manager is a term that future purchasing managers will adopt”* (p.40).

3.1.4 E-procurement - Electronic and digital era

The internet and telecommunications revolutions which started at the beginning of the 1990s and continue today mark the latest development in the evolution of purchasing. The e-commerce that started with the adoption of EDI systems and thrived with the invention of the internet had a major impact on the way that companies link with their suppliers. More electronic means of exchanging information (e-mail, e-catalogues, video-conferencing, mobile phones) today enable the development of more flexible, cost effective procurement processes and have opened up the possibility for easier trading with more suppliers.

Knowledge oriented companies recognise that purchasing offers great opportunities to increase profitability. The Hackett best practices report (Hackett, 2001) acknowledges that an improvement in spending efficiency of 2% could increase corporate shareholder value by 10%. The realisation that internet technologies can provide great savings inspired avant-garde organisations to focus their purchasing strategy on two areas: the way they manage their SRs and the way individuals in the organisation place orders (Hackett, 2001).

Cutting edge purchasing practices in the supplier management frontier include the further reduction of the supplier base, centralisation of purchasing activities to a single process, implementation of strategic sourcing, and effective SD. The use of technology to conduct transactions with methods such as corporate purchasing cards, online catalogues, bar coding and blanket purchase orders enables companies to cut down transaction and administrative costs in MRO and maverick purchases. By linking the PD to internal customers and suppliers, organisations have found a way of reducing their total costs and achieve improvements in other areas such as operations or finance control. Furthermore, e-procurement technology enables purchasing managers to deal with more strategic value-adding activities such as improvements in the procurement process, strategic sourcing and the management of SRs.

3.1.5 A model of management areas of purchasing involvement

From the discussion of the evolution of purchasing over the last 60 years four major areas of purchasing involvement in organisations can be identified.

1. Product Management: Product (service) management refers to the traditional initial role of purchasing in organisations, involving all these activities conducted in order to define, assess and control the product/service attributes that are exchanged. The factors mostly associated with this area are the buying price, product specifications, and product development.

2. Process Management: Process management marks the second revolution in purchasing involving all the activities that are executed to facilitate, plan and control the delivery of the products or services that are supplied to the customer organisation.

3. Contract Management: Supply contracts have become more complex and their management more demanding, due to the increasing interdependence of partnering organisations (Tsay et al., 1998). Apart from the terms and conditions that specify the price and deliverables, contracts can include performance criteria, incentive rebates, revenue recognition, mutual safeguards, and other critical variables. As a result companies have placed

great emphasis on their management, in many cases introducing information systems support for their management (Boyce, 1993).

4. Supplier Development: As it was discussed earlier the increasing trend for companies to focus on their core competencies and outsource more of the supporting products or services, has made them more dependent on their suppliers and the suppliers' performance is closely linked with the success of the customer organisation. For the benefits of SRs to be realised, the suppliers' operations should be developed and managed in order to meet the needs of the internal customers of the organisation. (Watts et al., 1992) define SD as "a long-term cooperative effort between a buying firm and its suppliers to upgrade the suppliers' technical, quality, delivery, and cost capabilities to foster ongoing improvements". From that perspective it can be said that SD is a strategic management area for a SR that can enhance the effectiveness of SCM, by ensuring that a supplier's operations and performance are in alignment with the organisation's operations and business strategies. SD programmes can be used as tools to amend inefficiencies and develop new capabilities that can enhance the performance of the BR.

Each of these areas has a different scope and time horizon and involves different kinds of activities. Product/service management entails all the activities that contribute to the actual design and determination of specifications of the product/service exchanged. It encompasses decisions on the choice of the most appropriate product/service for the organisation and technical norms and standards. Process management involves all the activities aimed at planning and managing the actual exchange of the product/service between the partners within the frame decided in the contract and product specifications. Contract management includes those activities that are conducted in order to define a contract - the institutional framework within which relationships develop. Contract management is concerned with selecting, negotiating the terms of the SR, creating relationship agreements with suppliers, defining clear

responsibilities with the internal business units, and benchmarking supplier’s performance. These activities can be seen as *strategic* in SRs, as they reflect the organisation’s purchasing strategy and must be aligned with its corporate and business strategies. The product/service and process management areas that support contract management are more operational and more limited in scope. Finally, SD entails all the activities aimed at improving the performance of suppliers. This includes reducing costs, increasing quality levels, improving communication and ensuring timely delivery of products/services. It can also include activities aimed at helping the supplier organisation improve its financial position and operations or ensuring that excellent suppliers are recognised and rewarded. The four management areas and the forces that led to the evolution of the purchasing function are summarised in Figure 3.1.

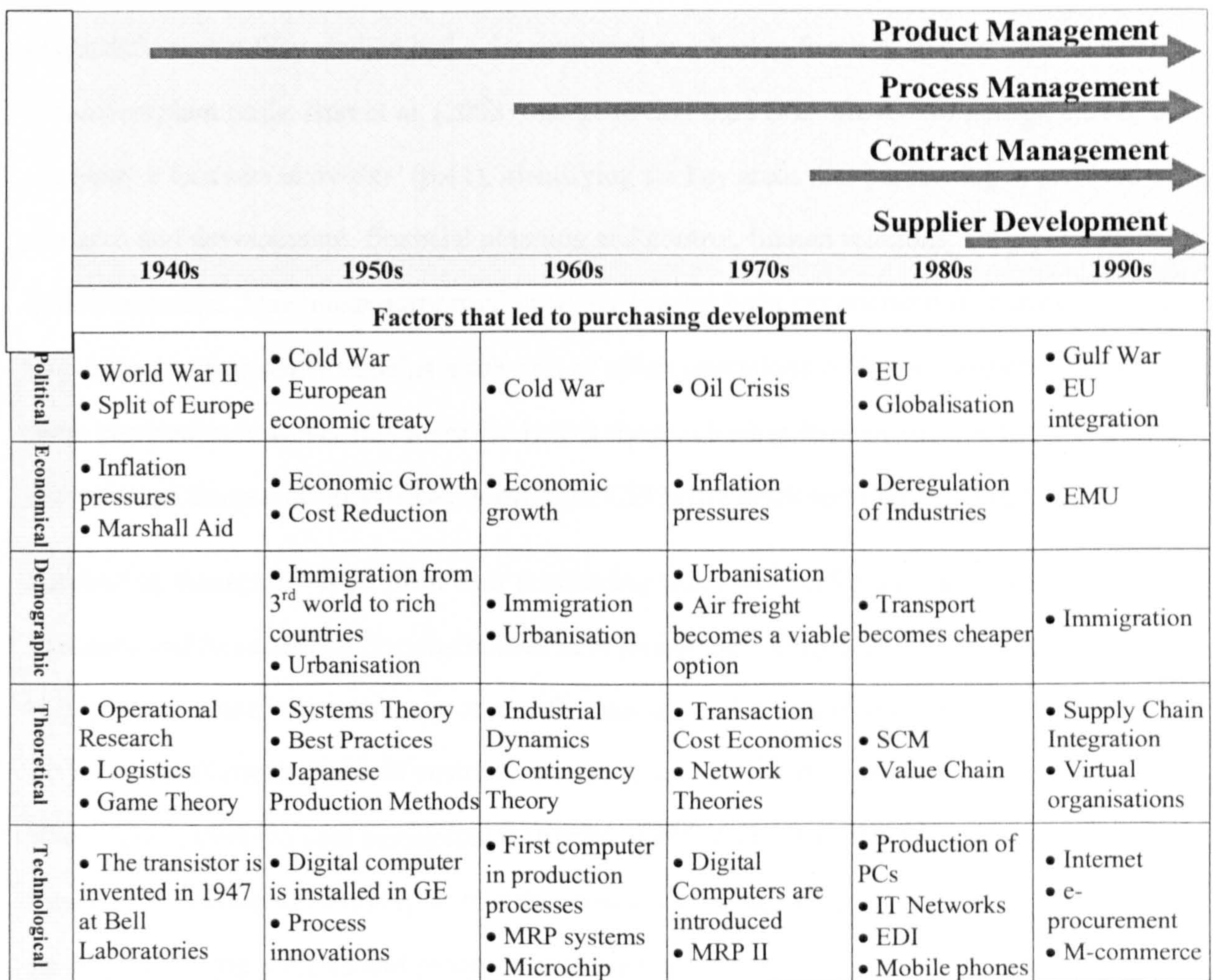


Figure 3.1 Areas of involvement and historical milestones in the development of purchasing

3.2 The role of the purchasing profession in the organisation

The externalisation of operations management with the adoption of SCM techniques by many organisations has had a profound impact on the position and scope of the PD in organisation. The division of responsibilities among suppliers and customers has changed due to the new paradigm of closer, more collaborative SRs. The requirement for (and capabilities of) purchasing managers, as well as the way PDs are structured in organisations, has been transformed accordingly.

Recognising the central role in the management of supply chains that the purchasing department can play, many companies are emphasising the need to have a central point of contact for all procurement activities. Fearon and Leenders (1995) report that only 12% of the organisations that they studied had a decentralised purchasing function that was conducted on a division/plant basis. Burt et al. (2003) also posit that the PD is '*the hub of a large part of a company's business activities*' (p.41), identifying six key areas that purchasing is involved in: research and development, financial planning and control, human relations, supply, conversion and distribution. This 'metamorphosis' however has not been experienced in many companies as purchasing frequently remains a sub-unit of either operations or finance departments. In these companies however it is more likely that the purchasing director reports directly to chief executive of finance or operations, or even the CEO (Hendrick and Ogden, 2002).

Purchasing managers - apart from their purchasing function - perform a variety of other functions and have several responsibilities in organisations. They are involved and make a very positive contribution in many areas of organisational management, from new product development (Croom, 1996; Wynstra et al., 1999) and quality management (Carter and Narasimhan, 1994) to cost management (Ellram, 1995) and even marketing (Turnbull, 1990). Fearon and Leenders (1995) report that the most common activities of purchasing managers are in establishing policies and procedures, setting up contracts for common requirements,

participating in system-wide purchasing/supply, personnel decisions, and developing supply systems. According to a recent study (Hendrick and Ogden, 2002) nevertheless, the processes related to outsourcing of products and services are still their main responsibility. These processes are closely related to the management of SRs.

After discussing how purchasing evolved to become a strategic weapon for companies, the next section focuses on the way this development happens in organisations, and the extent of current knowledge of its involvement in the management of SRs.

3.2.1 The development of purchasing in organisations

There are various conceptual models in the purchasing management literature that describe the development of the purchasing profession, which partly reflects the growing interest in the purchasing function in organisations. Table 3.1 presents a selection of several models that have been developed over the last twenty years¹⁹. As can be seen, all models adopt a stage developmental approach to explain how the purchasing function evolves in an organisation.

One of the early studies in purchasing development is the model presented by Barnes and McTavish (1983), in which purchasing is viewed as developing on the basis of ‘the sophistication of buyers’. This model portrays purchasing as developing from a clerical, informal and unsophisticated phase to advanced strategic buying in which purchasing managers participate in supplier management and coordinate the procurement process.

Although this model has in many ways been influential on the way academics and practitioners perceive purchasing development, its major limitation is that it provides only a rudimentary approach, considering very few areas of development. An alternative, more elaborate early model of the development of purchasing is provided by Reck and Long (1988), who identify four developmental stages that purchasing goes through to become an strategic function in an organisation, as well as the impact of each stage on twelve management areas.

¹⁹ Although in the academic and practitioner literatures there are many more models, only a representative sample is considered with the intention to reflect the range of different opinions that have been hitherto expressed.

The value of this model is its elasticity - that it can be applied in various contexts to describe the nature of purchasing development. This is nevertheless its major drawback, as it does not give any direction in the conditions under which the adoption of a particular purchasing strategy is preferable. Another interesting model is that developed by Syson (1989). This model refers to the changing areas of focus of purchasing as it develops in an organisation, from being a transaction focused function dealing with the clerical task of handling the volume of transactions, to the commercial stage in which the focus is on cost savings and SD programmes, and finally to a proactive stage in which the focus is on contract management and integrated logistics management. Syson (1989) suggests that the more involved purchasing is in commercial and proactive activities, the more effective it is in the organisation. Similar to the earlier models however, this model is also descriptive and does not give any guidance on the conditions under which each stage would be appropriate.

The model provided by Freeman and Cavinato (1990) overcomes this limitation by taking a portfolio management approach to purchasing development and putting an emphasis on the impact of the organisational structure on the development of purchasing. The authors identify four different styles of purchasing and advocate that the ultimate goal of purchasing strategies is to be aligned with the organisation's overall business strategy, using hybrid modes of these styles to fit particular occasions. Burt and Doyle (1993) also provide a thorough explanatory model of purchasing development that can be used as a benchmark or a measurement tool for organisations to evaluate their purchasing level of development. Listing four stages, they emphasise how purchasing can become a strategic weapon to manage supply chains through implementation of new technologies and best practice models. The major strength of these models is the large number of different areas against which the development of purchasing can be assessed, however they do not provide guidance as to how assess this development.

Probably one of the most profound purchasing development models in the literature (mainly because of its operational character) is that proposed by Keough (1993). It involves five separate stages that have different focus and require different managerial skills and activities. Its major contribution is that it identifies a direct relation between the industry in which an organisation operates (and implicitly the number and type of products/services that are outsourced) and the level of purchasing development. Barry et al. (1996) provide a different approach to purchasing development. Although they propose a model for MRO (maintenance, repair and operating) supplies, their model is distinctive in that it describes in detail specific activities that purchasing managers conduct which can be compared across the different evolutionary phases. The model proposed by Stannack and Jones (1996) provides a historical approach to the evolution of purchasing by examining the way its focus has shifted from being product-centred to being performance centred. In their model however they do not discuss the conditions that led to its development, nor do they describe any different management areas that purchasing may be involved in.

Jones (1999) criticises the majority of these models primarily because they are not operationalised and thus do not provide an accurate depiction of the development of purchasing in individual organisations, as they only report its developmental stages. His second criticism stems from the fact that most models have only a very few variables to assess the development process of a PD in an organisation. In this regard his model incorporates 18 variables (measurement criteria) and five different stages which an organisation can use to evaluate purchasing performance.

Author(s) Stage	Barnes and McTavish (1983)	Reck and Long (1988)	Syson (1989)	Freeman and Cavinato (1990)	Burt and Doyle (1993)	Keogh (1993)	Barry et al. (1996)	Stannack and Jones (1996)	Jones (1999)
1 st Stage Characteristic Focus Org. Develop	Informal buying Clerical Paperwork mgt. Passive	Passive Clerical Price focus Isolated	Transactional Clerical Paperwork mgt Efficiency- oriented	Financial planning Clerical Buying Reactive	Reactive Clerical Paperwork mgt. Low level reporting	Serve the factory Clerical Logistics Low-level reporting	Basic Reactive Administrative Not visible	Product-centred Inflexible Poor assessment Task oriented	Infant Fragmented Cost Savings Very low contribution
2 nd Stage Characteristic Focus Org. Develop	Advanced buying Participative Total costs Decision discretion	Independent Procurement mgt. Cost reduction Independent (not coordinated)	Commercial Developmental Cost Savings Value-adding	Forecast Based Planning Purchasing Cost minimisation Reactive but plans for future	Mechanical Transactional Price oriented Low level reporting	Low unit cost Professional Cost Analysis Purchasing committees	Enhanced Proactive Strategic Purchasing Customer service	Process-Centred Process efficiency Process evaluation Task oriented	Awakening Price control Savings Small contribution
3 rd Stage Characteristic Focus Org. Develop	Strategic buying Full procurement Relations mgt. Integrative	Supportive Cross functional Contract mgt. Facilitator	Proactive Strategic Logistics mgt. Effective	Externally oriented Procurement Value analysis Fit with business plans	Proactive Co-ordinator Supplier develop. Senior level reporting	Co-ordinated Corporate policies Contract mgt. Centralised	World class Integrated Supplier mgt Centralised Integrative	Relational Partnership sourcing Supplier mgt. Skills oriented	Developing Transactional Negotiation Average contribution
4 th Stage Characteristic Focus Org. Develop		Integrative Strategic sourcing Contributor Centralised (but cross-functional)		Strategic Management Supply Relationship mgt. Positive proactive	World Class Strategic sourcing Supply mgt. Integrator	Cross-functional Total cost analysis Supplier develop. Centralised		Performance focus Best practices Relationship mgt. Integrated	Mature Specialist buyers Strategic Sourcing Supply base management
5 th Stage Characteristic Focus Org. Develop						Word-class S.M. Kaizen Supplier selection Relations mgt.			Advanced SCM Devolution Central control

Table 3.1 Purchasing development conceptual models

Even though these models examine purchasing development from different directions they have several shared attributes. Firstly, in all models the SRs seem - implicitly - to change as purchasing develops (which is perhaps the reason why it develops). At the early stages SRs are at 'arms-length' with the organisation and as purchasing develops the number of suppliers decrease and closer, more cooperative SRs are formed. SRs management seems also to follow a similar trend in all models. As purchasing develops the level of purchasing involvement and sophistication in their management also changes. In the early stages purchasing is viewed as being passive, reactive and clerical with minimum involvement in the management of SRs, and gradually as it develops it is viewed as strategically managing these SRs. Most models furthermore suggest that purchasing in its early stages of development is conducted in a fragmented fashion and is low in the organisational hierarchy. As it develops it becomes more coordinated and centralised, and at the final stage integrative of all purchasing activities within the organisation. The most notable assumption however is that they all assume an ultimate point at which purchasing fulfils its potential where all management initiatives should evangelically lead: that is, to integrate SCM.

None of the models however explore the conditions that lead to the development of the purchasing function and they do take an implicit assumption that because of its position in organisations and the latest economic and organisational developments, the purchasing department should manage the supply chain.

3.2.2 Role of purchasing in the management of SRs

In terms of the management of SRs, it is evident in the literature that PDs have been granted a prominent role in coordinating and integrating the flow of resources (products, information, knowledge) between suppliers and customers, as a result of the implementation of SCM and lean supply practices (Carr and Smeltzer, 1999). As a consequence of new technological advancements with the introduction of e-procurement in many organisations, new responsibilities and practices for purchasing managers are evolving. For example major

production, materials handling and development responsibilities are given to third parties or strategic suppliers, and as a result the process of selecting the most appropriate suppliers has become very crucial for purchasing departments (Hendrick and Ogden, 2002).

In a study conducted in the USA of the future challenges and opportunities for purchasing over the next decade, Carter et al. (2000) posit that organisations will direct their strategy towards increasingly integrating suppliers with the internal operations of the organisation. They report that new organisational practices, such as key SR management, team based management and the IT skills requirements of purchasing personnel may be on the agenda of the purchasing profession for the next decade.

It appears from the literature that although purchasing has been described as evolving into supply management there has not been a systematic study of the activities that constitute this involvement and the mediating role that it plays in different SRs. Recent studies have stressed the changing role of purchasing in today's knowledge based economies with respect to its increasing participation in cross-functional teams and decision making authority in several non-procurement related areas which calls for more 'educated' and skilful purchasing managers (Carr and Smeltzer, 2000; Hult et al., 2000). These studies however do not explore the entire gamut of activities that purchasing managers conduct in SRs, but rather focus on their participation in cross-functional teams and the managerial implications that this entails. There has been limited research attention on the internal organisational challenges within the purchasing department that arise from the new responsibilities. A coherent framework of what the purchasing contribution to the management of SRs actually is has yet to be developed; the study of which has been called for by other researchers (Sheth and Sharma, 1999; Carr and Smeltzer, 2000). This thesis aims to instigate a research agenda in this direction.

A second research stream involves the mediating role of purchasing in the management of SRs. Building on the model by Reck and Long (1988), and similar to Keough (1993), Cousins

(2003) argues that the overriding question of purchasing development and its role in organisations should not be whether purchasing is strategic or not (e.g. managing SRs), or whether purchasing managers are linked to senior levels of management, but why its role may be different on separate occasions. On that ground he identifies two types of organisations: (i) transaction cost oriented organisations, in which the main focus is to achieve competitive advantage through minimisation of costs. Purchasing in these organisations is viewed as passive or supportive. (ii) resource based oriented organisations, in which the main focus is to achieve competitive advantage through better utilisation of their resources. In these organisations purchasing is viewed as independent or (if more developed) integrative.

Cousins' argument is that transaction oriented organisations opt for tactical (short term) cost reduction strategies whereas resource based firms focus on strategic collaboration with their suppliers with the aim to better utilise their resources, and concludes that the resource based approach is preferable as it offers more opportunities for achieving competitive advantage in the long term. Many companies however opt for strategic resource based supply without aligning their objectives, which is the main reason for the failure of many supplier partnerships (alliances). His observation is congruent with Drucker's (1998) argument that management in organisations today is based on the definition of the results a company expects to attain and the subsequent utilisation of its resources to achieve that goal. If a company's initial strategy is to achieve cost reduction it should choose a transaction based approach to purchasing in order to minimise its cost, and in that way improve its market standing. If it defines its goal as being a leader in innovation it should opt for a resource based approach to purchasing, with closer collaboration with its suppliers in order to excel at developing new products (services).

Absent from previous research has been an effort to understand also how certain organisational variables can influence the role of purchasing within SRs. A salient research

question is, for example, how structural characteristics of the products or services that are exchanged and organisational functions such as the infrastructure of organisations influence the contribution of purchasing in SRs. This study moves towards these directions from a SCM perspective and other cognate fields of the supply chain synthesis and synergy (TCA, industrial marketing and organisation theory). From this theoretical basis it explores certain propositions of the contribution of PDs and their role in the management of SRs involving the exchange of different types of products/services.

3.4 Chapter Summary

This chapter discussed the changing role of purchasing in organisations (with an emphasis on the management of SRs). It reasoned is that the latest developments in SCM (closer collaboration between partners and the use of new technology) have induced a transformation of the role of PDs in the management of SRs.

By reviewing the economic, political, technological and demographic conditions that led to the development of the purchasing profession, it was demonstrated that its evolution advanced through four different stages that deepened its involvement in four major management areas in the organisation: product management, process management, contract management and supplier development. As a result of the implementation of SCM practices (and similar principles of lean manufacturing) in many of these areas, it was contended that new responsibilities and activities for purchasing managers are evolving in their role to integrate the interface between suppliers and internal customers.

Underlying today's orthodoxy about the role of the purchasing function in organisations, there is a basic assumption that has been held by practically all management theorists and by most practitioners: purchasing was considered as a clerical, passive and administrative function for decades, but has now evolved to become one of the most strategic areas of cost reduction in organisations. In today's digital and knowledge based era in which the trend for closer

collaboration between customers and suppliers has intensified, the functional role of the purchasing department appears to be changing its place within the organisation once again.

In most companies the PD is perceived as providing a professional, strategic, value-added service to organisations. Limited attention has been given so far in the literature however to the identification and scope of the activities that purchasing managers conduct in the management of SRs, and consequently the nature of the mediating role they have. The majority of studies focus on the position of purchasing in the organisation and there is an emerging literature on its involvement in new product development processes and its role in the formulation of operations, business and corporate strategies. There has recently been work on the role of purchasing with respect to its participation in cross-departmental teams and involvement in decision making outside the ‘traditional’ realm of procurement. These studies however focus solely on the participation of purchasing managers in these areas, rather than relating them to a broader picture of SR management. There seems to be a vague assumption that purchasing managers, by virtue of their position in the organisation, are becoming in effect supplier chain managers.

The ultimate aim of this study is to enhance the understanding of purchasing involvement in SRs and to contribute to the ongoing calls for the ‘professionalisation’ of purchasing. It therefore develops a systematic framework of the activities that purchasing managers conduct within the management of SRs, and explores their mediating role in SRs for the exchange of different types of products or services with different structural characteristics.

Chapter 4 - The research problem: conceptual & analytical frameworks

"We adore chaos because we love to produce order"
M. C. Escher (1898 – 1972)

In this chapter the conceptual foundations for exploring the 'actual' role of purchasing in SRs are laid out and reasoned and specific research questions and propositions are raised, providing the scenario for the empirical research that is presented in Part II of the thesis.

- The first section discusses the notion of the role of purchasing in SRs and develops a conceptual framework for assessing it using appropriate research methods.
- The second section develops a framework for assessing the performance of SRs in order to assess the impact of the role of purchasing on their performance.
- The chapter concludes with a summary of the key issues identified in the literature, and defines the research problem that the thesis is dealt with, by raising specific research questions and developing research propositions with respect to these research questions that are explored through empirical study.

4.1 Conceptualisation of the role of actors in SRs

The role of purchasing managers/departments in SRs is conceptualised and assessed in this thesis in terms of four 'high rank' (*structural*) variables that have been extensively used in the theoretical models discussed in chapter 2: their contribution to the development of *trust* between the trading partners, the level of *power* they possess in decision making, their *involvement* to the SRs, and their contribution to the development of *commitment* to the SRs. As these four *high rank* structural variables are complex constructs, it is necessary to break them down into lower, measurable variables that are easier to identify and assess. Each of the structural variables can be considered in this sense to be dependent on and determined by a set

of second rank variables. The role of purchasing managers/departments in SRs can be assessed in terms of these second rank variables.

This section reasons why and how these four variables can determine the nature of SRs, and expounds how they are operationalised in this thesis to define the role of an actor in a SR. In doing so, specific research propositions are raised that guide the empirical research.

4.1.1 Trust²⁰

As discussed in chapter 2, organisations attempt to reduce the complexity of the business world arising from bounded rationality and lack of resources, by engaging in BRs with other organisations. As every transaction within a BR is governed by risk and uncertainty (due to the impossibility of simultaneous exchange of resources), the existence of trust between the trading partners can be viewed as being a rational motivation for dealing with this uncertainty (Miles and Creed, 1995). Luhman (1988) for example posits that in particular contexts trust is a “*solution for [a] specific problem of risk*”. In Industrial Organisation literature trust is acknowledged not only as a necessity in a BR but also as a strategic move. Ouchi (1980), describes trust as a mechanism of organisational control and Bradach and Eccles (1989) identify it as an alternative to price, contracts, and authority. Within the SRs literature, trust is recognised as a major issue in determining the nature of supplier/customer relations. It is viewed as a foundation for co-operation and as the basis for stability (see for example Helper and Sako, 1995; Sako and Helper, 1998; Dyer et al., 1998) and it has been argued that it can

²⁰ The construct of trust is considered to be the cornerstone of every relationship and academically has interested people since Aristotle. This fundamental concept has been studied by philosophers (Aristotle, 1991) psychologists and socio-psychologists (Deutch, 1958; Luhmann, 1979) and political economists (Machiavelli, 1999; Bennis and Nannus, 1985). With such multi-disciplinary attention, there is little consensus on its meaning or role. A useful classification of the literature is provided by Rousseau et al. (1998) who understand trust as comprising: (i) multilevel trust (individual, group, firm, and institutional), (ii) trust within and between organisations, (iii) multidisciplinary trust, (iv) the multiple causal roles of trust (trust as a cause, outcome, and moderator), (v) trust as impacted by organisational change, and (vi) new, emerging forms of trust. In this study trust is considered at the interorganisational, organisational and personal levels of business exchanges using the concept of *organisational trust*.

be a significant source of competitive advantage for suppliers and buyers (Cousins and Stanwix, 2001; Zaheer et al. 1998).

Despite the voluminous literature on trust there is a general disagreement on whether trust can be intentionally created and managed in an economic environment (Lane and Backman, 1998; Blois, 1999). It is contended however that certain processes and routines in a SR (as well as certain contextual factors), which can influence the development of trust, can be managed (Sydow, 2001). Sydow (2001) (p.33) further posits that even if trust cannot be managed, the agents *“can certainly act in a trust-sensitive way when building and sustaining inter-organisational relations or networks”*.

4.1.1.1 Dimensions of organisational trust

Despite its obvious existence in many areas of economic activity and its evidenced importance to SRs, trust at the organisational level is an elusive and difficult concept to analyse (Bennis and Nannus, 1985). A plethora of different definitions have been proposed across various management disciplines. Moorman et al. (1992) view trust as *“a willingness to rely on an exchange partner in whom one has confidence”* (p.315), Anderson and Narus (1990) define it as *“the firm’s belief that another company will perform actions that will result in positive outcomes for the firm, as well as not take unexpected actions that would result in negative outcomes for the firm”* (p.45), and Giddens (1990) defines it as *“the confidence in the reliability of a person or a system regarding a given set of outcomes or events, where that confidences expresses a faith in the probity or love for another, or in the correctness of abstract principles”* (p.34). However, there is general agreement that trust involves faith or belief in people or organisations (Blois, 1999) and always exists in face of risk (Sydow, 2001).

Often-cited models for understanding the development of trust are those of Zucker (1986) which includes *process-based, characteristic based and institution-based* trust, McAllister (1995) who defines *affect based and cognition based* trust, or Sako (1998) who defines *legalistic, rational calculative, gift exchange, and embeddedness-based* forms of trust. The

classification provided by (Lane, 2001) that considers trust as developing also in three stages, namely *calculative, cognitive* and *norm/value based*, is adopted and explored for the purposes of this study.

Calculative trust (CLT)

This view of trust is found in transaction cost theory, agency theory and game theory.

Essentially it is a condition where actors would act in a trustworthy fashion only because it is in their self-interest and because they also understand that it is in the interest of the other player to act in a trustworthy manner (Williamson, 1993b).

Williamson (1993b) identifies two antithetical behavioural aspects of the parties involved in an economic transaction: *opportunism*, which is a self-interest seeking assumption, and *bounded rationality*, which is a cognitive assumption according to which economic agents are intendedly rational but only limited so. He posits that trust in the sense used by sociologists is irrelevant to commercial exchanges and that reference to trust in this way simply promotes confusion. In this respect he examines usages of trust, distinguishing calculative, societal and personal trust. He essentially argues that commercial relations are calculative and diffuse terms such as trust which have mixed meanings should be avoided by social scientists and used only in terms of interpersonal relationships: trust merely “*muddies the clear waters of calculativeness that governs contractual relationships*” (p.485). In the same article he also uses the transaction cost theory to explain the impact of embeddedness (or, in his schema, the *institutional environment*) on calculative trust. He posits that social culture, politics, regulations, professionalisation, networks, and corporate culture, are all facets of the institutional environment that affect calculativeness.

According to this view, calculativeness, or (calculative trust), is a more accurate construct and more relevant to commercial contracts which are based on *safeguards* of different kinds.

These safeguards may impose financial or reputational penalties on a party if they opportunistically breach a contract. The existence and level of these contractual safeguards is a

determinant of the level of calculative trust between the parties, in the sense that they will behave in a trustworthy manner when they consider the future benefits derived from non-opportunistic behaviour. In many cases a party will prefer the stability of abiding by a contract rather than infringing it, not for benevolent reasons, but after weighing benefits and costs. Milgrom and Roberts (1992) also stress that in many contexts, reputation losses or gains will be amplified by the spread of information among different organisations, even those not actually participating in the transaction.

The *reputation* of organisations themselves could be another factor influencing whether players behave in a trustworthy fashion (Bennet and Gabriel, 2001). An actor (organisation) that has the recognition and respect of its associate actors and even its competitors will inspire trustworthiness in other actors. On the other hand, a damaged or bad reputation might lead to loss of potential contracts and even rupture existing SRs.

The contractual safeguards and reputation of actors can therefore provide information on the existence of calculative trust between them. The involvement of purchasing managers in activities that assess the reputation of suppliers and in the establishment of contractual safeguards can indicate whether they contribute to the development of calculative trust in a SR.

Cognitive trust (CT)

Lane (2001) posits that many analysts on trust concur with Williamson that not all instances of cooperation at the organisational or departmental level require trust between the interested parties. Although cooperative behaviour might exist, this could be solely enforced by market mechanisms, or by authority instigated by power imbalances between the parties. This behaviour is what many organisational theorists define as *trustworthiness* (Barney and Hansen, 1994; Blois, 1999). Trustworthiness could be an outcome of calculativeness, however it is not the same as trust²¹.

²¹ The concept of trustworthiness is discussed later in the chapter

One of the conceptual foundations of this study is that SRs are an intricate mesh of organisational, departmental and individual relationships. The '*calculative*' view of individuals as being driven only by self-interest is contradicted in many sociological studies about economic exchanges. The behaviour of individuals involved in a SR may not necessarily be an outcome of calculativeness but of a innate trait of human nature to sympathise and attempt to form relationships (even in an economic competitive environment), as this sympathy makes other people mirrors of themselves (Hume, 2000). Williamson (1996b) also retains the concept of trust primarily for what he names *personal trust*. Personal trust, he claims, "*exists where calculativeness is close to zero [...], and the domain of trust is clearly and discretely defined*" (Williamson, 1996b).

A potential source of trust may be common *cognitions* amongst the involved parties (defined as '*rules that constitute the nature of reality and the frames through which meaning is made*' (Scott, 1995). The sharing of cognitions provides a framework for understanding and appreciating a partner's way of thinking, their needs and expectations, and based on these behaving accordingly.

The concept of cognitive trust is related to that of 'relational embeddedness' (Granovetter, 1985; Uzzi, 1997) and focuses on the direct dyadic BRs in a SR. It is operationalised primarily in this research at the inter-personal level but can be extended to the group and organisational levels by aggregating the participating individuals' perceptions. Evidence of the existence of cognitive trust can be identified in a BR by the ability of individuals (or actors) to understand a partner's needs and expectations from the BR. This ability can be enhanced by: (i) previous (dyadic) SRs, which can provide the basis for understanding a partner's needs and expectations through repeated interactions (Gulati, 1995), and (ii) "*direct access to information about each partner*" (Mizruchi and Galaskiewicz, 1993). This could lead to the

development of shared understandings and decrease potential hazards in future alliances (Gulati, 1995).

Other sources of the generation of cognitive trust could include the provision of unconditional help to a partner, the full and open communication between partners, the behaviour and ethical attitude of individuals in their interaction with their partners, and their willingness to adapt the relationship as the needs of one party, or the business environment changes.

Normative trust (NT)

The third dimension of organisational trust, *normative* (or norm-based) trust, has its foundations in institutional theory, which suggests that institutional environments (like societies, marketplaces, business networks, organisations) impose pressures on the actors that operate within them to appear legitimate and conform to prevailing institutional norms (Scott, 1995; DiMaggio and Powell, 1983). Norms are defined by Sherif (1936), who first introduced the concept, as “*customs, traditions, rules, standards, values, fashions and other criteria of conduct which are standardised as a consequence of the contact of individuals*”.

These common values and norms shared between actors can shape both the behaviour of parties engaged in a SR as well as their beliefs regarding the intentions of others, and can deter opportunistic behaviour and promote co-operation (Lane, 2001). Normative trust is characterised by a mutual understanding of expectations and responsibilities of the parties involved in a relationship and can be applied to industries (Scherer, 1980), organisations (Dornbusch and Scott, 1975) or individuals (Bradach and Eccles, 1989). This mutual understanding of obligation to common values and norms can develop incrementally in a long term relationship, where the parties involved have successfully completed transactions in the past and believe that one another will comply with them (Child, 2001; Macaulay, 1963).

Normative trust differs from calculative trust in that it is based on social control determined by these common organisational values, norms, and cultures to encourage desirable behaviour,

whereas calculativeness is built on statutory, formal rules and regulations to ensure trustworthiness. The formal control imposed with calculative trust is that of a strict evaluation of performance, while social control concerns dealing with people. Three types of norms are utilised in this study to investigate the role of PDs at all levels of SRs.

- Industry norms (structural embeddedness): The norms and values specified in an industry shape what Jones et al. (1997) name the *macroculture* of SRs, and may be critical to understanding the behaviour of actors in a SR. These norms may affect the coordination of different organisations through ‘*developing a particular language to facilitate complex routines in the exchange*’ (Williamson, 1985) (p.155), and by specifying broadly understood rules for appropriate actions. Firms in Silicon Valley for example, influenced by the industry’s idiosyncrasies, have developed a peculiar language based on IT jargon to communicate with each other. Understanding and communicating with this language is a prerequisite for all the companies that operate in this environment. Purchasing managers, because of their position in the organisation, come into contact with managers from different industries. Their ability (or inability) to appreciate and conform to the norms of the industry in which their partners operate is therefore critical in defining their role in the SR.

- Organisational culture (do actors comply with the way the organisation operates?): Organisational theorists argue that the factors which hold an organisation together are the common values, norms and ethics amongst its members (Schein, 1992). Organisational norms such as the *organisational culture*²² and the ability or inability to understand the business requirements of different departments warrant considerable attention and are viewed as critical elements in the way that purchasing managers exercise their professional role within SRs.

- Honesty and openness: Honesty and openness can provide the fundamental grounds upon which a SR is built and are considered two of the most difficult values to possess and uphold.

²² Organisational culture is defined as “*the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about, and reacts to its various environments*” (Schein, 1992)

Based on societal norms however, organisational theorists believe that transactions would come to an immediate halt if suppliers and buyers did not believe that there was an underlying level of honesty among them. Williamson (1996a) for example argues that honesty and openness between partners should be *'the basic standards which allow transactions to be negotiated and consummated'*.

- **Ethical behaviour**: The societal norm of ethical behaviour in SRs may be influenced by organisational and industry norms. Ethical behaviour in this research is operationalised at the individual level and is considered as an important attribute of the behaviour of purchasing managers in describing their role in SRs.

Trust and trustworthiness

All three *'facades'* of trust may be legitimate means of explaining the creation of trust within and between organisations. To argue however that any one of them may be the sole basis for the creation of trust in a BR is only partially correct. Any of them to a certain degree and depending on particular conditions can lead to the development of a trust in a SR. In economic exchanges however an actor's reputation for *trustworthiness* is probably more important than demonstrating the ability to create trust. Dasgupta (1988) defines trustworthiness as an actor's *'overall disposition, motivation, the extent to which they award importance to their own honesty'*. This could be the outcome of calculativeness, cognition or norm-based trust depending on the particular context of the SR. The ability to inspire and have confidence in a SR partner and to keep promises are probably the most characteristic elements of trustworthiness in a SR (Blois, 1999). For this reason the trustworthiness of purchasing managers/departments may also be used to identify their contribution to the development of trust in SRs.

Figure 4.1 illustrates the factors that can influence each of its constitutional dimensions and how trust between partners in a SR is conceptualised to develop over time at the three levels of analysis of SRs.

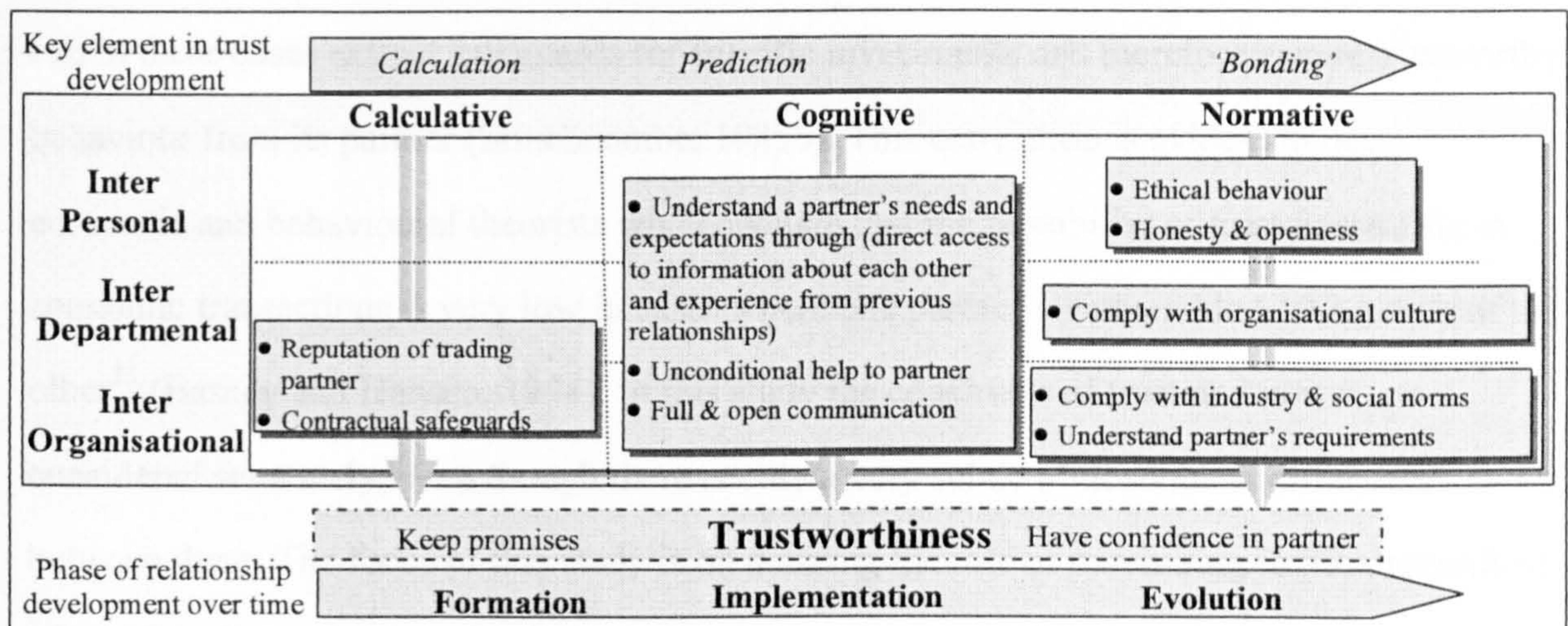


Figure 4.1 The dimensions and development of trust in this study (based on a model by Child (2001))

4.1.2 Power

Hazen (1994) posits that critical theorists on IORs contend that much of the literature has been dominated by what Burrell & Morgan (1979) define as the *'functionalist paradigm'*, which generally assumes that collaborating organisations share common goals in their attempt to reduce uncertainty. The resource dependence, agency and game theories however advocate that collaborating parties possess different resources that may be seen critical by other organisations, which could have different values and goals in an economic environment. The diverse strategic intents of individual organisations may grant power to certain organisations that in turn can have an impact on the nature and management of the SR (Hardy et al., 1998). In this context, the power of organisations is not only a determinant of SRs, as argued in resource dependence theory, but also one of the constitutional characteristics for their management. The construct of power and the dynamics of power balances is in this respect central to understanding the constitution, behaviour and management of relationships (Hardy and Phillips, 1998) and the roles of the actors that participate in it.

Although it may seem to be antithetical to the conceptual and philosophical foundations of trust, power may be often confused with trust (Das and Teng, 1998). This confusion arises from the fact that certain SRs appear to be based on trust, whereas in reality this trust is just a façade of the existence of a power relationship (Hardy et al., 1998). The dominant partner in

can in these cases extract safeguards for specific investments and therefore ensure trustworthy behaviour from its partner (Stinchcombe, 1985b). This conviction is evident to many economic and behavioural theorists who conclude that the possibility of trust-based BRs in economic transactions is very low in cases where one partner is vulnerable to the power of the other²³ (Barney and Hansen, 1994). In this study the constructs of trust and power are considered separately, even though there is only a very subtle philosophical difference between them. The focus of this study is on defining the role of purchasing in SRs, regardless of whether they are power-based or trust-based, and not to define the SRs themselves.

4.1.2.1 Dimensions of power

Various types of power are discussed in the literature (see for example Lukes, 1974; Clegg, 1989; Hardy and Clegg, 1996). In this study the classification proposed by Hardy and Phillips (1998) is adopted. They provide a framework of understanding power as being a function of three dimensions: *authority, possession of scarce resources and influence*.

Authority (AP)

This type of power is defined by Hardy and Phillips (1998) (p.219) as '*the legitimate right of an actor to make a decision*'. It involves responsibility for issuing orders that guide the direction of a SR, with an expectation of conformity, although it does not imply the use of force or coercion (Hall, 1999). In a supply network such power might rest with one organisation, could be shared (as in the case of a joint venture or strategic partnership), or be dispersed (Hardy and Clegg, 1996). Within an organisation, authority could similarly rest with one department, be shared between departments for the procurement of a product/service that would be used jointly. The most widely used typology of authority is that of Weber (1947), which classifies authority as being *rational-legal, charismatic and traditional*²⁴. For the

²³ Williamson (1993b) uses this argument to reject the use of the word trust and introduce the concept of calculativeness (as discussed earlier) and Barney and Hansen (1994) dismiss as naive and foolish the belief that trading partners are inherently trustworthy and that as such legal contract are unnecessary.

²⁴ *Charismatic* authority stems from an individual's ability to exercise power in decision making, based on his/her personal characteristics and can extend the rational-legal authority prescribed by the contractual arrangement. This form of authority can be found in types of contracts where the terms are not clearly arranged.

purposes of this study, only the rational-legal aspect of authority is relevant and is therefore used for identifying and assessing the role of purchasing in SRs.

Rational-legal authority arises from the formal structure of an organisation (Thomson, 1956), and is laid down in any form of a legal agreement, as in a contractual arrangement. It is prevalent in any form of SR where an individual, department or organisation has the legitimate power, based on their position in the organisation or the terms of the contract, to exercise power and take decisions. Perrow (1970) provides a good example of the legitimate authority of departments in industrial organisations, positing that the most powerful departments in organisations are sales departments, and concluding that the most critical function in an organisation tends to have the most authoritative power.

Domination - control (CP)

This dimension of power refers to control in the SR, which entails “*the control of the behaviour of one actor by another who can offer or restrict benefit or inflict punishment*” (Hall, 1999) (p.376). Hardy et al. (1998) present a version of domination that relies on control of scarce or critical resources. They posit that “*when one organization or group relies on another for a critical resource, such as expertise, money, equipment, information, etc., the dependent organization is at a power disadvantage*” (p.66). This is also evident in resource dependence theory. Pfeffer (1981) posits that power results from both access to and control over important organisational resources, such as information. People who have access to resources decrease their dependence on others, and people who control relevant resources increase others’ dependence on them, thereby acquiring power.

Possession of critical resources however is not enough in itself to give power to a group or organisation. *Contextual pertinence* and appropriate use of critical resources is also required (Pfeffer, 1981). For example, for the purchase of a sophisticated IT system, the possession of

Traditional authority stems from cultural or ethical norms and customs, where power is exercised by individuals or organisations, based on the belief that ‘this has always been the way things are done’.

technical expertise, or the control of the flow of information within an organisation, may permit the individual(s) or the department with such control to affect the decision on the particular type of the product that will be purchased. To some extent, control in BRs is also based on the process of monitoring and evaluating the performance of an individual or group. However, the process of evaluation only enhances the level of control when the individuals, groups or companies being evaluated believe that the evaluation is important to them.

Influence (IP)

This third type of power is exhibited when a decision is made because of “*an assumed pressure to satisfy the power holder’s wishes*” (Hall, 1999). Unlike authority, which is explicit, influence can be more subtle and is usually acquired unconsciously. Even though actors may not have authority or possess critical resources they can gain power in a relationship by “*speaking legitimately for issues affecting the relationship*” (Hardy and Clegg, 1996).

Influence can therefore be used by actors to extend their degree of authority in SRs.

The level of influence in a BR is studied in this research as an expression of the social network construct of *centrality* that an actor has in the decision-making channels in the SR. This refers to the extent to which an actor can reach all others in a social network in the fewest number of direct and indirect links (Freeman, 1979). An actor with high centrality will be recognised as a major channel for disseminating information and a crucial player in the SR. Mizruchi and Galaskiewicz (1993), focusing on both the relational and positional aspects of BR in networks, recognise that research has often found a correlation between centrality in a network and influence in a BR. The level of centrality of purchasing managers in SRs is in this respect instrumental in determining their level of influence in decision making.

Freeman (1979) defines two types of centrality measures that are relevant to this study: (i) *degree-based* centrality that includes measures which examine communication activity and refers to the number of ‘ties’ an actor has in the SR, and (ii) *betweenness*, which refers to the extent to which a particular actor lies between various other actors in the dissemination of

information and decision making. Betweenness measures the degree to which an actor can be a ‘broker’ in the dissemination of information, or a ‘gatekeeper’ of knowledge with potential control over others (Scott, 2000).

Power and responsibility

The possession of power entails great deal of responsibility for those that hold it. Thus this study not only investigates the level of power that purchasing departments have in SRs, but also discusses the responsibilities that arise from this power evidenced in the activities they conduct for the management of SRs. Figure 4.2 below illustrates the dimensions of power in SRs that are examined in this study.

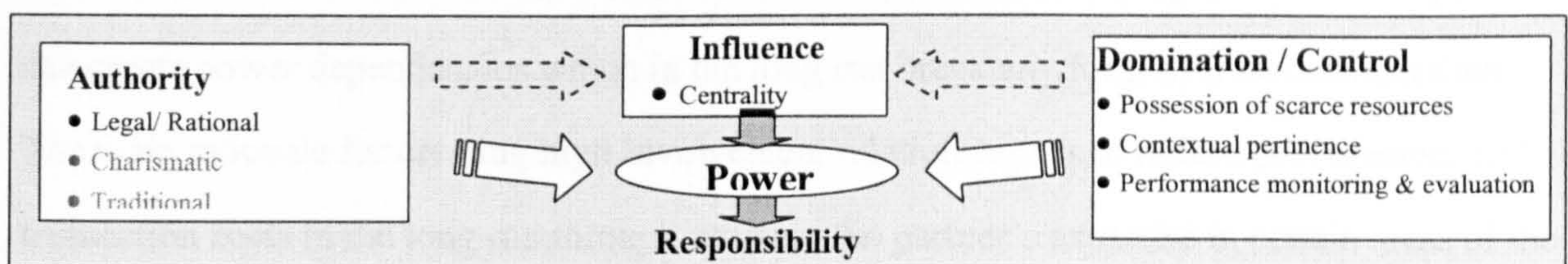


Figure 4.2 Power dimensions and interdependencies

4.1.3 Involvement

Involvement is a reflection of the degree and type of tangible and intangible resources, effort, time and activities dedicated to a SR, or taking the IMP Group perspective, ‘*the existence of strong links, ties and bonds of the companies in a relationship*’ (Gadde and Hakansson, 2001). The level of involvement in a SR can provide useful insights about its economic importance, the continuity of the relationship and the sourcing strategy of the buying firm. It can also indicate the level of technical expertise, organisational learning and the ability of organisations to create new knowledge, which could be done through the transfer of new technology or know-how, unilaterally or bilaterally. The level of involvement may also be an indication of the determination of the trading partners to make the SR successful, and evidence the will to establish a stable, long-term relationship. It is contended that this is a more preferable construct for the purposes of this research than that of the level of *interaction* in a SR, as it

becomes possible to distinguish between the different levels of involvement of the participating actors in a SR.

SRs can be generally characterised as being high or low involvement BRs (Gadde and Shenota, 2000), and the level of involvement can be evaluated through the financial investment or organisational involvement in the relationship (Mothe and Quelin, 1999). A high involvement BR could be developed if the trading partners have common goals and both show the determination to be involved in one another's operations. If there is an imbalance in the pursuit of involvement between parties, i.e. if only one of the partners seeks involvement in the BR, this could be an indication of a unilateral interest in developing the relationship and can create power dependencies which in the long run break any form of trust between them. The main rationale for creating high involvement relationships is to reduce procurement and transaction costs in the long run through utilising the partner's expertise in certain areas of the exchange (MacDuffie and Helper, 1997). High involvement SRs are however considered to be costly to develop because of the time, effort and resources devoted to them. Low-involvement SRs on the other hand entail limited interaction amongst the partners and can be handled with low levels of operational integration. These SRs may also be termed as arms length SRs (Lamming, 1993), and are likely to be cost effective in the short run because they require lower handling costs. Generally speaking greater involvement entails an increase in BR and supply handling costs, but under certain circumstances could lead to lower procurement and transaction costs²⁵.

²⁵ **Comment:** As already discussed in the previous chapters, traditionally, purchasing managers did not have a great deal of involvement with individual suppliers. Gadde and Hakansson (2001) list three reasons for this: (i) higher level of involvement in a supplier's operations may make the customer dependent on only one source and thus increase transaction uncertainty, (ii) it could reduce technological flexibility as the technical expertise of a particular supplier may lock the customer into the technology that the supplier uses, and (iii) low level of involvement could enhance competition between suppliers and thus increase the potential for lower prices. However, with the strategic recognition of the value of building stronger long-term SRs, this approach has changed. The literature advocates high levels of involvement of purchasing managers in supplier operations.

4.1.3.1 Dimensions of involvement

The construct of involvement in SRs is conceptually defined in this study as a function of the *complexity* of a SR, the *scope* of a SR, and the *intensity of interaction*.

Complexity of relationship (CI)

The complexity reflects the infrastructural characteristics of the intricacy of a SR. It includes the number of products or services exchanged, the operations shared between partners, and the skills and organisational level of the people involved in the SR. In this respect the complexity of the SR increases with the number of operations shared between the partners, the level of expertise required by the individuals involved, and the technological complexity of the products/services exchanged. Multiple individuals with different roles and levels of authoritative power in the organisations involved would also increase the complexity of a SR, by enacting individual relationships and communication channels that could potentially have conflicting directions and interests (Ring and Van de Ven, 1994).

Scope (SI)

The scope of a SR refers to its extent or *length*, the *amount of resources* devoted by the participants and the *technology* or other capabilities that are transferred from one partner to another. In a short-term SR for example, where participants collaborate only for six months for the development and execution of a project and one participant dedicates only a small portion of the necessary capital (human and financial) for the project, the scope would be less/lower than the scope of a long term SR where both participants dedicate equal amount of resources and share technological and organisational capabilities²⁶.

Intensity of interaction (II)

The intensity of interaction is conceptualised as a function of the *quantity of information* exchanged between the parties and the *personal contact* and spatial proximity between the actors, and the *early input* of suppliers in a customer's projects.

²⁶ The level of commitment to the SR (discussed in the next section) may be a determining factor of the scope of the SR (and vice versa) (Deutch, 1958).

- Information exchange about one another’s operations: A SR consists of a large numbers of activities conducted by the actors that participate in it, and to ensure its effectiveness great coordination of these activities is required. This coordination to a large extent relies on information exchange between the actors. The availability of direct access to information about each partner (Mayer and Davis, 1995; Mizruchi and Galaskiewicz, 1993), the type and quantity of information exchanged, and the tools used by the actors to facilitate this exchange, are indicators of the level of information exchanged between the parties.
- Spatial proximity and personal contact: Spatial proximity between the actors is related to the quantity of information exchanged (Allen, 1977), and has been found to affect the quality of interactions between actors in a relationship as it is related to direct communication (Moorman et al. 1992). It has been also used as indicator of a buyer’s ability to observe the behaviour of its supplier (Brickley and Dark, 1987).The rationale is that actors are more prone to interact and share information if they are positioned close to each other, for example in the same building or office area. Sydow (1996) observed that actors situated in spatial proximity to each other co-operate repeatedly. He concluded that since economic exchanges are embedded in a tight network of social relations, the perception of the availability of an actor which is facilitated by face-to-face interaction is likely to enhance coordination and cooperation in a situation that involves a problem or opportunity associated with the other actors. Figure 4.3 illustrates the dimensions of involvement that are considered in this study, as well as their inter-relationships.

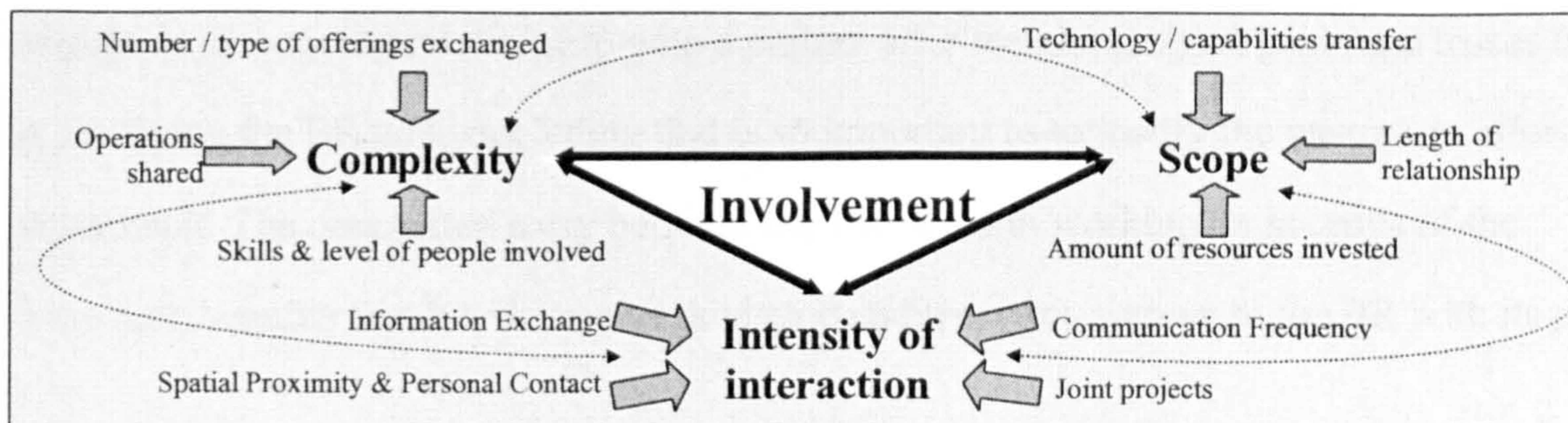


Figure 4.3 The constitutional dimensions of involvement

4.1.4 Commitment

In industrial marketing and institutional economics is acknowledged that the level of commitment that partners demonstrate in a SR can provide substantial information about its nature. Commitment has been characterised as “*the most advanced phase of trading partners’ interdependence*” (Scanzoni, 1979), and is defined as “*an intention to continue a course of action or activity, such as maintaining a relationship with a business partner*” (Fehr, 1988).

Schurr and Ozanne (1985) emphasising the importance of commitment for long term SRs, posit that even when alternative suppliers enter the market offering better deals, current suppliers are unlikely to be replaced in relationships where high levels of commitment exist. For customers, potential benefits from high levels of commitment in long term SRs could include improved product development, increased margins and higher overall satisfaction. As companies move towards closer, more collaborative SRs, the construct of commitment is paramount in providing information about the role of purchasing in SRs.

In the relationship marketing literature two types of organisational commitment are identified. The first, *affective commitment*, is a psychological sentiment of the mind based on a sense of liking and emotional attachment to the partnership (Wetzels et al., 1998). This type of commitment is brought about by a person or group sharing, identifying with, or internalising the values of the individual or organisation that it is collaborating with (Morgan and Hunt, 1994). The second type of organisational commitment stems from transaction cost theory, and is referred to as *calculative commitment*. This is based on the belief that an actor decides to engage in an ongoing relationship with a partner after weighing up all gains and losses from maintaining the BR and concluding that is so important as to justify the maximum effort to maintain it. The committed party believes the BR is worth working on in terms of the economic benefits that it will receive, and so it endures commitment to the BR with its partner.

4.1.4.1 Dimensions of commitment

In this study the construct of commitment to a SR is conceptualised as being a function of three dimensions: the *effort* to maintain the SR, *loyalty*, and the actual *length* of the SR.

Effort (EC)

This dimension of commitment is operationalised as the propensity of the partners to continue their BR. This may include their willingness to receive their partners' ideas; their willingness to adapt to environmental changes and maintain the relationship, the extent of help given to a partner with no strings attached; and the level of financial investment in the SR.

Loyalty (LC)

In SRs economic commitment is often operationalised in terms of the degree of loyalty felt toward suppliers or customers (Dwyer et al., 1987) and incorporates both repeat interactions and attachment to the trading partner (Jarvis and Wilcox, 1977). A SR in which there is little loyalty but a great deal of effort on behalf of the partners can be said that it is characterised by calculative commitment (a condition where the participant organisation continues the relationship as long as it can continue to provide benefits for them).

The length of a relationship (LGC)

The actual length of the relationship simply refers to the length of a contract agreed at the beginning of a SR, but also to an evident desire to maintain a relationship in the future and an evident intention to maintain a relationship in the future.

Figure 4.4 illustrates the conceptualisation and handling of commitment for the purposes of this study. Commitment would be highest when there is a high level of loyalty, length of relationship and effort by both parties, would be moderate when these dimensions are high for one party and low for the other, and would be lowest when effort is low by both.

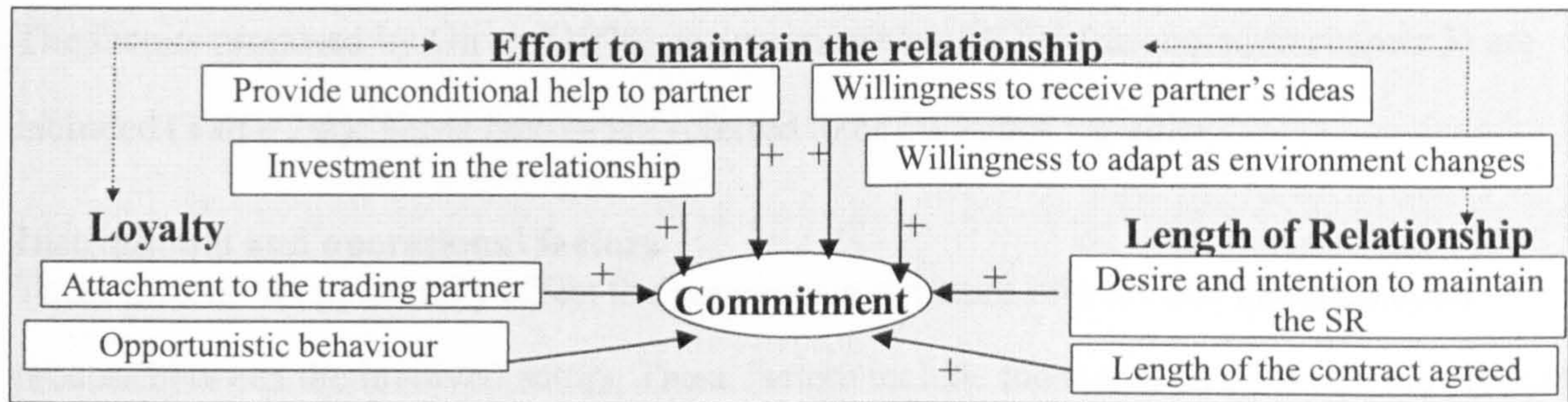


Figure 4.4 The antecedents of commitment

4.2 Conceptual framework for the role of actors in SRs

This section develops a conceptual model for identifying the ‘actual’ role of purchasing in the management of SRs. From the discussion of the constitutional dimensions of the structural variables of SRs (i.e. the second rank variables) it can be inferred that these second rank variables can be assessed by analysing the way that actors conduct certain activities with regard to the management of SRs. It is contended however that the way in which these activities are conducted may be in turn conditioned by certain factors that can influence the nature of a SR, which may themselves have an impact on the structural variables²⁷. Therefore for a more accurate representation of the role of an actor in SRs the way that these factors are managed/handled or implemented should be taken into account.

For that reason, in the direction of conceptualising how the role of purchasing in a SR (in terms of these four structural variables) can be determined, a large number of factors that characterise the pre-contractual, institutional and operational phases of SRs is considered, drawing on the theoretical works discussed in chapter 2²⁸.

Pre-contractual factors - synthesis of SRs

These are factors in the stages preceding the development of SRs, and describe the contingencies that lead to their genesis and which influence the selection of trading partners.

²⁷ It is acknowledged there is no set number of factors that characterise SRs, because their development and behaviour is chaotic in the sense that there are innumerable contingencies and influences. Furthermore, SRs may be similar in structure and operational character, but never the same. Even if they are established by the same actors, they could vary if the context or chronological period is different.

²⁸ It should be noticed at this point that these factors may be interrelated, as a change in one might have an important impact on another. For example the proposed length of a SR may have an impact on the level of interaction between individuals (MacNeil, 1978)

The factors proposed by Oliver (1990) as determinants of IORs (discussed in chapter 3) are included (Table 2.6). These factors are referred to as *initiating* variables.

Institutional and operational factors

These factors can potentially affect the governance structure of a SR and the interaction process between the involved actors. These factors include those that characterise the products or services exchanged, the interacting parties, the environment, and the atmosphere. These variables are referred to as *adjusting* variables and are outlined in Table 4.2 along with representative studies that investigate their impact on supplier and SRs.

Variables describing the parties involved	<ul style="list-style-type: none"> • Partner’s position in the market/organisation (Harland, 1996) (related to reputation) • Culture and history of organisations involved
Variables describing the elements of exchange	<p>A. The type and characteristics of the offering exchanged (MacNeil, 1978)</p> <ul style="list-style-type: none"> • Asset specificity of product or service (Williamson, 1993b) • Criticality of product/service (degree of risk in the investment that is made with the purchase of the product or service) (Ostrom and Iacobucci, 1995) • Level of intangibility (McDougall and Snetsinger, 1990) <p>B. The degree of financial exchange (Williamson, 1996b)</p> <ul style="list-style-type: none"> • Volume of transactions • Size of turnover (economic importance of the relationship) • Investment in the relationship • Financial performance incentives
Variables describing the environment within which the interaction takes place	<ul style="list-style-type: none"> • Dynamism of the SR (relational embeddedness) (Granovetter, 1985) • Position in the supply chain (structural embeddedness) (Jones et al., 1997)
Variables influencing the atmosphere of a SR	<ul style="list-style-type: none"> • Formality of the relationship (Lawrence and Lorsch , 1967) • Cost of managing the relationship (Williamson, 1993b) • Cost Transparency (Cousins and Stanwix, 2001)

Table 4.1 Adjusting variables that can potentially influence the scope of SRs

Each of these *adjusting* factors/variables can potentially have an independent impact on the nature, management style and efficiency of the relationship both directly and in conjunction with the initiating variables, and subsequently on the role of purchasing managers in the management of SRs. Although there might be some correlation between these constructs, each of them merits separate consideration in this study since the primary focus of the research is to delineate the role of purchasing in relationships and not to devise a mathematical formula of how these constructs act together in determining the nature of relationships.

The proposed conceptual framework for conceptualising the role of purchasing managers (departments) in SRs is presented in Figure 4.5. Its rationale is that to identify the roles of the actors in the management of SRs, the levels of trust, power, involvement in one another's operations, and the level of commitment that they exhibit need to be identified. These characteristics are determined by the activities they conduct in the SR, which are accordingly influenced by the adjusting and initiating variables of a SR.

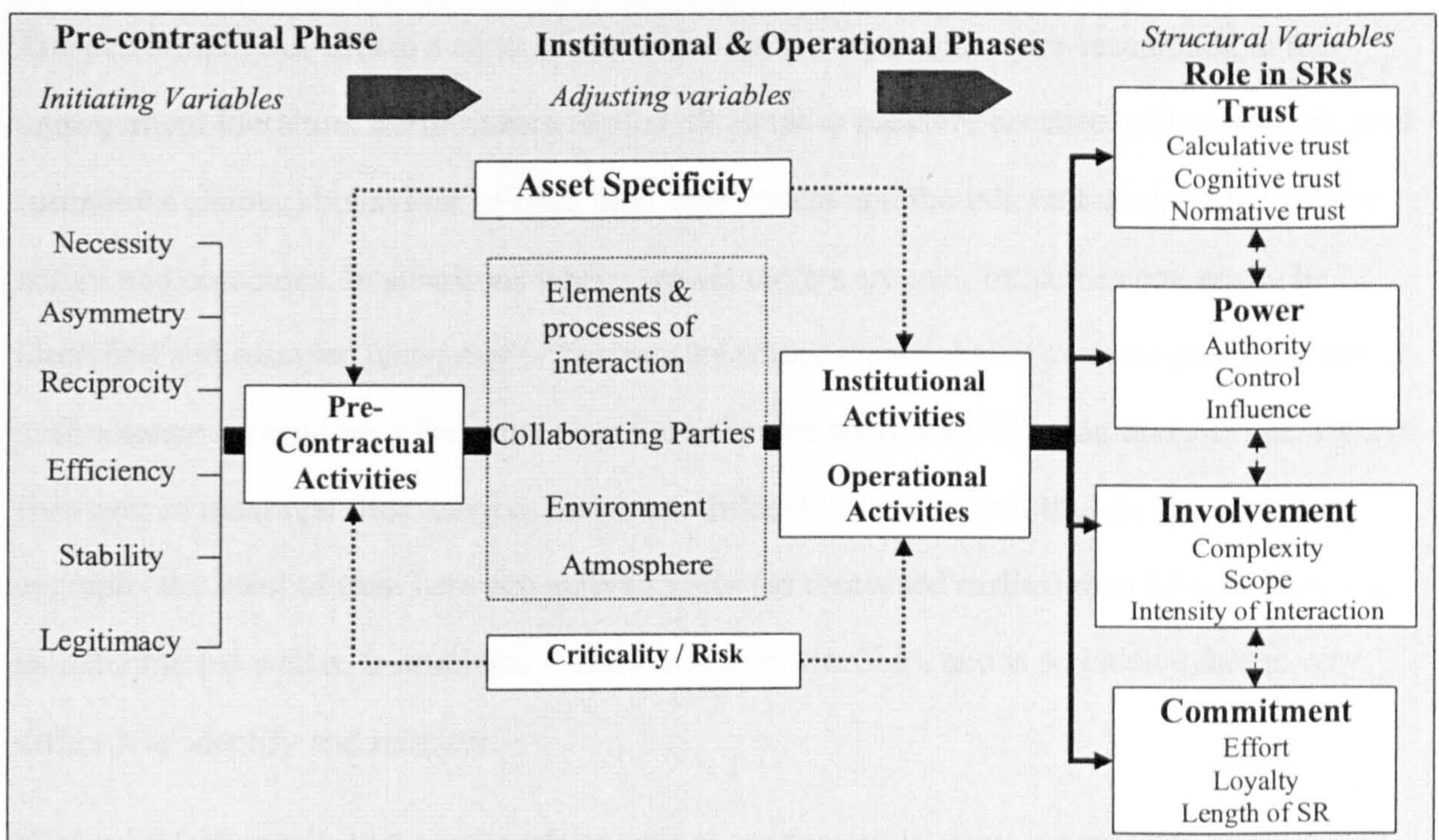


Figure 4.5 Conceptual framework of the variables that determine the role of actors in SRs.

4.3 The performance of supplier relationships

This section addresses the third conceptual challenge of this thesis, the development of an instrument to assess the performance of SRs. An underlying (implicit) assumption in this thesis is that effective SR management is an enabler of effective supply chain performance. By identifying and signifying whether the mediating role of purchasing has an influence on SR performance, one of the objectives of the thesis therefore is to generate insights which may ultimately improve supply chain performance. An analytical framework to measure the performance of SRs is therefore developed in this section and utilised to explore the

association between problematic and successful SRs, and the role of purchasing in these relationships. If, for example, a PD has a prominent role in the management of a SR for the exchange of a particular type of product/service whose performance is very good, and is not involved to a great extent in the management of another SR for the exchange of a product/service with similar characteristics whose performance is poor, then it would be logically inferred that the PD has a positive influence on the performance of that SR.

The performance of SRs is a contentious issue that is very much under-researched in the management literature. Performance is often difficult to measure because of the dynamic (and sometimes chaotic) behaviour of SRs, their elusiveness and the inherent complexity in their nature and outcomes. In situations where pre-set targets are met, outcomes can easily be identified and assessed using any of the benchmarking measurement systems prevalent in the performance management literature (e.g. the balanced score-card (Kaplan and Norton, 1992)). However in most real life cases outcomes are difficult to define, and thus to monitor. For example, the level of trust between actors in SRs (as discussed earlier) may be considered as an outcome (as well as a structural variable) of a relationship, and is so elusive that is very difficult to identify and monitor.

Harland (1996) posits that most performance measurement systems incorporate hard quantitative measures that are not appropriate for the soft and elusive features of relationships. Lamming (1993) also contends that these measurement systems are usually designed by a single organisation and thus do not take into account the relationship as a unit of analysis. Finally, given that these models are usually designed for a customer organisation, they are imposed on suppliers and therefore may carry a bias in their interpretation.

Without a clear method for defining the performance criteria of a particular SR, a potentially beneficial SR for an organisation could be neglected. In the strategic management and marketing literatures, relationship performance has been assessed for example by measuring

the degree to which objectives have been achieved (Bleeke and Ernst, 1993), and using managers' perceptions of the relationship effectiveness (Heide and Miner, 1992). Bucklin and Sengupta (1993) define relationship performance as the "extent to which both firms are committed to the relationship and find it to be productive and worthwhile". Other scholars have measured the performance of a SR using quantitative measurements, in terms of the gains or benefits a company achieves in comparison to the costs invested, using financial and non financial measures (including operating performance, learning outcomes, expenditure and goal attainments) (Clifford, 2000).

In this thesis a gap model is developed that utilises managers' perceptions of their department's (or organisation's) BR with their trading partners' department (or organisation) (Figure 4.6). Based on the discussion of the nature of SRs in chapter 3, the proposed model contains two general assumptions: (i) in order to capture the multiplicity of the social networks in which the SRs are embedded, it takes a social network theory assumption that SRs are an intricate mesh and extensions of individuals' relationships (Scott, 2000), and (ii) each manager's perception of the nature and performance of a SR carries the same weight.

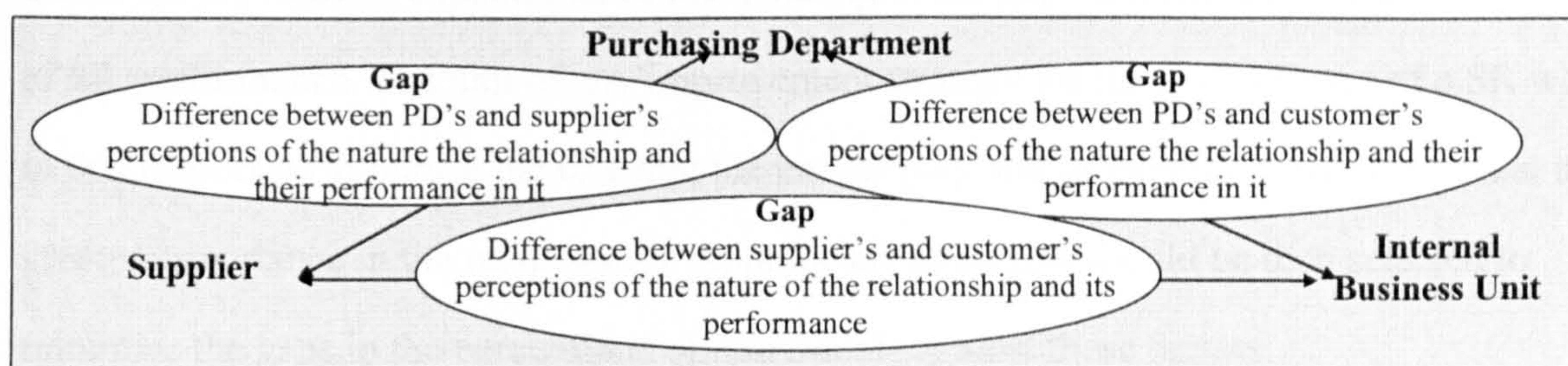


Figure 4.6 Gap analysis for measuring the performance of SRs

Relationship performance is assessed in terms of the disparities that exist between parties' perceptions of the nature of their BR and their perceptions of their own performance, as well as their partners' perceptions of the nature and their performance in the BR. The nature of a SR is determined by aggregating the individual managers' perceptions of the importance of certain activities (across the three dimensions of SRs) and factors that are considered to

influence its nature. The rationale is that the smaller the gaps between departments' perceptions, the better the performance of the SR. This model is presented in Figure 4.7 and is referred to in this thesis as the 'RelPerf' (Relationship Performance) model. Similar to the Gap (SERVQUAL) model developed by Parasuraman et al. (1988) it measures how different the perceptions of the nature of a SR and actors' performance in the SR are.

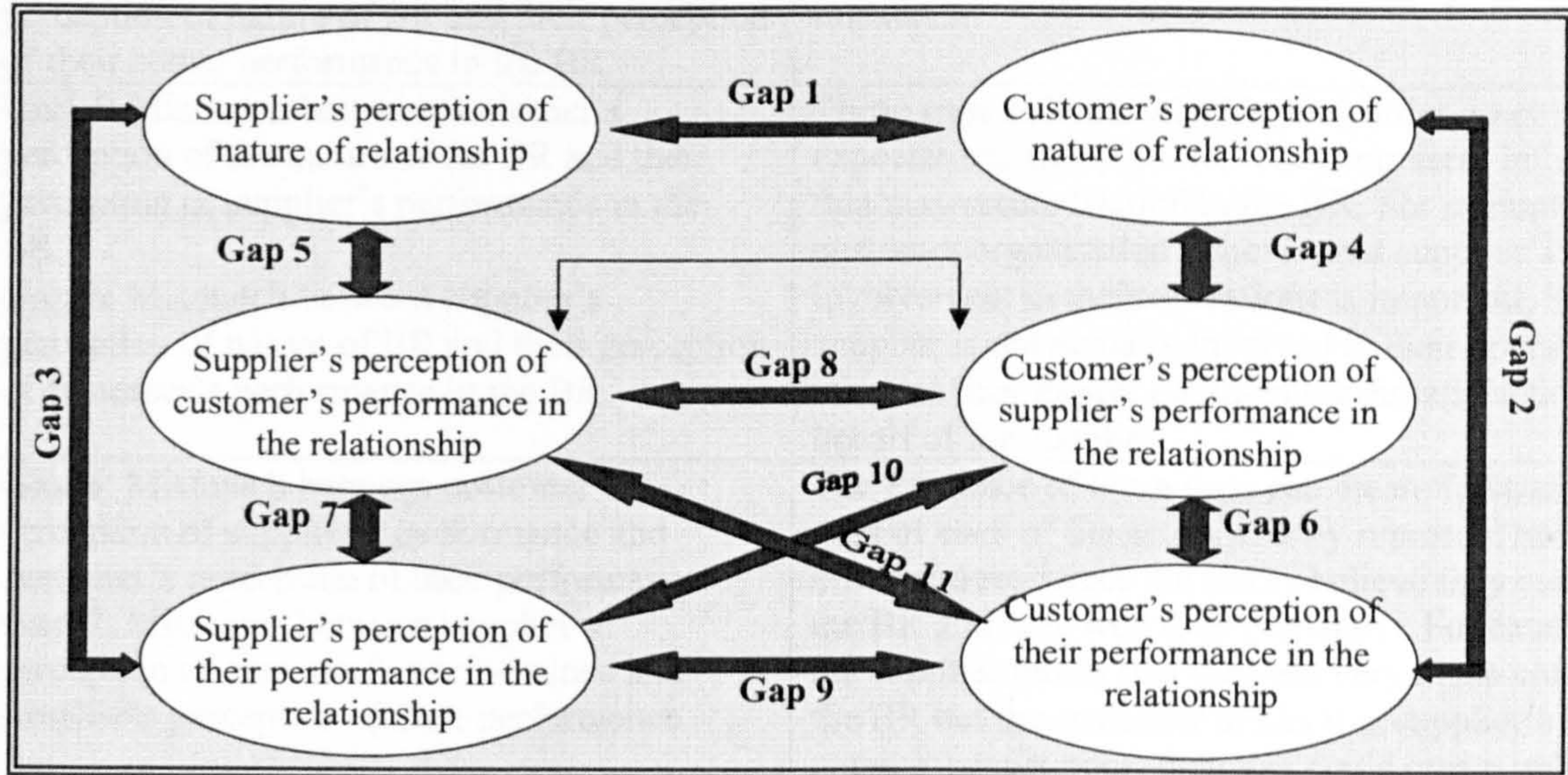


Figure 4.7 Framework for measuring performance of relationships (ReLPerf)

Table 4.2 provides an explanation of the meaning of the gaps identified in the model in terms of SR performance. The aim of any improvement strategy for the performance of a SR would in this respect be to pursue the role that the parties play and to identify those factors that have greater importance in the relationship. Appropriate strategies should be then selected to minimise the gaps in the perceptions of individuals against these factors.

Disparities of perceptions	Description
<p>Gap 1: This gap assesses the difference in the perceptions of the nature of the BRs that the two actors have, in terms of the importance of the factors that constitute it.</p>	<p>This mismatch indicates the disparity in the expectations that the two parties have from the BR they are engaged in. For an effective BR this gap should be assessed at the initial stages of the development of the BR to form the basis of the nature of the BR.</p>
<p>Gap 2: Mismatch between customer's perception of nature of BR and their perception of their actual performance in the BR. Gap 3: Mismatch between supplier's perception of nature of BR and their perception of their actual performance in the BR.</p>	<p>These gaps could be used by the organisations / departments (internally) to assess their performance against their expectations and use more (or less) resources/effort in certain areas where there is a mismatch.</p>
<p>Gap 4: Mismatch between customer's perception of the nature of the BR and their perception of supplier's performance in the BR. Gap 5: Mismatch between supplier's perception of nature of BR and their perception of customer's performance in the BR.</p>	<p>These gaps indicate whether the parties meet their expectations from the BR. They represent imbalances that may create friction in the BR. For example if the customer organisation believes that supplier's involvement in their operations is important, but the supplier is not actually involved in their operations as much as they expect could create dissatisfaction on behalf of the supplier.</p>
<p>Gap 6: Mismatch between customer's perception of supplier's performance and customer's perception of their performance. Gap 7: Mismatch between supplier's perception of customer's performance and supplier's perception of their performance.</p>	<p>The existence of these gaps can create frustration in the eyes of each of the actors as they represent how much effort and resources the actors believe they commit in the BR and how well they manage it. For example, if the supplier thinks that they are very much committed to the BR but the customer thinks that supplier's commitment is poor, then this could create imbalances and dissatisfaction.</p>
<p>Gap 8: Mismatch between supplier's perception of customer's performance in the BR and customer's perception of supplier's performance in the BR.</p>	<p>This is probably one of the most important gaps. It represents the level of dissatisfaction from the BR of one or both parties, as their performance is not recognised as being satisfactory by their partner. If the supplier believes for example that they trust the customer and that the customer does not trust them that gives power to the supplier which can create imbalances in the BR.</p>
<p>Gap 9: Mismatch between supplier's perception of their performance in the BR and customer's perception of their performance in the BR.</p>	<p>This gap is the subject of most of the misunderstandings in a SR and its existence substantiates the necessity of a joint performance measurement system that will incorporate soft and hard performance measures.</p>
<p>Gap 10: Mismatch between supplier's perception of their performance in the BR and customer's perception of supplier's performance in the BR. Gap 11: Mismatch between supplier's perception of customer's performance in the BR and customer's perception of their performance.</p>	<p>If the customer believes that trust is important to the BR and the supplier does not trust them this can lead to opportunistic behaviour of the customer. If for example if the customer believes that the supplier is not trusting them and they feel that they do trust them in other words if they feel that they put a lot more effort or resources, this could create imbalances in the BR.</p>

Table 4.2 Gaps for assessing the performance of SRs based on the perception of individual managers of the relationships with their partners.

4.4 The research problem

This section presents the research problem that guides the empirical research. By pulling together key issues identified in the literature, the principal research issue is defined and four principal research questions are raised. Specific research questions that can be explored through research methods are then developed and research propositions are raised by considering salient issues identified in the literature.

The review of the SCM, purchasing management and SRs literatures identified a number of emerging key research themes. Some substantial observations were made:

SCM literature: There has been an increasing interest in the management of supply chains over the last 20 years. This originated in the manufacturing sector and was marked particularly by the work of the IMVP project on lean manufacturing and works from scholars on both sides of the Atlantic.

SR literature: SRs have attracted considerable attention in the SCM field. To some extent, this is the corollary of the emergence of new forms of organisational structures that have been accelerated by the latest technological, political and demographic changes in the global marketplace. Although many of the economic theories take the organisational boundaries determined by legal entities as companies as the unit of analysis for the study of SRs, in this study they are considered as developing through systems that are not always the same as firms. Furthermore, SRs are conceptualised as processes evolving through pre-contractual, institutional and operational stages that have unique characteristics.

Purchasing management literature: Purchasing merits particular attention in the management of SRs, as there is increasing awareness of its role in managing organisational resources in order to increase organisational performance. The role of purchasing in the management of SRs in the present context of business exchanges has not however been researched thoroughly.

Principal Research Issue: It is contended from the literatures regarding the nature of SRs and the role of actors in their management that there is an increasing interest in the management of supply chains in various industries as there is greater awareness of the benefits to business performance. Purchasing has gained an increasing recognition of the value it may add to business transactions and has become more strategic focusing on areas such contract management rather just ordering and replenishing routines. There appears to be an implicit assumption in the purchasing and supply management literature that purchasing managers by virtue of their organisational position and their new roles in organisations are in effect supply chain managers. There is an incoherent view however of the exact activities that purchasing managers conduct in SRs, the ‘actual’ mediating role they have in their management, how their role influences the performance of SRs, and how these relationships can be more efficiently managed to leverage a range of advances in business performance.

The overall objective of the study is to explore the mediating role of purchasing in SRs, and to develop preliminary insights and introduce a research agenda regarding the contextual factors that necessitate the implementation of certain activities which are considered critical to the performance of SRs in different contexts. More specifically this research aims to answer the following principal research questions:

- | |
|---|
| <ol style="list-style-type: none">1. How do purchasing managers contribute to the management of SRs?2. How do contextual factors of the products/services exchanged influence the implementation of the activities conducted by purchasing managers and how does their significance of vary across different SRs?3. What role do purchasing managers (and PDs) have in the management of SRs?4. How does the role of purchasing in SRs affect their performance? |
|---|

Table 4.3 Research questions for this study

Empirical research context

It was conferred in the discussion of the SCM literature (section 2.1) that the majority of research in the area of purchasing and supply management is conducted in the manufacturing / industrial sector. As a result, most of the literature on SRs traditionally refers to the

procurement of goods in manufacturing supply chains. The management of SRs in the service sector and for the procurement of services has received relatively little examination. Very few researchers in the field of SCM have been interested in the procurement of services and the research available for these activities is fragmented (Axelsson and Wynstra, 2002).

The explicit assumption taken in the service management 'sub'-discipline is that the peculiar matters in the production of services (intangibility, simultaneity, heterogeneity and perishability) do not allow a priori acceptance of the concepts and methods of analysis that were developed for the industrial sector (Van Looy et al., 1998). Whilst it is useful however for economic indicators to distinguish the production and supply of goods from that of services, defining the exchange context of an offering is not very clear. Very few business exchanges purely involve services and equally very few are purely for the supply of goods. The case in reality is an exchange of a product/service bundle that includes services as well as goods. Services exchanges could include the exchange of assets (material, information or knowledge), and entail the development and management of IORs, exactly as is the case in exchange of goods where the primary goal is to satisfy customer needs. The challenge therefore is to identify and analyse the contingencies that exist in different contexts when a particular construct is transferred to a different setting. Therefore, for the primary objective of this thesis it is argued that a processes and contingencies entailed in the exchange of services as well as industrial goods need to be considered.

In order to advance knowledge in the fields of purchasing and SCM, the combination of the aforementioned key points from the literature review leads to the contention that there is much scope to conduct research which will focus on the study of SRs in the service sector, which is of great important in today's economic climate. The empirical research in this work is therefore an investigation of the role of purchasing in SRs for the exchange of different types of goods and services in service organisations.

4.4.1 Development of research questions and propositions

4.4.1.1 Activities that purchasing managers conduct in SRs (Q1)

The objective of this question is to identify the range of activities that purchasing managers are involved in for the management of SRs and to delineate in what way and by what means they conduct them in different SRs, in order to develop an integrated framework of activities and responsibilities that their involvement consists of. The framework is developed along two dimensions: one that is based on the conceptualisation of SRs as processes that are developed through pre-contractual, institutional and operational stages (discussed in chapter 3), and one that classifies the activities of purchasing managers in terms of the four management areas identified in the purchasing management literature review in chapter 2 (i.e. product management, process management, contract management and SD). Each of these stages and areas are emphasised by different research schools, have different time horizons and involve different kinds of activities and responsibilities. The specific activities and responsibilities constituting purchasing involvement in SRs are identified through three organisational ranks of purchasing managers (directors of PDs, senior, and junior purchasing managers), and are based on examples of such activities identified in the empirical research. The key research questions therefore that are addressed are:

- Research Question 1a** What is the range of activities related to product management that purchasing managers conduct for the management of SRs?
- Research Question 1b** What is the range of activities related to process management that purchasing managers conduct for the management of SRs?
- Research Question 1c** What is the range of activities related to contract management that purchasing managers conduct for the management of SRs?
- Research Question 1d** What is the range of activities that purchasing managers conduct for the management of SRs that are related to supplier development?

Based on the discussion of the enhanced strategic role of purchasing in organisations in chapter 2, it is expected that empirical support will be found for the following proposition in terms of the activities that purchasing managers conduct in SRs.

P1. *Purchasing managers contribute to a broad range of activities and have various responsibilities in the pre-contractual, institutional and operational stages of SRs in terms of contract management, product management, process management and supplier development.*

4.4.1.2 Contextual factors that affect the implementation of activities and their level of significance in different SRs (Q2)

It is surmised that not all the activities that purchasing managers conduct may be equally important in the management of SRs, and/or bear the same level of difficulty in their implementation. As discussed earlier in this chapter the importance and the way that these activities are conducted may be conditioned by factors that also shape that nature of SRs.

The objective of this research question therefore is to identify first the overall significance (weight) of activities, in terms of their importance and their difficulty to manage, and then to identify and analyse the situations under which these activities need and can actually be performed in various SRs (i.e. to identify the conditions that give rise to their importance and the reasons that they may prove difficult to conduct). In answering these issues, the study aims at developing a contingency model which can provide insights about particular activities that purchasing managers should focus their attention on under certain conditions.

In this direction this question explores how two characteristics of the products/services exchanged necessitate purchasing involvement in particular areas of SR management (*conditioning* factors of the necessity to carry out certain activities). The first conditioning factor is the main focus of transaction cost theory; the level of *asset specificity* of products or services that are outsourced. The second is the level of *criticality* that the exchange of a product/service entails²⁹. The key research questions therefore that are addressed are:

Research Question 2a How important is each activity to the management of SRs?

Research Question 2b How difficult is each activity to conduct?

²⁹ The concept of asset specificity refers to the extent to which the resources exchanged between firms are dedicated to a specific relationship and was discussed in chapter 2. Hence only the criticality of the product/service is discussed in this section.

Research Question 2c What is the impact of asset specificity and criticality of the product/service exchanged on the importance of activities and subsequently on the involvement of purchasing managers in SRs?

The criticality of the offering exchanged is assessed by utilising managers' perceptions of the importance of that offering to the strategic objectives of their organisation. It transcends the notion of time and does not refer to specific moments or episodes, as in the case of critical incidents. The criticality of the exchange of a product or service is related to the consequences that a customer perceives would ensue in the event of delivery failure, and the risk of losing market opportunities. In the event of delivery failure, customers are likely to regard this more seriously with regard to products/services with high levels of criticality than when the exchange is perceived to be less critical (associated with the risk of obtaining faulty products or not obtaining these products on time). Webster and Sundaram (1998) posit that in exchanges of high criticality, it is expected that customer satisfaction is more difficult to recover when there is a service failure, and this is something that may have implications with regard to loyalty. Apart from customer satisfaction, it has been suggested that the criticality of an offering affects other attributes of the exchange, such as purchasing price. Ostrom and Iacobucci (1995) for example posit that customers are likely to place greater importance on price under conditions of exchanging less critical offerings, and greater importance on quality for more critical offerings.

As discussed in chapter 2, central to the philosophy of SCM is the degree to which each actor in a supply chain views its partners as being critical to their success. The concept of the criticality of an offering plays a great role in the very notion of interdependence between actors, in that it can indicate which supply chain partners should not act based on self interest but for the good of everybody in the supply chain and which partners are less likely to affect supply chain performance should they act in a self-interested way. It is reasonable to assume then that in SRs the criticality of an offering is a major factor in determining their character, because it concerns the question of relationship stability.

Ostrom and Iacobucci (1995) posit that criticality is related to the involvement of the consumer in the service encounter. In cases where highly critical offerings are exchanged, consumer involvement increases as does their desire for unflawed delivery. This arguably can have implications on the level of involvement of purchasing departments in SRs, depending on the level of criticality of the product/service exchanged. Consequently, based on the preceding discussion, it can be inferred that the level of criticality of a product/service that is exchanged will have a significant impact on the extent and involvement in the activities that purchasing managers conduct in SRs. Based on the discussion on the role of criticality, the role of asset specificity (chapter 3), and on the role of purchasing in organisations (chapter 2), empirical support for the following propositions is expected to be found.

P2i. *The level of asset specificity of a product or service exchanged in a SR, can determine the importance of certain activities conducted by purchasing managers and as a consequence their contribution to the management of SRs.*

P2ii. *The level of criticality of a product or service exchanged in a SR, can determine the importance of certain activities conducted by purchasing managers and as a consequence contribution to the management of SRs.*

4.4.1.3 Role of purchasing in SRs (Q3)

The primary focus of this thesis is the exploration of the role of purchasing in the management of SRs. This chapter dealt with the conceptual issue of identifying and operationalising the underlying dimensions that characterise the role of an actor in a BR and proposed that the role of purchasing in SRs can be identified in terms of four variables: their contribution to the development of *trust* between the trading partners, the level of *power* they possess in decision making, their *involvement* to the SRs, and their contribution to the development of *commitment* to the SRs. The key research questions therefore that are addressed for the role of purchasing in SRs are:

Research Question 3a What is the contribution of purchasing managers/departments to the development of *trust* between the parties involved in a SR?

Research Question 3b What is the level of *power* that they possess in decisions regarding the management of SRs across different organisational levels?

Research Question 3c What is the level of their *involvement* in the operations of internal customers and suppliers?

Research Question 3d What is their contribution to the development of *commitment* in the SRs they are involved in?

Based on the discussion on the dimensions of the four structural variables that can define the role of an actor in a SRs and on the strategic role of purchasing in organisations discussed in chapter 2, empirical support is expected to be found for the following propositions in terms of the contribution of purchasing managers to the development of trust, the level of power that purchasing managers/departments have in SRs, the involvement of purchasing managers in the management of SRs, and their contribution to the development of commitment:

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- P3ai: *Purchasing managers are actively involved in activities that contribute to the development of calculative trust between the parties involved in a SR*
- P3aii: *Purchasing managers are actively involved in activities (and conduct them in a way) that contributes to the development of cognitive trust between the parties involved in a SR*
- P3aiii: *Purchasing managers engage in activities (and conduct them in a way) that contributes to the development of normative trust between the parties involved in a SR*
- P3aiv: *Purchasing managers conduct their activities in such a way as to enhance their trustworthiness in the management of SRs*
- P3bi: *Purchasing managers have a high level of authority over decisions in SR management due to their organisational position.*
- P3bii: *Purchasing managers wield a high level of control over decisions in SR management*
- P3biii: *Purchasing managers wield a high level of influence over decisions in SR management*
- P3ci: *Purchasing departments operate in a way that enhances the complexity of SRs*
- P3cii: *Purchasing departments devote all their resources to managing SRs and contribute to the establishment of the scope of the SR*
- P3ciii: *Purchasing managers exhibit high level of intensity of interaction with their trading partners*
- P3di: *Purchasing managers exhibit high level of effort with their actions to maintain the SR*
- P3dii: *Purchasing managers are actively involved in activities that indicate loyalty to a supplier.*
- P3diii: *Purchasing managers are actively involved in deciding and determining the length of a relationship with a supplier.*
-

Table 4.4 Research propositions for the empirical research

4.4.1.3 Impact on SR performance (Q4)

This question focuses on the inter-departmental level of SRs and explores whether (and how) the role of purchasing departments in SRs influences their performance. Based on the discussion of the role of purchasing in organisations (in chapter 3) and on the framework for assessing the performance of SRs, empirical support for the following proposition is expected to be found:

P4. *The role of purchasing in the management of a SR has a significant evident impact on the performance of that SR*

4.5 Chapter Summary

This chapter summarised the research themes that emerged from the literature review, established the conceptual foundations of the research problem, and developed a set of specific research questions and propositions that can be explored with appropriate research methods.

Figure 4.8 (also presented as Figure 1.1) illustrates the rationale for the sequence of the development of the research questions to answer the primary research issue of this thesis: the identification of the role of purchasing in the management of SRs.

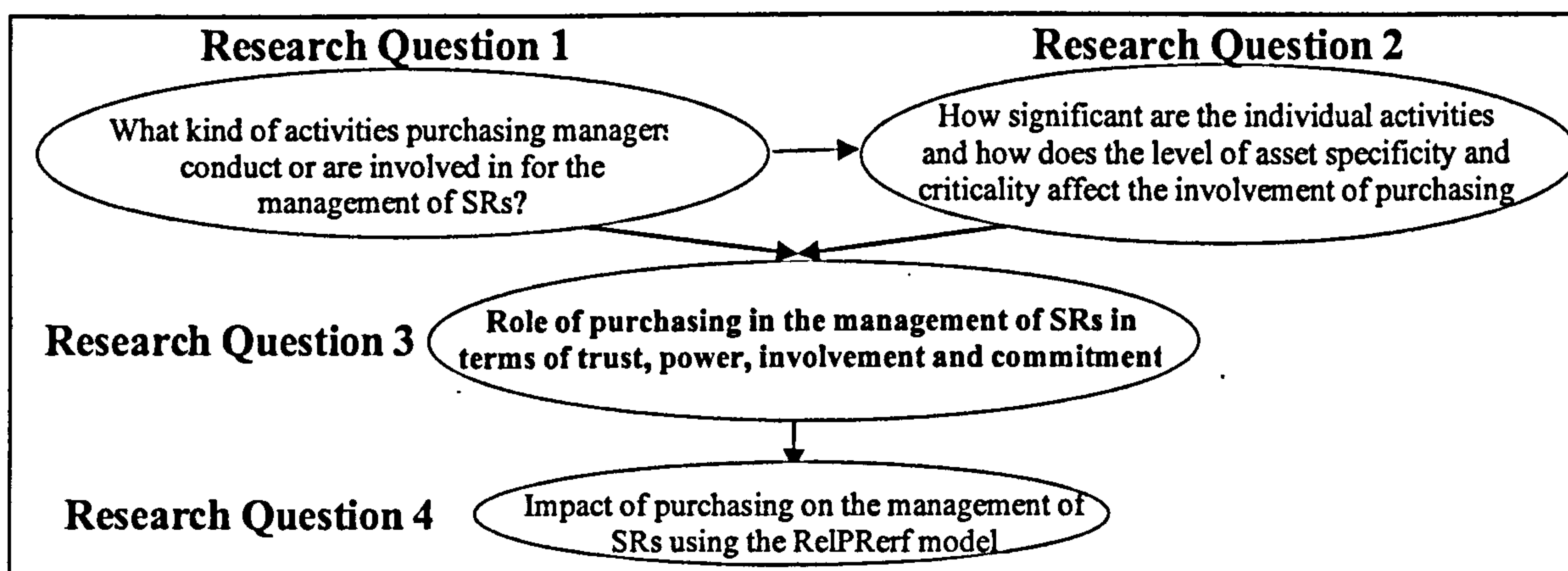


Figure 4.8 The research problem

The activities that purchasing managers conduct in SRs can be classified in terms of two dimensions as discussed in chapters 2 and 3: the four management areas of purchasing involvement in organisations (product management, process management, contract management and SD), and the three stages of the development of SRs (pre-contractual,

institutional, and operational). This classification provides a systematic framework that can be used as a benchmark tool in organisations to assess and validate the contribution of purchasing departments to the management of SRs.

As some activities may be more important than others and/or more difficult to conduct in different SRs, it is suggested that the level of asset specificity and the level of criticality of the products / services that are exchanged in SRs may have a determining role in necessitating purchasing involvement in particular areas of SRs' management and as a consequence their role.

The primary focus of the thesis, the role of purchasing managers in SRs is conceptualised in terms of four structural variables (trust, power, involvement, commitment). These variables are considered as upshots of the activities which purchasing managers conduct and of certain factors that influence the nature of SRs. As they are complex constructs that are difficult to assess, they can be broken down into lower second rank variables, which can be assessed by the identification of the activities that purchasing managers conduct in SRs (and the way they are conducted), as well as by those factors that can influence the nature and scope of SRs. Finally in order to assess the impact of the role of purchasing on SRs' performance, an analytical framework that assesses the performance of SRs is utilised.

Chapter 5 - Methodology, research design and empirical research

"I may be wrong and you may be right, and by an effort, we may get nearer to the truth".
Karl Popper (1902-1994)

The research design and methods that are utilised in this thesis to answer the research questions that were raised in the previous chapter should be in congruence with (and emanate from) the epistemological and methodological underpinnings of the research. This chapter reviews the use of different philosophical concepts of epistemology and assumptions about the nature of social science, to reason the selection of the appropriate methodologies, research design and research methods, and presents the process of collecting the data for the empirical research of the thesis.

- The first section of the chapter discusses the available approaches to inquiry and considers the different paradigms and methodologies for conducting research, to facilitate the clarification of the epistemological stance to the research problem. Based on this discussion, the philosophical underpinnings for this thesis are presented.
- In the second section, the process for approaching and defining the research problem is presented and the most appropriate research strategy for this study is selected. The fundamental dimensions of the selected strategy are discussed and the most appropriate design is selected based on the research questions, the theoretical underpinnings of the research, the propositions that were raised, the unit of analysis for the questions raised, and the criteria for interpreting the findings.
- In the third section, the chapter reasons the contextual background for the empirical research in order to ensure the *construct* and *external* validity of the research design, and selects the

most appropriate research methods and techniques to collect empirical data. Finally in the fourth section, the data collection process is presented.

5.1 Philosophical underpinnings of the nature of inquiry

In their work about organisational analysis, Burrell and Morgan (1979) develop an explanatory model for analysing organisational sciences. They posit that research is grounded on philosophical (meta-theoretical) assumptions, which support different approaches to inquiry and the selection of appropriate methodologies. They classify these assumptions into four distinctive sets related to *ontology*, *epistemology*, *human nature* and *methodology* and argue that by identifying and reasoning these assumptions, a better conceptualisation of reality can be achieved. The framework of Burrell and Morgan is widely accepted in social sciences as a very useful analytical tool for characterising the meta-theoretical perspectives of research. This section analyses and discusses its four dimensions of meta-theoretical assumptions, to identify the epistemological underpinnings of this research.

5.1.1 Ontological assumptions

Ontological assumptions represent a particular view of reality held about the phenomena that any research investigates. Two main ontological possibilities useful in decision-making about research methodologies are suggested in the literature. The first, *nominalism*, assumes that the reality of social phenomena under investigation are the product of individuals' minds. The second, *realism*, assumes that reality exists 'out there' and is not something which individuals create; in this view, individuals do not have any significant impact on the objects being observed. These ontological assumptions are reflected in two fundamental approaches of inquiry: *scientific* research and *social scientific* research.

The scientific approach in general adopts a 'realistic' view of the world; it is grounded in the belief that the world is composed of hard facts and that knowledge is created by investigating the real (physical) world, which is perceived to be unique. The social scientific approach on

the other hand adopts a 'nominalist' view; it is based on the belief that a unique (social) reality does not exist, and that the social world is structured by different (and at many times divergent) perceptions of humans and their influence on social contexts. There is a general acknowledgement in this view that it is not always possible to achieve repeatability, refutability and reductionism. Within the sphere of social science, Bryman (1989) identifies *organisational science* as a particular approach that deals with the study of organisations as opposed to entire societies. The organisational scientific approach embraces the beliefs of social science, but considers the difficulties that arise in gaining access to individual organisations and collecting the necessary data, due to sensitivity and confidentiality issues. These difficulties involve the power relationships that are developed between researchers, organisations and their stakeholders, and how they can influence research questions and the direction of research (Easterby-Smith et al., 1991).

This study investigates managers' perceptions of the involvement and role of purchasing managers in SRs and their impact on SR performance. It is contended that although the social reality of the SRs may have an existence itself, the managers' perceptions may not be identical and their assessment could be either a product of, or greatly influenced by, the process of measurement. In this way, although the social reality of SRs is assumed to be unique, it is acknowledged that the social reality experienced and assessed by the researcher (the '*realised*' reality) is subjective. In previous chapters it was also highlighted that the context in which these relationships are developed is very significant in determining their nature and character, and propositions were raised that the performance of these relationships is highly related to the specific context in which they are developed. Therefore this research is *context specific* and as such its findings are not easily repeatable in contexts with distinctively different temporal and situational characteristics.

This study therefore does not follow a scientific approach, because it does not lead to *objective knowledge*. It is in congruence with the organisational scientific approach in that it takes the view that the social world (as it is experienced by the researcher) is composed by the perceptions of humans and their influence on social contexts. It adopts the perspective however that there is a single universal reality about the role of purchasing managers in SRs, but this cannot be fully grasped and cannot be applicable to all contexts. Therefore it cannot be exclusively understood and interpreted by ‘hard’ measurement.

5.1.2 Epistemological assumptions

Whereas ontological assumptions concern the nature of reality, epistemology relates to how such assumptions are manifested in research (Burrell and Morgan, 1979). Its emphasis is thus on the philosophical foundations of the process by which knowledge is attained. The epistemological assumptions in the systematic generation of knowledge are reflected in the ‘paradigmatic’ collection of beliefs shared by scientists. For Kuhn (1996), a *paradigm* is a (loose) set of assumptions embraced by a community of scientists about how problems are to be understood, about what theory best describes the world and, therefore, which research questions and methodologies are appropriate. Two main *paradigms* can be identified in social sciences; functionalism and existentialism. Their fundamental difference is whether knowledge is something which can be acquired (i.e. is objectively knowable), or something that can be personally experienced (i.e. is subjectively knowable).

Objectivity - functionalism

As an epistemological stance, the notion of objectivity is adopted by *functionalism*.

Functionalism analyses social institutions according to the functions they perform in society and applies natural (formal) rules and procedures in the investigation of phenomena. This paradigm has dominated research in logistics and operations management over the last century, based on Taylor’s ‘Scientific Management’ (Meredith et al., 1989).

In purchasing management literature, Carr and Pearson (1999) for example use this perspective to reach conclusions about the strategic importance of purchasing in SRs. Using a survey and structural equation modelling as tools for analysis (and independent from the contexts in which these SRs exist), they conclude that firms with strategic purchasing functions are more likely to implement supplier evaluation systems; hence more effectively managing SRs. Questions that arise from their study are connected with what the term 'strategic' constitutes in different firms and how these firms actually operationalise the PD to achieve strategic aims. If there are conditions that facilitate 'strategic' purchasing in different contexts, then the phenomenon of the role of purchasing in SRs is more complicated than might be anticipated. If not, then the results of their study are tautological. On these grounds it is contended in this thesis that although strategic purchasing is (evidently) essential in supplier management, what constitutes the term 'strategic' may be subject to different interpretations. The overriding issue therefore should be how this strategic nature is operationalised in different contexts to obtain purposeful results on SRs' performance.

Subjectivity - existentialism

The notion of subjectivity is the nucleus of the *interpretive* (or *existential*) paradigm.

Existentialism adopts the stance that knowledge is subjective and *relative*, and is acquired through the human process of interacting with the environment. The interaction approach of the IMP Group is a typical example of a conceptual model that adopts the interpretive paradigm for the study of IORs (see for example Ford, 1997).

Post-positivism (critical realism)

Between these two antithetical manifestations of reality lies the social scientific paradigm of *post-positivism* or *critical realism* (Hunt, 1991), which merits consideration in this study as it has elements of both functionalism and existentialism, but is somehow different in its operationalisation. Critical realism is closer to functionalism in that it adopts the view that the reality of a social phenomenon exists 'out there' and is independent of humans' conceptions.

Bhaskar (1997) suggests that critical realism views the world of social phenomena as being composed of structures or mechanisms, actual objects and empirical objects. Christie et al. (2000) identify three domains in which critical realism research studies the social world: the real domain, the actual domain and the empirical domain (Table 5.1).

Real domain	Structures or mechanisms	These are constructs that are irreducible to other objects and usually cannot be observed, but whose effects can be felt. For example firms' actions are governed by structures such as property rights, competition, business networks, opportunism, collectivism and so on. These structures cannot be reduced to individual events and are collective entities.
Actual domain Events	Actual objects	These are typically observable and measurable constructs, and are explainable in terms of their underlying structures.
Empirical domain Experiences	Empirical objects	These refer to senses and impressions that arise by observing actual objects; i.e. individuals' interpretation and imagination of the actual.

Table 5.1 Ontological assumptions of critical realism (based on Bhaskar, 1997, p.13)

As critical realism is grounded in the belief that social reality is independent of humans' conceptions, it takes the standpoint that the social world can be inadequately or falsely conceptualised by social agents. For example, industry norms in SRs such as macro-culture and collective sanctions exist irrespective of their conception by social agents (i.e. managers); critical realism surmises that purchasing managers due to their imperfect comprehension of social reality, may falsely attribute the failure of a SR to the behaviour of a partner, rather than to the underlying social mechanisms that facilitate collaboration in that industry.

Critical realism acknowledges further the complexity of the social world in its assumption that the social world is *open*; the belief that social phenomena are typically governed by various independent and antagonising social mechanisms at the same time. In this respect the underlying constructs of a particular phenomenon cannot be easily comprehended. For example a SR can be structured by the reciprocal need to improve effectiveness in both organisations, but at the same time can also be structured by counteracting mechanisms such as asymmetry of power, necessity or isomorphism. The nature of the SR cannot be extrapolated therefore from one set of these social mechanisms. The dominant mechanism is ascertained instead through concrete analysis of people's perceptions of the relationship.

To compensate for the “*imperfect and probabilistically apprehensible perception of reality*”, (Guba and Lincoln, 1994) posit that “*triangulation from many sources is required*”. In other words, reality can be better understood when triangulated with other perceptions, or using different data collection techniques. The main difference compared with functionalism is therefore the belief that the latter has an inadequate conception of the social world. It can never be said that a theory is true, but merely that it is the best available (Chalmers, 1999). Based on these assumptions, the goal of critical realistic research is to identify and analyse both observable and non-observable structures and mechanisms (Tsoukas, 1989). It observes the empirical domain (or manifest phenomena) to discover through a mixture of theoretical reasoning and experimentation a knowledge of the real world, by naming and describing generative mechanisms and thus revealing more clearly their operations (i.e. the connections between actual events and generative mechanisms) (Outhwaite, 1983).

5.1.3 Assumptions concerning human nature

These assumptions explore the relationship of humans with their environment, and more particularly they refer to the role of researchers in the creation of environments. In one corner is the *deterministic* perspective which views humans as products of a predetermined environment, and in the other is the perspective of *voluntarism* that ascribes to humans a more creative role as being the controllers of their own environment.

5.1.4 Assumptions concerning methodology

Generally speaking, methodology refers to the way research is conducted³⁰. The two extreme positions in this set of assumptions are one which treats the world as if it is hard and external to the individual, and is related to a *nomothetic* style of doing research. This style puts more emphasis on the importance of conducting research that is based upon “*a systematic protocol and technique*” (Burrell and Morgan, 1979). The other extreme position, the *ideographic* style,

³⁰ Burrell and Morgan (1979) argue that the previous three sets of ontological, epistemological and assumptions about human nature have a direct impact on the way in which a researcher attempts to investigate a phenomenon. They contend that the combination of different ontological / epistemological stances and the perception of their role in the research environment should lead to the selection of the most appropriate research methodology.

understands the social world by obtaining first hand knowledge of the subject under investigation. It puts more emphasis on “*letting one’s subject unfold its nature and characteristics during the process of investigation*” (p.6). These two antithetical assumptions are reflected in social (and natural) sciences, in the traditional contrast of the methodological notions of *deductive* (explanation) and *inductive* (interpretation) reasoning³¹.

Deductive reasoning works from the more general to the more specific, attempting to explain observed phenomena on the basis of clear and distinct ideas. It begins with an existing theory about the phenomenon under investigation which is narrowed down using arguments that are usually phrased as ‘syllogisms’, or as brief, mathematical statements. These are called hypotheses and are usually operationalised within the development of a conceptual/analytical model. These hypotheses are then tested through empirical observation, which ultimately leads to confirmation (or not) of the original theory through established mathematical models.

Unlike deductive reasoning, inductive reasoning of a phenomenon works the other way and does not produce mathematical certainty. It initially involves the collection of specific observations in particular cases, which may lead to the detection of patterns and regularities. Tentative hypotheses (propositions) can then be formulated based on the researcher’s own knowledge and prior experience. These can be explored and, combined with the strength of previous observations, may lead to general (probable) conclusions or theories, the strength of which is determined in terms of their predictability³².

The methodological instrumentation of critical realism is abductive (or retroductive) reasoning. Although critical realism accepts reality to be unique (as does functionalism), it rejects the approach of inquiry into social phenomena through testing claims formulated as empirical

³¹ These methodological ways of reasoning emanate from the polarisation of functionalist and existential paradigms, and are manifested in the methodological philosophies of *empiricism* and *hermeneutics*.

³² The distinction between induction and deduction however is not so explicit. Parkhe (1993) (p.253) argues that “*both extremes are untenable and unnecessary*” and that the process of ongoing theory advancement requires “*continuous interplay*” between the two.

hypotheses. Abductive reasoning leads from the observation or perception of a phenomenon, to explanatory hypotheses of that phenomenon which can be then evaluated (Peirce, 1958).

Abductive reasoning encompasses two operations: the *selection* and the *formation* of plausible hypotheses. As a process of finding premises it is the basis of an interpretive reconstruction of causes and intentions, as well as of the inventive construction of theories (Peirce, 1960). In other words it is a "*reasoning backwards*" from consequent to antecedent. For example, the observation that purchasing in a few small firms has little involvement in new product development processes can lead to the inductive inference that in all small firms purchasing is not greatly involved in product development processes. Alternatively, starting with the claim that in all small firms purchasing has little involvement in new product development, a deductive inference could be made that in a random small firm the role of purchasing in product development must be minimal. However, starting with the observation that in one or more small firms purchasing is not greatly involved in product development, the task of abductive reasoning would be to identify the structures and mechanisms intrinsic to those small firms in which purchasing has little involvement in product development.

5.1.5 Meta-theoretical and methodological assumptions for this study

In light of the above discussion, the meta-theoretical assumptions adopted for this research are outlined in this section as a means of making clear the foundations for the methodological choice and the research design. Morgan and Smirchich (1980) provide a framework for positioning the research in terms of the meta-theoretical and methodological assumptions about inquiry, expressed in the continuum between objectivity and subjectivity (Table 5.2). Based on this framework and using the explanations for each of the dimensions of these assumptions, the following stance is adopted in terms of the ontological, epistemological, human nature and methodological assumptions.

- Ontology (reality as a concrete process): In the study of the role of purchasing in SRs, it is assumed that the social world created by the BRs that purchasing managers develop with suppliers and internal customers is an evolving process; it is concrete in nature, but ever-changing in detailed form. There are innumerable variables that interact with each other and it is extremely difficult to find determinate causal relationships between the constituent processes of the creation and management of these relationships. At best this social world can be expressed in terms of general and contingent relationships between the most eminent context specific variables. SRs can be exploited and directed by the participant actors (as well as the researcher) according to the opportunities that arise and the ability that the parties (and the researcher) have to mould the relationship.

- Epistemology (to study processes): This research investigates the perceptions of individuals and has been positioned in the sphere of organisational science. It raises questions which are formulated in a way that involves the researcher observing managers in different supply chain triads and analysing their perceptions in an objective way. It is conjectured that purchasing managers (and the other social agents in SRs), interpret and construct the social environment they work in. However, the social reality constructed by SRs is independent of these perceptions and, for that reason these perceptions may be fallible in their own right.

Triangulation is therefore needed with other sources to compensate for the incomplete appreciation of reality by managers. There is however no intention on behalf of the researcher to interpret and transform the views or beliefs of the people that participate in the research. In this respect the data collected is not to be in any way manipulated to control any variables. The epistemological position relating to these two sets of assumptions is close to critical realism; it does not however view the social world being similar to the natural world. The world is viewed rather as an open system, a concrete process evolving over time. It thus emphasises the need to observe the social mechanisms that construct and influence SRs and the processes by which they evolve in relation to the context in which they are embedded. Objectiveness on

behalf of the researcher is essential, as there is no intention to interpret the social world created by these relationships but to observe and report the changes that occur.

- Human nature (man as adaptor): It is assumed that the researcher is adapted to the socio-economic-political environment of the research defined by the restrictions of the study and the contextual characteristics of the organisations that are studied. At the same time however by using a distinctive methodology that emanates from his/her own philosophical underpinnings, the researcher sets the context of inquiry. Similarly, the managers participating in these SRs adapt their behaviour to the conditions set by the ever-changing nature of these relationships, but at the same time they seek to exploit and interpret the context to satisfy their needs.
- Methodological assumptions: As the epistemological and ontological considerations for this study deviate to some extent from the extreme sociological positivistic stance, it is contended that a pure empiricist research methodology using deductive reasoning, does not capture the entirety of the phenomena under investigation. The methodological stance adopted for the study is that a careful observation of various SRs in action may elucidate structures and patterns that can reveal the role of purchasing in SRs. Tentative hypotheses can then be put forward to explain the structures and mechanisms intrinsic in the SRs under investigation that dispose purchasing to adopt this role. The use of abductive reasoning to study processes of interaction between purchasing managers and their counterparts, under the philosophical foundations of critical realism in organisational science, is identified as being appropriate for this study. Table 5.2 (adapted from Morgan and Smirchich, 1980) positions the philosophical assumptions of this research in the continuum between general subjective and objective approaches.

	Subjectivist approaches			Objectivist approaches		
Core Ontological Assumptions	Reality as a projection of human imagination	Reality as a social construction	Reality as a realm of symbiotic discourse	Reality as a contextual field of information	Reality as a concrete process	Reality as a concrete structure
Assumptions about Human Nature	Man as pure spirit, conscious being	Man as a social constructor, the symbol creator	Man as an actor, the symbol user	Man as an information processor	Man as an adaptor	Man as a responder
Basic Epistemological Stance	To obtain phenomenological insight, revelation	To understand how social reality is created	To understand patterns of symbiotic discourse	To map contexts	To study structures, process, change	To construct a positivist science
Some Favoured Metaphors	Transcendental	Language game, accomplishment	Theatre, culture	Cybernetic	Organism	Machine
Research Methods	Exploration of pure subjectivity	Action research	Symbiotic analysis	Contextual analysis of Gestalten	Historical analysis, case study	Lab experiments, surveys

Table 5.2 Basic assumptions characterising the subjective-objective debate within social science

5.1.6 Research methodologies, designs & methods

In social sciences it is generally considered that the nomothetic style (or more generally empiricism) principally adopts a *quantitative* methodology for collecting and analysing data (Bryman, 1984). On the other hand the ideographic style (or hermeneutics) utilises mainly a *qualitative* methodology. Although there is an apparent correlation between the choice of methodology and qualitative/quantitative research techniques, many authors believe that whilst this is generally true, the distinction between methodologies exceeds the distinction between the methods selected for collecting research data³³.

Bryman (1989) for example notes that the distinction between quantitative and qualitative methodology should not be taken to imply either the presence or absence of quantified data. This does not fully or accurately describe the processes adopted by quantitative and qualitative researchers in practice; in fact qualitative research does not entail de-quantification of data. He posits that a researcher's epistemological position should direct their research, but should not

³³ In addressing this issue a distinction needs to be made at this point between the terms *research methodology*, *research design* and *research method*. Research methodology, describes the fundamental style of conducting research, reflecting its ontological and epistemological stance. Research design according to Bryman (1989) is "the overall structure and orientation of an investigation...[which provides] "the framework with which the data are collected and analysed" (p.28), whereas research method (or technique) refers simply to ways and tools of collecting data. In this respect the terms 'research methodology', 'research design and research method' indicate different levels of the research process.

be symmetrically related to a particular technique or method of doing research. Guba and Lincoln (1994) also argue that the choice of research paradigm, rather than the character of research methodology, is the overriding concern: *“Although [this]...implies that the term qualitative is an umbrella term superior to the term paradigm (and, indeed, that usage is not uncommon), it is our position that it is a term that ought to be reserved for a description of types of methods. From our perspective, both qualitative and quantitative methods may be used appropriately with any research paradigm”* (p.105).

5.2 Research design and research methods

Building on the philosophical underpinnings of epistemology and methodology of the thesis (discussed in the previous section), the theoretical and conceptual foundations of the research and the propositions that were raised for the research questions for this study, this section presents the research process and strategy, with the selection of the most appropriate research design and research methods and techniques for data collection³⁴.

5.2.1 The research process

Gill and Johnson (1991) propose a simplified rational generic framework for conducting research, which is presented as a linear developmental sequence. They caution however that the framework *‘...does not of course provide a description of the way in which research is actually conducted’* (p.4).

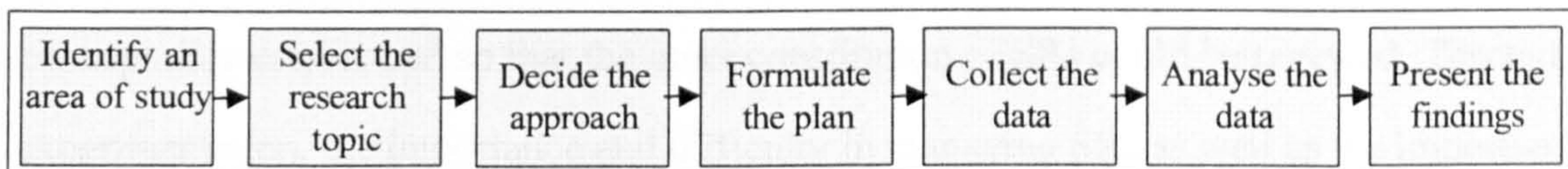


Figure 5.1 The research process

Easterby-Smith et al. (1991) for example suggest the subjects of research (managers), their stakeholders and even the academic community (in the case of academic research) can on many occasions be more powerful than the researchers and influence the research process

³⁴ The research strategy involves making decisions about the research goals or purpose, the content of the research (and the context that is operationalised), and the data collection and analysis methods.

immensely. The best laid research plans and designs can therefore be faced with unforeseen contingencies during the collection and analysis of data. Within the same framework, Bryman, (1989) posits that although a sequential process can be more suitable for functionalist / positivistic research (and especially when secondary data is collected), the research process for certain types of qualitative research where generation of data is required is an ongoing process, and thus advocates an evolutionary development of the research process.

The nature of the problem that is presented in this thesis was sketchy and only incompletely determined at the beginning of the study, chiefly because of the epistemological foundations of the researcher that the social reality of SRs is viewed as an open system, a process evolving over time. The research design could not therefore be fully specified in advance, but rather it emerged over time. The process followed was by no means linear, and involved refining decisions about the research strategy and research framework. Due to a lack of a descriptive framework, the study initially set out to identify all the activities that purchasing managers conduct in SRs. The identification of these activities raised further questions in the research; the underlying reasons why these activities are performed, their relative importance in the relationships studied, and the difficulty in managing/conducting them. During this stage the activities identified were placed into SR developmental stages and their constitutive managerial components³⁵, and consequently, through theoretical reasoning, they were conceptually established so that the inner constitution of SRs could be revealed. Through experimentation, the importance and difficulty in managing SRs as well as the importance and difficulty of handling the constitutional elements of the relationships were established.

Various reasons were uncovered to explain why purchasing managers are involved in the observed activities; for example purchasing managers are involved in the bidding process because of their organisational position. The literature in purchasing and SCM had to be

³⁵ Pre-contractual, institutional and operational stages, and product management, process management, contract management and supplier development management areas.

revisited in order to explain and verify the historical reasons that propel purchasing participation in these areas.

In order to generate insights about the mediating role of purchasing managers in SRs, the research progressed to investigate the processes whereby purchasing managers exercise the activities that were identified in the first stage of the inquiry, and what impact this has on the constitutional elements of SRs (trust, power, etc). Propositions were advanced that (i) purchasing managers (and as a result PDs) play a major role in the management of relationships in terms of the development of trust, their powers of decision making, their level of involvement and their contribution to the development of commitment; but (ii) these roles vary depending on the rank of purchasing managers in an organisation, and on the asset specificity and criticality of the different types of products and services exchanged.

Consequently propositions were raised to explore the impact of these roles on the performance of SRs. The literature on relationship performance was revisited to develop the analytical framework to assess the performance of the relationships studied and to juxtapose it to the role of purchasing in these relationships. Finally, based on the importance and difficulty of managing/handling the activities and constitutional elements of the SRs identified in the first stage of the empirical research, propositions were raised in terms of the particular activities/elements of SRs that purchasing should focus its on attention in different contexts.

Figure 5.2 illustrates the 'iterative' research process for this study.

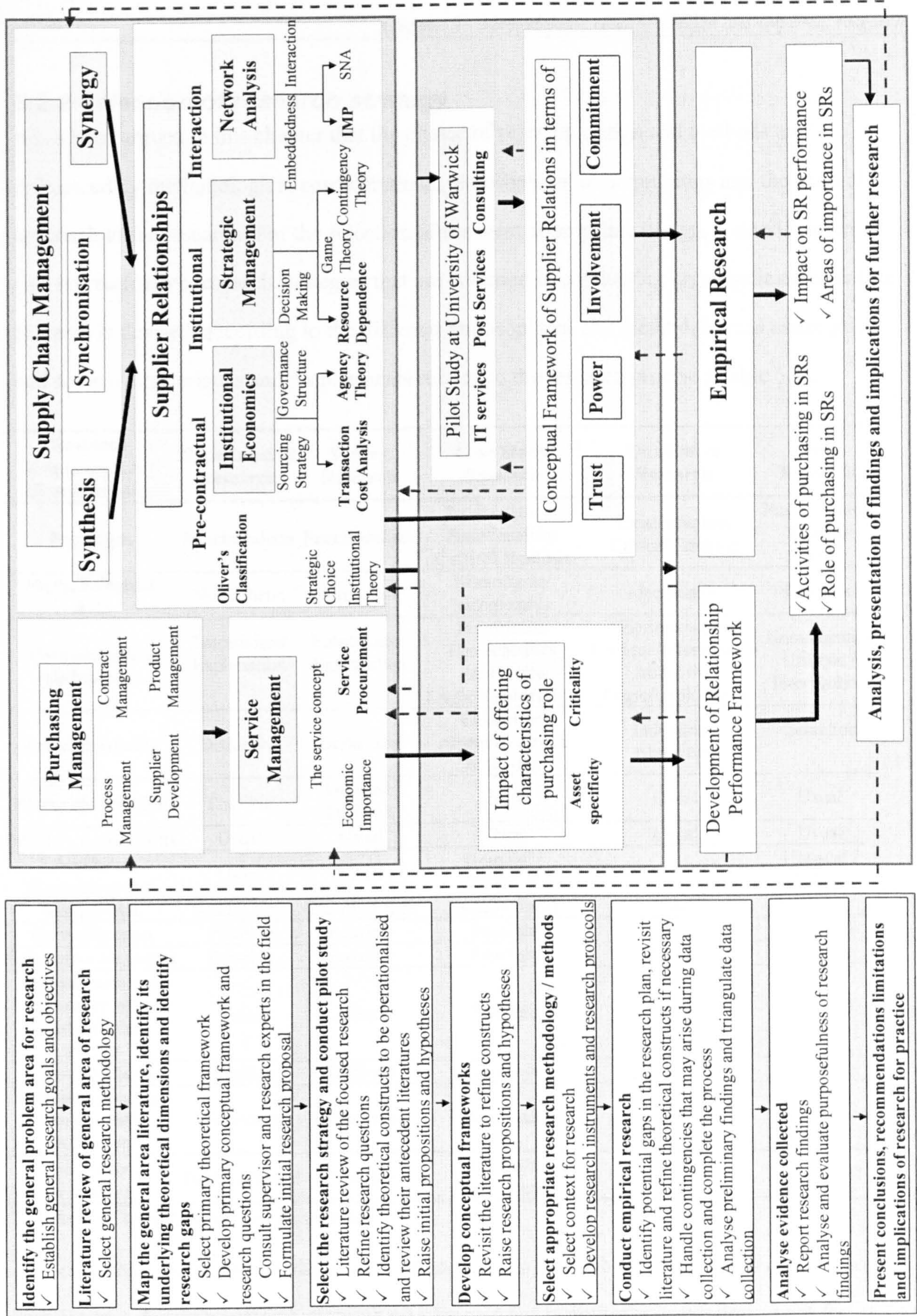


Figure 5.2 The research process for this study

5.2.2 Selection of research strategy

It has been argued in this chapter that the choice of research design and methods are influenced by methodological considerations, philosophical underpinnings and the general approach to the research. For the selection of the most appropriate design, a classification of five representative research strategies that are common in conducting organisational scientific research is devised, according to the different philosophical and methodological assumptions and some characteristics and requirements related to the research process (Table 5.3).

Research Requirements / Characteristics	Experimental Research	Survey Research	Case Study Research	Qualitative Research	Action Research
Paradigm	Functionalism	Functionalism	Existentialism Functionalism Critical Realism	Existentialism Critical Realism	Existentialism Critical Theory
Methodological style	Nomothetic	Nomothetic	Nomothetic/ Ideographic	Ideographic	Ideographic
Methodological philosophy	Empiricism/ Explanation	Empiricism/ Explanation	Empiricism Hermeneutics Abductive Logic/Exploration	Hermeneutics Critique/Intervention Abductive Logic/Exploration	Hermeneutics Critique / Intervention
Art of reasoning	Deduction	Deduction	Deduction Abductive logic Induction	Induction / Abduction	Induction
Direct observation	Possible	Unusual/ Difficult	Usual	Usual	Usual
People's perceptions	Usual	Usual	Usual	Usual	Usual
Artificial Reconstruction	Usual	Usual	Unusual / Difficult	Unusual / Difficult	Unusual / Difficult
Sample Size	Small/Large	Usually Large	Usually Small	Small	Small
Quantification	Possible	Possible	Possible	Unusual	Unusual
Perceptive measures	Possible	Possible	Possible	Possible	Possible
Identification of causality with mathematical rigour	Usual	Usual	Possible	Unusual	Unusual
Theory building	Possible	Difficult	Possible	Possible	Possible
Role of researcher during data collection	Observation	Explanation	Observation	Observation / Intervention	Intervention
Control over variables	Difficult/Usual	Possible	Difficult/ Not Usual	Not Usual	Not Usual

Table 5.3 Characteristics of research designs

The case study is the preferred research strategy in the early phases of research (description and concept development) where there may be no prior hypotheses or previous work for

guidance, and when the boundaries between the phenomenon and the context are not clearly evident (Yin, 1994). The level of analysis is usually the participating organisations, but could also be departments in these organisations or even inter-organisational networks, and therefore there is a strong emphasis on the context in which the phenomenon occurs. Variables cannot be controlled or manipulated through intervention, but outcomes and processes are measured systematically using multiple data collection techniques (quantitative and qualitative), depending on the particular type of case research. Experimental (or quasi-experimental) design on the other hand is appropriate when researchers seek to manipulate the behaviour of independent variables (and carefully and systematically control any intervening variables), to determine the effects of any intervention on dependent variables in the search for knowledge and examination of causality (Gill and Johnson, 1991). Similarly, although survey research is the most common research design in the purchasing management literature³⁶, it usually does not study the intervention of organisations or peoples' perceptions and its objective is generally to examine any interrelationship (causality) between variables using empiricist methodology, and to allow for statistical analysis with quantitative methods. Field studies or ethnomethodology, although they are similar in nature to case study designs, are limited because they only use qualitative data and interpretation of observations. Finally, action research involves the active participation of the researcher in which knowledge is generated in a cyclical process that alternates between action, critical reflection and interpretation of data. From this classification it can be seen that the most appropriate research design for this study, in terms of the meta-theoretical and methodological assumptions and research questions, is **case study design**.

³⁶ Babbar and Prasad (1998) report that 51% of research conducted in 22 purchasing related journal involved the use of survey design.

5.2.3 Case study research

The main advantage of case study research is that phenomena are studied in their natural settings and that theories are created directly from the data. Meredith et al. (1989) (p.311) define it as “*an all encompassing research that is used to investigate a specific phenomenon through an in-depth limited scope study*” of a small number of cases. According to Yin (1994) it is a strategy for conducting qualitative research that is more appropriate when investigating the why and how questions of a phenomenon. Its main goal is to understand as comprehensively as possible the phenomena studied through *perceptual triangulation* (Bonoma, 1985) (p.203), i.e. the accumulation of supporting sources of evidence to ensure that the facts being collected are indeed correct³⁷.

Quality of case study research

Case study research has been recognised as providing the means to scientifically address broad issues concerning organisational phenomena, if it is based on a well defined and rigorous design. This design, according to (Christie et al., 2000), has to ensure that any inherent bias is minimised through a set of tests. Yin (1994) and Miles and Huberman (1994) summarise these tests through five major approaches / tests. The rationale for the importance of the test as well as a list of techniques that can be used to ensure the quality of case study research in terms of these tests is given in Table 5.4 in the next page:

³⁷ It should be noted the epistemological stance of this thesis is that the knowledge obtained by investigating the research phenomena is not apparent to anyone. Understanding is instead meaningful in the framework of the epistemological and methodological assumptions of the researcher (Meredith, 1998). In this respect it is acknowledged that the knowledge obtained carries a certain degree of bias.

Tests	Rationale for critical realism	Case study tactic	Research phase that it occurs
Construct validity	Ensures adequate measures for the concepts under investigation. It <i>“testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed”</i> (Sekaran, 1992)	<ul style="list-style-type: none"> • Apply triangulation • Research protocol • Have key informants review draft report	<ul style="list-style-type: none"> • Data collection • Data collection • Data collection
Internal validity	Refers to the identification of causality between dependent and independent variables (Emory and Cooper, 1991). Case study research conducted with a critical realist perspective does not intend to define causality but rather aims to identify generative mechanisms which it then uses to ‘infer’ that a particular event resulted from some earlier occurrence.	<ul style="list-style-type: none"> • Pattern matching • Explanation building • Time series analysis • Logic models 	<ul style="list-style-type: none"> • Data analysis • Data analysis • Data analysis • Data analysis
External validity	Refers to the generability of the findings beyond the proximate research case studies. Contrary to purely empirical research in which generability is ensured through appropriate sampling and the use of rigorous statistical and mathematical methods, case study research relies on theoretical sampling and analytical generalisation (Glasser and Strauss, 1967)	<ul style="list-style-type: none"> • Use rival theories within single cases • Use replication logic in multiple cases 	<ul style="list-style-type: none"> • Research design • Research design
Reliability	Involves the issue of the ‘replicability’ of findings. In the critical realism research, it is of paramount importance as it is based on the assumption that reality is unique; therefore, results should be repeatable. To achieve reliability case study procedures should be enacted to identify a documentation trail.	<ul style="list-style-type: none"> • Research protocol • Case study database 	<ul style="list-style-type: none"> • Data collection • Data collection
Confirmability	It involves the ability of other researchers to trace the chain of events leading to its conclusions and the logical abduction of inferences if it is carried out in the way it is described by the researcher (Lincoln and Guba, 1985).	<ul style="list-style-type: none"> • Develop a record of data collected 	<ul style="list-style-type: none"> • Data collection

Table 5.4 Case study tactics for four design tests (adapted from Yin, 1994)

5.2.3.1 Selection of case research design for this study

The process for the selection of the most appropriate design for case study research highlights the central role of the theoretical foundations in the approach. Theory should guide the design and analysis of the case study and the results of the study should develop the theory. Thus, the answer to identifying the boundaries of a case should be heavily influenced by the researcher’s theoretical perspective on the subject matter of the study. Several types of case study designs and styles for conducting case based research exist. Tables 5.5 and 5.6 pinpoint the differences between single vs. multiple, and holistic vs. embedded case study designs.

Single vs. multiple case studies: This distinction refers to the fact that case study research can investigate a single setting (single case research) or multiple settings (multiple case research), depending on the nature of the research.

	Choice	Advantages	Disadvantages
Single cases	<ul style="list-style-type: none"> When a case is extreme or unique (Eisenhardt, 1989b) When a case is critical for testing a well formulated theory (Voss et al., 2002) 	Greater depth	Limits on the generalisability of conclusions drawn. Biases such as misjudging how representative a single event is and exaggerating easily available data
Multiple cases	When replication of findings is required (Yin, 1994) ³⁸ .	Augments external validity	More resources needed, less depth per case

Table 5.5 Choice of number and type of cases (source: Voss et al., 2002)

Holistic Vs Embedded designs: The distinction between holistic and embedded case studies relates to the number of units of analysis in the research and the nature of the ‘case’ chosen for study. Holistic and embedded designs can be applied to both single and multiple case studies.

	Unit of analysis	Nature of the ‘case’ chosen	Advantages
Holistic	Single	lacks any socially significant internal divisions	• More straightforward
Embedded	Embedded units	there are subdivisions (e.g. an organisation with a number of different departments or groups)	<ul style="list-style-type: none"> It can allow for slight changes in the orientation of the study during the data collection process It can be more flexible and exploratory

Table 5.6 Holistic vs. Embedded case studies

There are five main areas that determine the choice of the case study design: (i) the research questions, (ii) the propositions of the research, (iii) the unit of analysis, (iv) how data is linked to propositions, and (v) the criteria for interpreting the findings (Yin, 1994).

The first research question seeks to identify the activities that purchasing managers conduct in SRs. Although a single case study design would provide rich data on the way in which purchasing managers conduct certain activities within SRs, it would inhibit the ease of generalising the findings of the study in contexts that would be different to those of the single case study. In addition, the objective of the study is not to examine a unique (critical) case or

³⁸ Extension of the study to new populations is achieved by using theoretical sampling. With careful selection of cases that produce similar results, *literal replication* can be achieved; and with the selection of different cases in ways that are believed to be theoretically important and produce contrasting results (but for predictable reasons), *theoretical replication* can be achieved (Strauss, 1987)

falsify an existing theory, which are the most common reasons for conducting single case studies, but to explore the activities the purchasing managers conduct, and through literal and theoretical explanation to explain the role of purchasing management in SRs using abductive logic. A multiple case study (with careful selection of the cases to be studied) is thus preferable as it enables generalisation of findings beyond the context of a single study.

In chapters 2 and 4 it was posited that SRs are intricate constructs that are composed of a nexus of interpersonal, inter-departmental and inter-organisational relationships which are developed with the exchange of a product or service (or a combination of both). In doing so it is acknowledged that there are multiple units which could be used to analyse SRs. The ‘cases’ could be: (i) the individual relationships that are exchanged for a particular product or service (the unit of analysis being the product or service exchanged), (ii) the organisations that PDs belong to (the unit of analysis being the organisation itself), (iii) the PDs and the individual purchasing managers within the organisations (the units of analysis being the departments and the individuals) or, (iv) the organisational procurement process.

In addition, questions three and four require an analysis of the different constitutional elements of SRs. Therefore the recognition of different units of analysis and the need to conduct multiple cases call for a multiple embedded case study research design to fully understand the phenomena under investigation. Tsoukas (1989) posits that case study research can be applied using an ideographic style from a critical realism perspective to identify the structures and those generative mechanisms that can lead to the explanation of a phenomenon in specific contexts. He propounds that this is a legitimate strategy for the identification of those mechanisms. It may not produce deterministic associations linking the observed phenomena with these structural mechanisms, but nevertheless it may ascribe causes and explanations. By adopting an ideographic style the *differentia specifica* of certain contexts can be elucidated, identifying the impact of contingent factors on these mechanisms.

In this thesis a multiple embedded case study using an ideographic methodology with abductive reasoning is therefore applied, to identify those mechanisms or structures that explain the different roles that purchasing managers and departments adopt in SRs. The case research design is stratified into three different stages. Firstly, using inductive logic, it identifies the activities of purchasing managers (and as a result PDs) in SRs. Secondly, it attempts to identify the reasons why purchasing managers are involved in these activities, and using tentative propositions, various rules are outlined to describe these reasons. Thirdly, abductive logic is used to understand why these rules exist, the structures and the associated causal powers behind them, and which structures are responsible for such rules.

5.3 Empirical research: data collection and analysis processes

In this section the empirical operationalisation of the research problem is presented in order to answer the research questions for this thesis. For the purposes of this study seven case studies were conducted over a period of 14 months (August 2001 - October 2002)³⁹. The case studies were conducted in two focal service organisations (a financial services organisation and an airport operator), involving the examination of SR for various products or services, with different structural characteristics from 10 different supplier companies. The two focal organisations were selected for three pragmatic reasons: (i) appropriateness for the collection of data needed for the research, (ii) access to these organisations through existing contacts, (iii) their proximity and convenience. Negotiating access to these two organisations was a process that lasted about two months and was finalised after the consent of the chief purchasing managers of the organisations in return of a full report of the findings of the study. The twelve companies involved in the study are all based in the UK⁴⁰.

³⁹ The term 'case' refers to the study of the SRs that are developed with the exchange of products/services. The units of analysis may be the products/services exchanged, the purchasing managers or PDs, or the organisations.

⁴⁰ In order to ensure confidentiality of the data collected and anonymity of the participants in the research, they are referred to in this thesis using the name of the service or product that is exchanged in the SR.

5.3.1 Contextual background

Focal company A – the financial organisation⁴¹

The financial organisation is a large corporation with a long history in the UK financial services sector. It was established in the 18th century and has evolved to become one of the biggest financial organisations in the world through mergers and acquisitions of banking, insurance and investment companies. Today it operates in more than 30 countries under the same corporate name. Its offerings cover a broad range of banking and financial services in the UK. It is one of the largest employers in the UK with approximately 80,000 employees, 2,500 retail branches and nearly 500 subsidiary companies (only in the UK), having a market capitalisation for 2001 that was estimated at £36.1 billion. The organisation is managed on a divisional basis by five executive directors, each of whom is responsible for a group of businesses.

Focal company B - the airport operator organisation

The airport operator is the holding company of a group of several subsidiary companies that are active in the provision and management of airport and transportation related business in international airports in the UK. These airports accommodate over 120 million passengers per annum, more than 100 competing airlines, and numerous tenants and concessionaires. The organisation was established in the mid 1960s as a public owned company, and has experienced major growth since its inception. It employs 12,500 people and had a turnover of £2 billion for the year 2003.

The role and evolution of the PDs in the organisations⁴²

The analysis of the organisations' business plans and discussions with the Chief Purchasing Officers (CPOs) indicates that both companies followed an evolutionary process in the establishment of SD programmes. In the early 1990s both companies engaged in strategies of

⁴¹ The organisations that are studied in this research are considered appropriate loci for conducting this research because of its richness in terms of the different types of products/ services that are purchased, their importance to the world economy, but also the lack of research in these sector (Tyler et al., 1998).

⁴² For ease and consistency, the departments in the two focal organisations that deal with the purchasing and SCM of products and services are referred to here as PDs, although their names vary in the two organisations.

supply base reductions and the formation of close SRs. In order to select the best suppliers the organisations conducted detailed supplier audits and assessments of their performance. Once the assessments were completed, the organisations decided to keep only those suppliers that met their performance standards. This was the era in which the PDs were formed as independent business units within the organisations. To extend the improvements in supplier performance, the PDs then launched SD programmes with key suppliers. After the initial success of these programmes, the PDs established SD teams and extended the programmes to most of their major suppliers⁴³. Table 5.7 presents key information for the two PDs studied and in Appendix A their organisational charts is presented.

	Financial Organisation	Airport Operator
Position	The PD is part of the operations group of the organisation. It employs 83 people	The PD is part of the operations group of the organisation. It employs 76 people
Important milestones	<ul style="list-style-type: none"> • 1993: Established as a department that could deliver potential economies of scale in savings for the group • 1994: Decided that expenditure in excess of £25,000 needed to be approved by the PD • 1996: A SCM programme is launched and savings targets for the following 5 years are set • 1998: Systematic expenditure reviews of most of the products / services purchased take place • 2000: E-procurement strategy for commodity purchases is established 	<ul style="list-style-type: none"> • 1993: A restructuring programme of the company's processes and organisation is launched • 1995: A four year programme of reorganising the procurement processes and restructuring the organisation's supply chains is initiated • 1999: Reviews of the procurement process of a series of products are launched. New structure around six product teams is adopted • 2000: A SD department is created • 2001: E-procurement initiatives adopted
Procurement strategy	The procurement strategy moved from local decentralised buying with a focus on the ordering of products and services, to consolidation and standardisation of purchases and suppliers with a focus on the prices paid for purchases, and later to initiatives towards helping suppliers to improve their productivity. A partnership approach is adopted in purchasing through segmenting and differentiating suppliers, with a focus on their core competencies and the establishment of continuous improvement programmes with certain important suppliers.	<ul style="list-style-type: none"> • The organisation has an established partnering approach to SRs • A standardised, holistic approach for reviewing SRs is in place to establish what value the organisation is obtaining from its supply chains • Procedures for offering support to suppliers, designing and delivering appropriate training and tools, and promoting the partnering ethos are in place. • Global sourcing is on the agenda for best purchases through e-procurement

Table 5.7 Presentation of the purchasing departments in the two focal organisations

⁴³ Both focal organisations have SD programmes which were developed and managed by the PDs. The airport operator however has a more established SD programme with a clear structure of the development process and a separate SD group.

Presentation of cases studies (SRs)

Tables 5.8 and 5.9, present the main characteristics of the SRs studied in this thesis giving information about the various products/services that are exchanged, the profile of the trading partners, the number and people involved in their management (in brackets) and the level of criticality to the focal organisations. In the next two chapters the context in which these SRs have evolved and operate is discussed in more detail.

	Products / services	Criticality	Supplier	Internal Department(s)
Travel (10)	Air, rail and sea travel, hotel reservation, car hire, etc	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • UK arm of a global corporate travel services company, one of the largest global travel companies in the UK, with a network of 24 offices (25) 	<ul style="list-style-type: none"> • VIP: arranges travel needs for the company's 70 group directors and executive officers (4) • International Banking (8) The group is the largest user of travel within the organisation.
Print Services (7)	Small, medium and large printers, copiers, reprographics, office supplies, web design services, etc	<ul style="list-style-type: none"> • High (Production printer) • Low (reprographics) 	<ul style="list-style-type: none"> • UK branch of a large conglomerate. The SR involves managers from the accounts management department of a print services organisation (10) 	<ul style="list-style-type: none"> • Facilities department: manages the office equipment requirements in the various buildings across the entire organisation, and liaises with the end users of office equipment (8) • IT department: (8)
Stationery (10)	Office supplies, computer consumables, furniture	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • UK branch of a major European office products organisation and one of UK's leading supplier of office products (10) 	<ul style="list-style-type: none"> • Branch network: financial accounting of the cost of the branch network as well as the distribution, administration, cost management of all supplies (10) • Insurance company (6): one of the largest mortgage lenders in UK
IT services (8)	Desktop computers, mainframes, network installation, professional services, maintenance, etc	<ul style="list-style-type: none"> • High (network installation and maintenance) • Medium (Desktop printer) 	<ul style="list-style-type: none"> • IT hardware supplier: UK based division of one of the leading manufacturers of IT products and services in the world. The parent company is associated with many of the industry's technological revolutions (10) • IT infrastructure services supplier: UK based division of a leading European organisation; provides IT solutions for corporate customers, specialising in consulting on the IT strategies of its customers (8) 	<ul style="list-style-type: none"> • IT department (18): one of the largest non-financial business units within the group; controls the overall volume of desktop printing and administers the budget for some of the printing products purchased such as web design

Table 5.8 Case Studies in the financial organisation

	Products / Services	Criticality	Supplier	Internal Department(s)
Baggage Handling (6)	Move passenger bags for connecting flights	Very High	<ul style="list-style-type: none"> • The division of the aviation services subsidiary company of a large UK distribution and logistics provider (12) 	Representative body of the airlines that use one of the operator's airports; its main role is to act as a liaison point for the airlines (3)
Cleaning Services (10)	Cleaning services for airport terminals	Medium	<ul style="list-style-type: none"> • Cleaning company A (6) A specialised aviation cleaning company that was formed by the UK based subsidiary of an international facilities service organisation • Cleaning company B (4) UK based company owned by a European multinational cleaning and facilities company, specialising in cleaning services for airports 	<ul style="list-style-type: none"> • Airport operations department for A (6) • Airport operations department for B (2) <p>Groups that deal with the everyday activities and operations of individual airport terminals (cleaning, security, property management, and issues related to the retailers and staff within the terminals. They are also responsible for the budget of the terminals.</p>
Waste (3)	Management of waste for the entire group	Medium	<ul style="list-style-type: none"> • Waste supplier (6) The supplier is a wholly owned subsidiary of a large European waste services organisation. The company delivers a wide variety of waste management resources and services to organisations and to the public in the UK. • Cleaning company B (4) 	Operations group of one of the airports (3)

Table 5.9 Case Studies in the airport operator

5.3.2 Ensuring external validity of the research

The case studies were selected with the intention of analysing a variety of industries and products/services, so that the findings could be replicated and generalised beyond particular contexts. The rationale for their selection is that of *theoretical sampling* and replication (whether the selected cases would produce patterns in terms of the role of purchasing in SRs, and for predictable reasons).

The number of cases is limited when they reach what Eisenhardt (1989b) describes as *theoretical saturation*. The seven case studies involve the exchange of diverse products and services with different characteristics in terms of the volume and variety of their production processes⁴⁴ (Figure 5.3). The volume dimension refers to the production level of an operation and has implications for the way the operations are organised in terms of the level of

⁴⁴ The volume-variety taxonomy is an established way of classifying products/services. It represents two major characteristics and has been used extensively in the operations management literature (Slack et al., 2001).

repeatability of the tasks people are doing, the level of systemisation of the work where standard procedures are set down in a manual, and the level of unit costs (a low volume product or service is likely to yield to low units costs through economies of scale) (Slack et al., 2001).

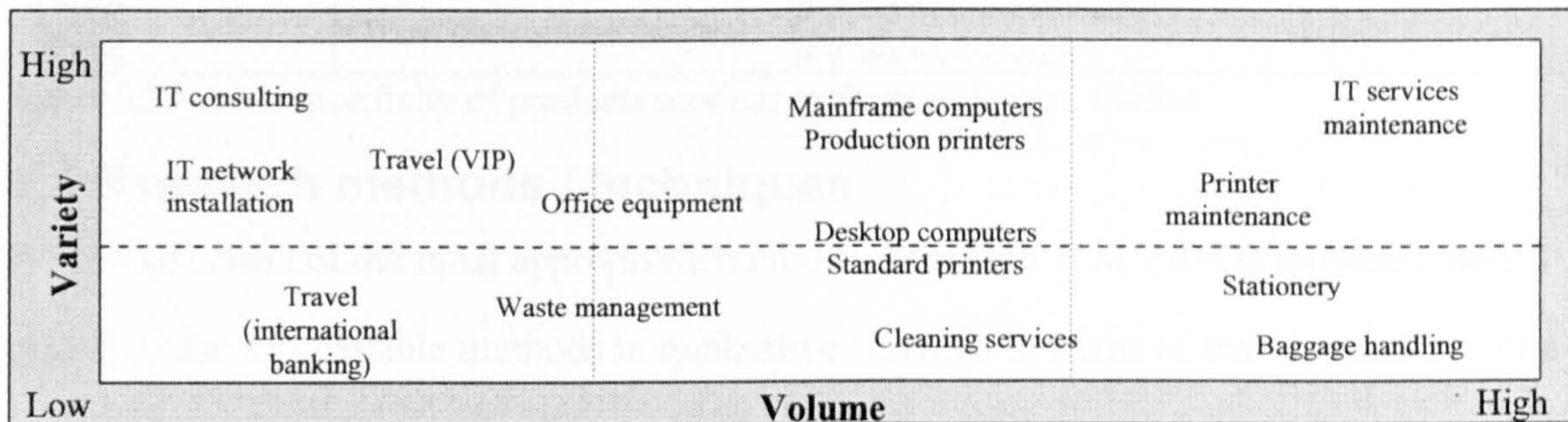


Figure 5.3 Volume-variety dimensions of products/services exchanged in case studies

In order to minimise the effect of the adjusting variables the research is conducted in two organisations with analogous sizes (for their industry) and market position. Each of the SRs selected is similar in structure, including one or two external suppliers of a product/service (who work together for the same contract), the PDs of the customer organisation, and one or two internal departments, representative of the final consumers of the service or product exchanged. In addition to seeking a sample of triads that have this structure, goods and services that have unique infrastructural characteristics and different strategic importance to the parties involved were chosen to accommodate the research questions. Finally, in order to minimise the effect of the initiating variables (as described in section 4.3.6.1) all the SRs that were selected were formed on the basis of increasing the efficiency of the focal organisations.

Using the TCA framework to identify the characteristics of investments (or products or services exchanged), it is demonstrated that a broad spectrum of different types of SRs developed with the exchange of the products or services studied (Table 5.10). This increases the construct and external validity of the research, as it allows for generalisation of the findings beyond certain contextual constraints.

		Investment Characteristics		
		Non-Specific	Mixed	Idiosyncratic
Frequency	Occasional	<ul style="list-style-type: none"> • Travel (VIP) • IT services (computers) • Print services (standard printers) 	<ul style="list-style-type: none"> • Print services (production printers) • IT services (mainframe PCs) • IT services (consulting) 	<ul style="list-style-type: none"> • IT services (network installation)
	Recurrent	<ul style="list-style-type: none"> • Stationery • Print services (office equipment) • Travel (international banking) 	<ul style="list-style-type: none"> • Print services (maintenance) • Cleaning services • IT Services maintenance • Waste management 	<ul style="list-style-type: none"> • Baggage handling

Table 5.10 Asset specificity of products/services exchanged in case studies

5.4 Research methods / techniques

For the selection of the most appropriate methods, Meredith et al. (1989) provide a useful classification of available methods in qualitative research in terms of two dimensions, one related to ontological and epistemological assumptions (the continuum between functionalism and phenomenology) and the other to the sources, mechanisms and type of information used in the research (Table 5.11)⁴⁵.

		Natural ←————→ Artificial		
		Direct Observation of Object Reality	People’s Perceptions of Object Reality	Artificial Reconstruction of Object Reality
Rational	Axiomatic			<ul style="list-style-type: none"> • Reason/Logic/Theorems • Normative Modelling • Descriptive Modelling
	Logical Positivist/ Empiricist	<ul style="list-style-type: none"> • Participant Observation • Structured Observation 	<ul style="list-style-type: none"> • Questionnaires • Interviewing 	<ul style="list-style-type: none"> • Prototyping • Physical Modelling • Laboratory Experiments • Simulation
	Interpretive	<ul style="list-style-type: none"> • Participant Observation • Archival Data 	<ul style="list-style-type: none"> • Historical Analysis • Delphi • Intensive Interviews • Expert Panels • Futures / Scenarios 	<ul style="list-style-type: none"> • Conceptual Modelling
	Critical Theory		<ul style="list-style-type: none"> • Introspective Reflection 	
Existential				

Table 5.11 Location of research methods (adapted from (Meredith et al., 1989).

They posit that the tools utilised to acquire information for the inquiry (which derive from any of the available meta-theoretical assumptions), may also vary depending on the natural context of the research. Research could then be classified into three distinct categories: *direct*

⁴⁵ Meredith et al. (1989) use the term method to refer both to research designs and research techniques. Their classification is nevertheless very useful in this study.

observation, people's perception of reality and artificial reconstruction of object reality. They note however that some methods may be classified into a number of different cells in the table depending on the peculiarities of the epistemological assumptions of the research.

The second (intermediate) category in the classification, *people's perceptions of object reality*, refers to the fact that research is conducted through somebody else's eyes. The concern in this type of research is the representation of the reality of the individuals that participate in the research and its analysis. Meredith et al. (1989) posit that in situations where direct observation is not possible or viable, due to time or resource restrictions, or in situations where there is an inability to control all the variables surrounding a phenomenon being observed, an assessment of people's perceptions may yield significant insights into the underlying explanation of the phenomenon. The nature and management of SRs is extremely difficult to study through direct observation as it requires dedication and time on behalf of the researcher. Descriptive, in-depth information can however be obtained through people's perceptions of the dimensions and critical elements of the SR that they are involved in. Under this category, structured interviewing, surveys, historical analysis, expert panels, futures research and introspective reflection are considered more appropriate.

This study investigates people's perceptions of the activities that purchasing managers conduct in SRs, and the nature and performance of these SRs. According to Meredith et al. (1989), this involves the utilisation of either interviews or questionnaires as appropriate methods. The second question, which seeks to assess the significance and difficulty of managing the activities/responsibilities that purchasing managers conduct or are involved in, also requires investigating people's perceptions through either interviewing or surveys. A unilateral utilisation of a single research method (such as interviews or surveys) would however be inappropriate for this study as it would not address the different characteristics of the research questions posed. Using only statistical analysis for example may obscure some of the

underlying factors that influence the process of SR management. On the other hand, only using interviews would limit the scope for quantifying the significance of certain factors that could influence performance and purchasing manager activities.

In order to ensure rigour and construct validity of the study, perceptions and research methods are triangulated. The research methods utilised are a combination of interviewing and questionnaires that encompass both data and methodological triangulation, thus enabling convergence of the results. The quantitative techniques are used in this study to control for bias in order that facts, instances and phenomena can be understood in an objective way, whereas the qualitative techniques are employed to capture and understand the perceptions of participants of the nature of the SRs under investigation, by looking at first hand experience to provide meaningful data (Duffy, 1987).

5.4.1 Data collection process

In order to ensure triangulation of the research design and enhance construct validity of the research, a short scale pilot study was conducted at the outset of the study at the University of Warwick, which aimed to refine the research questions for the study, the data collection plans and the conceptual frameworks⁴⁶. Based on the insights provided, three primary data collection techniques were selected to be used to ensure triangulation of data. A historical analysis was initially performed and discussions with potential participants in the research were conducted, to generate insights about the SRs under investigation and to further refine the conceptual framework of SRs that was presented in chapter 4. A structured survey was then conducted, followed by in-depth semi-structured interviews with selected managers from all the organisations studied⁴⁷. Finally, a second survey was conducted with the objective of

⁴⁶ Three pilot cases which involved three SRs, each focusing on the supply of a different service/product were conducted, so as to identify any variation in terms of the supplier strategy that is appropriate for each type of service. More specifically the supply of post services (mass), information systems (service shop) and management consultancies (professional) were considered (Silvestro et al., 1992).

⁴⁷ The questionnaire was used first, mirroring the viewpoint of Duffy (1987) (p.132) who suggests that “*by using quantitative methods prior to qualitative work, the replies to surveys can provide leads for subsequent interviews*”

collecting quantitative information concerning the importance of activities that purchasing managers conduct and their performance in their implementation.

5.4.1.1 Historical analysis

Historical analysis involved examining documents including reports, referrals from meetings, existing statistics and recorded data, to give an explanation for new trends and generate new insights about phenomena. Documentary material was used initially to map the organisational processes of the interaction and to determine who was involved in the pre-contractual phases of the SRs under investigation. The material used included copies of original contracts (obtained with the consent of the chief purchasing managers), letters and referrals exchanged between the parties, reports by purchasing managers, and archives including records showing the frequency of the service exchange. A chronology of the events that characterise each SR was compiled, and most importantly this chronology was used to ascertain how and why SRs evolved since their initial formation.

5.4.1.2 Survey instrument of the factors that influence SRs

Following the initial discussions with key administrators in the two focal organisations, a draft questionnaire was developed based on the conceptual framework of SRs (presented in Figure 4.5). The main objective of the questionnaire was to obtain ‘objective’ initial information about the nature of the SRs in terms of the factors that affect them, and to identify those factors considered to be more important in the SRs. A secondary objective was to identify potential patterns of SRs’ management in the case studies, which would be used as a basis to further explore these patterns using qualitative data.

The unit of analysis of the questionnaire is each individual manager’s perception of the factors that affect the relationship that their organisation (as an entity) has with its partners, and not

and observations, and the need to ask routine background information during an interview could be eliminated should these questions have been answered by respondents in a previously administered questionnaire”.

the relationship with individuals from other organisations/departments. Three generic areas of relationship management were examined:

- the impact of these factors on the current state of the relationship with their supplier;
- the performance of the actors in terms of these factors;
- the difficulty of managing/implementing/handling each factor in the relationship.

All managers within the 12 organisations that have an involvement in any of the three phases of SR formation and management were invited to participate in this phase of the study. This included 85 managers in total. Table 5.12 shows the profiles of the participants in the survey.

Purchasing Department		Supplier		Internal Customer	
Chief Purchasing Managers	2	Senior Managers	12	Senior Managers	12
Senior Purchasing Managers	15	Junior Managers	14	Junior Managers	13
Junior Purchasing Managers	17				

Table 5.12 Profiles of questionnaire participants

Design of the questionnaire

The questionnaire seeks to collect data about attitudes, beliefs and experiences. It uses qualitative (or nominal or ordinal) data since they describe attributes of relationships between organisations. The following considerations were taken into account in its design.

Wording	Everyday vocabulary was used to capture the essence of each question, and concepts that were difficult to define were explained by definitions drawn from the literature.
Ordering of concepts	The questionnaire was divided into three parts. In the first part general, easy to answer questions were put. In the second part the core questions were put and in the third part more advanced questions, those that required experience in the relationship, were placed.
Number of questions	The core literature that the questionnaire draws upon is the conceptual framework presented in chapter 4, containing 34 adjusting variables and eight initiating variables regarding the three phases of SRs.
Overall length	The questionnaire's length and layout was an important issue. The design that was chosen allowed for the collection of a large volume of data but at the same time the size of the questionnaire was not larger than two pages.
Placing of sensitive questions	Asking questions about relationships is always a sensitive matter. The possibility of receiving answers that for political reasons will not be necessarily true is therefore high. For that reason triangulation with qualitative research methods is intended.
Ability of respondents	It has been acknowledged that some questions would be impossible for some respondents to answer. For this reason the sample was divided into three generic categories: directors of business units, senior managers, and managers at the operational level. The customised questionnaires were then sent to corresponding respondents.
Level of measurement	According to the ability of the respondents to answer the questions, three levels of measurement were identified: one involving chief purchasing managers, one involving senior purchasing managers, and another involving junior purchasing managers.
Sequence of questions	The initiating and operational variables of the model describing the IORs were placed in random order to minimise bias in the answers.

Table 5.13 Survey design considerations

In order to ensure a high response rate at a low cost and to gather information rapidly, the survey process was completed by email. To ensure comprehension and clarity, and to identify possible shortcomings, a pre-test of the questionnaire was conducted to determine whether or not any alterations or rewording of questions was necessary due to any jargon, inconsistencies or leading questions. The sample for the pre-test involved three relevant senior managers from the two focal organisations, who were then excluded from the sample. In addition to testing the actual questionnaire, the pre-test included in-depth conversations with some of the participants, not only to obtain direct feedback on specific sections and items in the questionnaire, but also to serve as an opportunity to give opinions on the structure and appropriateness of the questionnaire as an instrument. The data from the pre-test was also used to facilitate a trial of the codification, programming and statistical analyses using the SPSS 11 software. The pre-test also assisted in an assessment of the time and cost involved in completing the study. As a result of the pre-testing, slight changes and variations of wording to a number of questions were made to accommodate for the language used in these businesses and some questions inappropriate to the focal triad and the services offered were deleted. Following the pre-testing, six different versions of the questionnaire were produced, containing two sections. Section 1 contains questions related to screen respondents and the product or service that is offered and section 2 contains factors that could potentially influence the relationship in the triad. It assesses managers' perceptions of the importance of each factor on the relationship, their perception of their departments' actual performance against each factor and their perception of the difficulty to implement/handle/manage each factor

Type of answers - Likert scaling

A Likert type scale of answers is used to assess the importance/performance and difficulty of managing individual factors in the relationships studied and the importance of relationship management in the performance of service delivery. To minimize potential bias caused by the choice of a Likert type scale, the questionnaire uses an anchored scale in which explanations

are given next to the numbers. The specific scale is a semantic differential scale assigning numbers to the importance of certain factors in the relationships, to the performance of the trading partners and to the difficulty of the factors to be implemented or managed.

Furthermore, a drop-down menu is used with the explanations of the rating, in order to make easier for the respondents to rate the questions (Appendix B).

Data collection

The updated questionnaire was customised to the peculiarities of each case study and sent by email to the 85 senior and junior managers with a covering letter inviting them to participate in the research. Sixty eight usable replies were collected from the managers of the organisations, representing a final response rate of 80%. From the 68 replies, 24 (35.3%) were from purchasing managers, 22 (32.3%) from suppliers' managers and 22 (32.3%) from internal customers. Upon receipt, all the managers that participated in the survey were responded to (usually via email) thanking them for their participation and noting that the results of the study would be available to them.

Measurement instrument bias

An issue of concern was whether the respondents would fully understand the complexity of the answers that they needed to give. Most of the constructs used in the questionnaire are highly complex and deal with soft and very sensitive issues in SR management (such as trust and commitment). Therefore with each questionnaire a separate page of explanations was given to each interviewee on (1) how to answer the questions and (2) how their response would be interpreted. Another issue was the layout of the questionnaire. The questionnaire included many questions that could possibly tire the respondents. The use of drop-down menus saved space in the layout and made the completion of the questionnaire easier in the sense that the respondents only had to use their mouse to fill it in.

5.4.1.3 Semi-structured interviews

Semi-structured interviews are the main mode of data collection and are intended to elucidate the forces influencing the initiation of the SR for each case, in order to understand the structural characteristics of the relationships, and to provide first hand data for identifying the activities conducted in SRs and the patterns of interaction between purchasing managers and their counterparts. The interviews provided insights into the roles of purchasing managers in the SRs that were studied in a way which the initial questionnaire could not. The SRs are seen as being very dynamic and complex, consisting of historical and contextual dimensions that the questionnaire could not capture. Moreover the interviews allowed for further and more in depth enquiry into issues that may have been omitted in the questionnaire.

An important issue in the interview process was that the interviewer, as a doctoral candidate with no previous experience in purchasing management, had to be aware of preconceptions that could arise from the way the literature portrays the role of purchasing managers. Whilst the literature was revisited several times to elucidate issues pertaining to the research questions, care needed to be taken so that the outcomes of the study would not be influenced and the researcher would maintain an objective, neutral role in the research process.

After the initial open-ended conversations with key managers from the two focal organisations and the design phase of the questionnaire, it became clear that many individuals are involved in one way or another in the three development stages of the SRs under investigation. It was decided that from a cost and time point of view not all of these individuals could be interviewed for the purposes of this study. A positional approach was therefore followed whereby the managers interviewed were identified with the help of the directors that co-initiated the study (Scott, 2000). Sixty managers were selected in total from the PDs, supplier organisations and internal departmental units, and were invited via an emailed introductory

letter and an agreement form to participate in confidential, one-to-one semi-structured interviews⁴⁸.

Semi-structured interviews were preferred to structured interviewing because they enabled a two way communication between the interviewer and the managers, allowing for particular pathways to be followed when managers discussed particular aspects of their relationships with their trading partners. It is believed that this enhanced the richness of the responses and allowed new ideas and nuances to be introduced into the study. Similarly, this format was preferred to unstructured interviewing as particular questions needed to be answered in this study and open-ended questions would make the interviews substantially different from one another and thus difficult to analyse.

Approximately 90% of respondents expressed an interest in being interviewed. Follow-up calls to these individuals then narrowed down the original list. Fifty five semi-structured interviews were conducted on a one-to-one basis with managers from the 11 participating organisations (two focal organisations and nine supplier organisations) that explored the role of the participating parties in the relationships. In particular, 2 chief purchasing managers, 12 senior purchasing managers and 7 junior purchasing managers, 12 senior and 8 junior managers primarily from the sales, operations and marketing departments of the supplier organisations, and 9 senior managers (directors) and 5 junior managers from the internal business units of the customer organisations were interviewed. This number represents four to six interviews with key individuals for each product/service. The inter-related actors were then identified at the one-to-one interviews. Interviews were carried out with at least one board representative or senior executive and other managers and suppliers.

The interviews were undertaken in the period January - August 2002 at the offices of the interviewees (in Bristol, the City of London and the Greater London area) and lasted between

⁴⁸ The list of questions that the semi-interviews were based is provided in can be found in Appendix C

one and one and a half hours, although the interviews with the purchasing managers lasted longer as most of them were involved in more than one SR. All interviews were arranged by phone in the preceding fortnight. The appointments and details of the arrangements were confirmed by email and included another copy of the consent form to be signed and returned to the researcher (Appendix C). Such correspondence, plus the ‘small talk’ prior to the commencement of interviews, led to a congenial and friendly atmosphere during the interviews. This assisted in putting the interviewees and interviewer more at ease, which in turn facilitated the interviewing process.

After introducing the study again, the managers were asked for their consent to tape record the interviews. A series of 18 main questions were asked regarding interviewees’ perception of the activities that are conducted for the management of the SRs they are involved in as well as their relationship with the other actors in the SR. Each interview was tailored to the specific characteristics of the interviewees according to their rank, their involvement in the SR and the organisation they work for, covering an overlapping core set of questions plus those pertaining to the particular manager and the specific conditions of the relationships they are involved in. For instance high rank managers and directors were asked more about the pre-contractual and institutional stages of the SR, whereas junior managers were asked more questions related to the operational variables of the SR. In addition, probing was used to delve deeper into issues that arose. During the interviews the *critical incident technique* was used to elucidate historical issues about relationships and to bridge the gap between the observations made by the researcher during the interviews and the perceptions of the managers (Flanagan, 1954). The interviewees were asked to recall a particular incident with their trading partners which in their opinion had a significant impact on the way the relationship had evolved, and to describe the actions they perform and their motives with regard to dealing with that incident.

The conceptual framework for the nature of SRs (Figure 4.5) and the RelPerf model (Figure 4.7) were used as templates during the interviews. Interviewees (depending on their rank and the type of product/service exchanged) were asked questions about the nature and scope of their BRs with their counterparts. They were also asked about their requirements and expectations and their perception of their partners' requirements and expectations. Their responses were inserted into the templates by the interviewer. The templates thus contained some verbatim phrases that illustrated the interviewees' opinions and perceptions, as well as notes taken by the interviewer during the interview. If the interviewees did not express an opinion about a particular subject contained within the templates then they were asked to do so.

All the interviews were then transcribed verbatim within a fortnight of being conducted. The taped interviews were used to check and improve the responses recorded in the templates. These templates then formed the basis for qualitative analysis of the data. The full transcripts of the interviews were entered into N.U.D.I.S.T. for analysis. All interviewees were offered a copy of their interview transcript, consistent with ethics guidelines. Two people requested their transcripts, and neither asked for any changes to be made.

The managers that were interviewed were reluctant in the beginning to talk about their interpersonal relationships with their trading partners, but as the discussion evolved they opened up and welcomed the opportunity to talk to an objective and external listener. The academic nature of the research and informal conduct of the interview may have influenced managers in 'opening up' about their experiences and opinions of the SRs in which they are involved.

5.4.1.4 Questionnaire on the activities of purchasing managers

The final stage in the data collection process involved a second survey amongst purchasing managers and their trading partners concerning the activities that purchasing managers conduct in the SRs, which had been identified during the archival analysis and the semi-structured interviews with the managers. The objective was to obtain information on the

importance and difficulty of managing the observed activities and to identify potential patterns in the answers of the managers involved in the management of SRs.

This second questionnaire also used as unit of analysis each individual manager's perception of the importance of the activities that purchasing managers are involved in, their performance in executing these activities and the difficulty in managing/implementing/handling them. The survey was also conducted by email for speed and convenience, and its layout was similar to the first so that it would be easier for managers to complete. The same generic rules in the design were applied in terms of wording, with particular attention to its length, and the sample size was exactly the same as the first questionnaire (85 managers). A pre-test was also conducted with two senior managers from the two focal organisations, who helped to modify the wording of the activities in order to ensure compatibility with the operations of their organisations.

The second questionnaire contains two sections. Section 1 contains questions related to the respondents' profile of their role in their organisations and their involvement in SRs (Appendix B). Section 2 contains two tables listing all the activities that were identified during the first stages of the empirical research and measures managers' perceptions of the importance of each activity, their perception of the performance of purchasing managers in executing these activities and the difficulty in managing, implementing or handling them. Anchored Lickert scales with explanations were also used in this questionnaire.

The same process of collecting the data was followed as in the first survey. A covering letter was sent along with the questionnaire explaining the reason for the second survey and explanations were also given on how to answer the questions. Sixty four replies were collected (a slight decrease from the first survey) for a final response rate of 75%, of which 28 (43.8%) were from purchasing managers, 15 (23.4%) from suppliers' managers and 21 (32.8%) from internal customers. The potential sources of error and bias in the data were dealt with by the

same processes for measurement instrument and non-response bias, revealing no apparent biases.

Ethical issues

Because the research involved surveying and interviewing respondents, care was taken to ensure the confidentiality of the data collected and the anonymity of those involved. As the email questionnaires were not anonymous, consent forms and a statement informing respondents of the research being undertaken were required. A second statement was required for all interviewees in addition to a consent form that included a clause enabling interviewees to withdraw their consent at any stage. As the interviews undertaken were taped and transcribed, interviewees were offered copies of their interview transcripts for validation purposes. The interview tapes were numbered and a separate list of corresponding numbers and names was made. Names were used only during the taped interviews; in the transcripts and in this thesis aliases are used and will be used in any publications based upon this research, to preserve confidentiality. In addition the data set is housed with the researcher and will be stored until the project is completed⁴⁹. The next section expounds the analytical process for answering the research questions for this study.

5.5 Treatment of data

The data collected comprises approximately 250 pages of typed interview transcripts, nearly 200 pages of typed questionnaire responses, and hundreds of pages of statistical analyses. In order to give answers to the four research questions, the analytical process outlined in Table 5.14 is followed. In the next two chapters this process is discussed in more detail.

⁴⁹ The data is stored in computer files that require a password known only to the researcher.

Level of Analysis	Within-Case Analysis Patterns of similarities and differences within a case	Cross-Case Analysis Similarities and differences across all cases	Group Analysis Similar cases are grouped together; these groups are compared for differences	Inter-Firm Analysis Patterns of similarities and differences for specific questions between the two organisations	Set Analysis Patterns of similarities and differences for both focal organisations
Research Question 1	Identification of activities that purchasing managers conduct or are involved in, in each SR	Identification & comparison of the extent of contribution of purchasing managers to various activities for SRs' management	Identification of SRs where similar activities are conducted by purchasing managers and formation of groups based on the type of product/service exchanged	Comparison of the activities that purchasing managers conduct in the two focal organisations for all the SRs examined in each organisation	Development of an integrated framework of activities that purchasing managers conduct in SRs
Research Question 2	Use of descriptive statistics from the second survey, to identify the most important/difficult activities for each case	Analysis of how the levels of asset specificity and criticality of the products/services affect the implementation of certain activities	Comparison between groups of cases with similar levels of asset specificity and criticality to assess the impact of the level of asset specificity and criticality of on the importance of certain activities	Comparison of the PDs to assess how the level of organisation and infrastructure of the PD can affect the difficulty of certain activities or facilitate their implementation reg. their ability to conduct them	Use of descriptive statistics from the second survey, to identify the most important/difficult activities all cases
Research Question 3	Identification of the role of purchasing in each SR	Commonalities (and differences) of the role of purchasing across the cases	Comparison between groups of cases where purchasing has similar role and extrapolation of the influence of the level of asset specificity and criticality in determining that role.	Comparison of the two PDs to assess how the level of organisation and infrastructure can affect the role of the PD	Conclusions of the role of purchasing in SRs
Research Question 4	Using the RelPerf model the performance of each SR is assessed.	Comparison across cases to examine any potential association between problematic and successful SRs and the role of PDs in the SRs	Comparison between groups of cases where purchasing has similar role and extrapolation of their impact on the performance of the SRs.		

Table 5.14 Process and levels of analysis for answering the research questions

5.6 Chapter Summary

This chapter discussed the philosophical underpinnings of the epistemology and methodology of the research by analysing the conventional forms of creating knowledge, of inquiry, and of scientific method and practice. Based on this discussion, it reasoned the selection of the

research design, methods and techniques and presented the process of empirical data collection used to answer the research questions for this thesis.

The positioning of the researcher's *weltanschauung* in the different paradigms that exist is considered necessary in order to reason the selection of the methodology and the methods utilised to conduct the empirical research. By doing so, important issues related to the choice of the particular research design that is adopted can be justified and limitations can be identified, thus increasing the quality of the study. Using an analytical model presented by Burrell and Morgan (1979), the ontological, epistemological, human nature and methodological assumptions of the nature of inquiry were discussed and the research was positioned in terms of the fundamental dimensions of each of these categories. Based on these assumptions this study is positioned in organisational science, adopting a critical realistic epistemology, which is objective in its observations and uses abductive logic as a methodological guide (employing both induction and deduction to understand underlying processes that describe the phenomena under investigation). The methodology adopted is primarily qualitative and ideographic, without excluding quantification of data and the use of quantitative analysis techniques.

An ideographic, multiple-embedded case study design is selected as the most appropriate research design based on the philosophical underpinnings of the research and the nature of the research questions. Seven case studies, selected for the structural characteristics of the product/services exchanged, provide the research context of the study which is conducted using different research methods (primarily semi-structured interviewing and two surveys with structured questionnaires), perspectives of multiple respondents, and operationalisation of the research with different units of analysis, ensuring its construct validity (Figure 5.4).

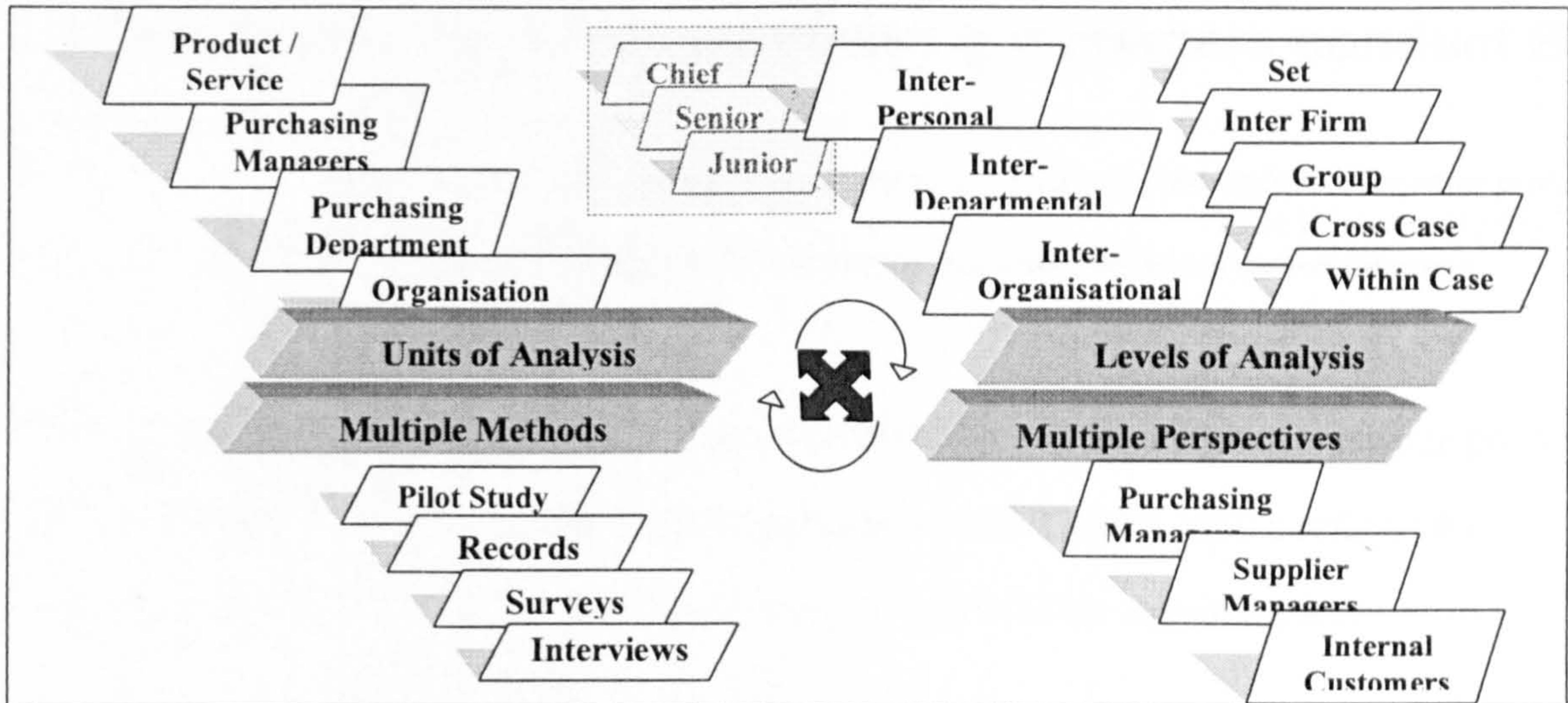


Figure 5.4 Ensuring construct validity in the research process

The chapter also discussed and reasoned the empirical study conducted for this thesis, including the presentation of case studies and the framework for analysis of the data collected. The study is conducted in two large service organisations in the UK, a major financial organisation and a prominent airport operator, involving seven case studies of products /services with different structural and infrastructural characteristics. An elaborate framework for analysis of the data collected has been developed to answer the four research questions. It involves initially the identification of the activities that purchasing managers conduct, and is followed by an in-depth analysis of the role that PDs play. The process is triangulated with the use of a questionnaire that assess the importance of the activities identified, their inherent difficulty and the performance of purchasing managers towards them. The analysis is conducted in five separate levels (within-case, cross-case, group, inter-firm and set analyses).

The third part of the thesis presents the findings of the research analysis. Chapter 6 deals with research questions 1 and 2, and chapter 7 deals with research questions 3 and 4. The findings are documented in accordance with the study's aims. A critical discussion of the findings is presented in chapter 8 and conclusions are drawn. The thesis concludes with recommendations for further research plus other relevant recommendations for changes in professional practice.

Chapter 6 - Activities purchasing managers conduct SRs

'Each problem that I solved became a rule which served afterwards to solve other problems'
Rene Descartes (1596 - 1650)

In the previous chapter the research design, methodology and the analytical research process was expounded. This chapter deals with research questions 1 and 2, which refer to the activities that are conducted by purchasing managers in SRs. Its objectives are:

- to identify the range of activities that purchasing managers conduct (or are involved) in for the management of SRs, and
- to analyse how the level of asset specificity and criticality of the products/services exchanged influence the necessity for purchasing managers to be involved in certain activities as well as their ability to conduct them.

The identification of the activities that purchasing managers conduct (or are involved in) for the management of SRs constitutes one of the three primary objectives of this thesis. Besides this, it is very useful in this thesis as it facilitates the identification of the 'actual' role of purchasing in SRs, which is dealt with in the next chapter. The assessment of the significance of the activities that are identified is also used to delineate the role of purchasing in SRs, and finally the exploration of how the level of asset specificity and criticality influences the necessity to conduct certain activities can lead to preliminary knowledge into the situations that certain activities need to be carried out in different cases, thus identifying in greater detail the scope of purchasing's contribution to SRs (see Figure 4.8).

The chapter is organised in two sections: the 1st section deals with the analysis of data and presentation of findings for research question 1, and the 2nd section deals with the analysis of data and presentation of findings for research question 2. In order to simplify the structure of

the chapter, the analysis of the data and the presentation of the findings for each research question follows the same pattern, using the analytical framework presented in Figure 5.14.

1. The methodology used in terms of data collection and analysis is presented first across the five levels of analysis.
2. The analysis of the data collected across the five different levels is discussed and the findings are then presented.
3. Finally the findings are reviewed and considered in relation to the existing literature and their potential implications for purchasing practice, in order to uncover the contributions and insights that they generate.

The chapter concludes with a summary of the findings for the two research questions and their implications for research questions 3 and 4.

6.1 Research question 1

Based on the literature review, the proposition P1 was raised in chapter 4 that addresses the research sub-questions 1a, 1b, 1c and 1d (p. 103).

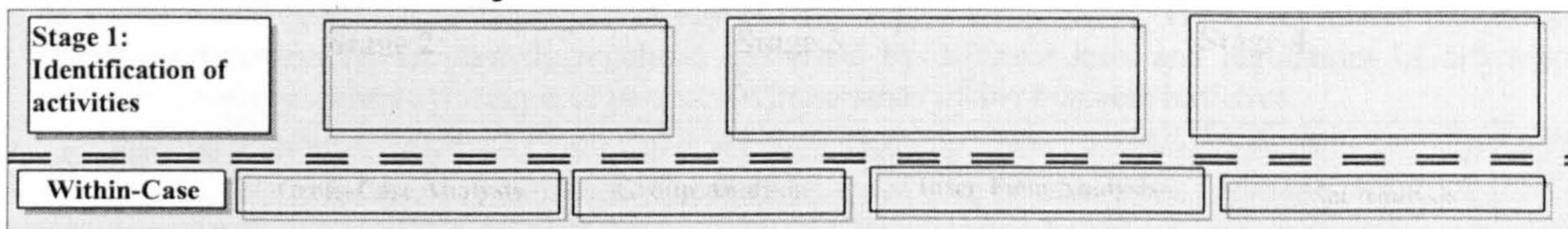
P1. Purchasing managers contribute a broad range of activities and have different responsibilities in the pre-contractual, institutional and operational stages of SRs in terms of contract management, product management, process management and supplier development.

Qualitative data in the form of the written narratives of the managers that were interviewed, and the job descriptions of purchasing managers in the two focal organisations (obtained from the companies' records) are used primarily to answer this question. The process of analysis of the data involves meticulous review and codification of managers' responses in terms of various activities that purchasing managers conduct in the SRs that are studied⁵⁰. Any bias that can potentially arise from the interviews is dealt with through the triangulation of purchasing managers' responses with those of the suppliers' managers and internal customers, and the business plans of the two focal organisations.

⁵⁰ The codification process involves allocating sections of the transcripts into multiple categories and subcategories. The activities are coded using the software program NUDIST 4.0.

Initially the activities that purchasing managers conduct (and the extent of their contribution to the carrying out of these activities), as well as the environment and the atmosphere in which they take place are identified and analysed for each case study (within case analysis). This is followed by a cross-case analysis that involves the identification of similarities and differences of purchasing managers' contribution across the different cases, and a group analysis of cases with similar patterns. An inter-firm analysis is then conducted that involves comparison of purchasing managers' contribution in the two focal organisations and extrapolates from the individual cases to identify the activities purchasing managers conduct in the two focal organisations. Finally, the set analysis involves a summation of all the answers to provide an integrated framework of purchasing involvement in SRs.

6.1.1 Within-case analysis



At this level of analysis the pre-contractual, institutional and operational stages are discussed for each SR, and the activities that purchasing managers conduct are identified and classified in terms of the four management areas of purchasing involvement. This framework is then used as a prototype for the analysis of the data at the other four levels. Each case analysis follows the same structure: an initial overview of the individuals that were interviewed is followed by a description of the activities conducted by purchasing managers in the pre-contractual, institutional and operational phases of SRs, and finally a summary of the interaction environment, the atmosphere and the extent of contribution of purchasing managers in their management is presented. The activities that purchasing managers conduct or are involved in for the management of each SR that is studied, as well as the level of their contribution to each activity, is presented in Appendix D. Their contribution is classified as

high, medium or low according to the resources, i.e. time, money and expertise, that purchasing managers devote⁵¹.

6.1.1.1 Case 1 – Travel

Seven managers were interviewed for the case study involving the provision of travel services to the financial organisation: three purchasing managers (one senior manager, one contract manager and one junior manager), two supplier managers (one senior and one junior manager) and two internal customer administrators⁵². A summary of the atmosphere and interaction environment between the parties in the SR, as well as the activities and the extent of purchasing managers' contribution to the four management areas and the three stages of the development of the SR is provided below.

Environment: The provision of travel is not very critical to the financial organisation's operations in as much as it is not a constituent part of any of its core products/services. The travel related industries operate internationally, are heavily regulated (governed by different laws and regulations of different countries) and competitive pricing is of paramount importance of any business initiative.

Atmosphere: The SR was established on the grounds of standardising the provision of travel and was based on the financial organisation's need to improve cost efficiency and service performance. As such the financial organisation dictated the terms of the contract and the contractual safeguards and although there is a feeling of partnership, it is the financial organisation that has control of the SR and the power to change the direction of the SR.

Processes of Interaction and contribution of purchasing in SR management						
	Pre-contractual		Institutional		Operational	
	C*	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	High	Focus on standardisation	High	Complexity reduction	Medium	PD maintains cost database
Process Management	High	Quality monitoring	High	E-procurement of travel	Medium	Cost reduction driven
Contract Management	High	Highly formalised	High	Clear terms and conditions	High	Frequently evaluating KPIs
Supplier Development	High	Non-existent	High	Developing	None	Insufficient resources

* Contribution of purchasing managers to the four management areas

Table 6.1 SR for travel services and contribution of purchasing managers to its management

⁵¹ The term *involvement in an activity* does not refer to the structural variable of involvement in a SR, but indicates participation in its execution or management.

⁵² The interviews that were conducted with the directors of the PDs involved all the cases that were conducted within their organisations and the discussion was less structured than the other interviews.

6.1.1.2 Case 2 – Print Services

For the SR involving the provision of print services, two purchasing managers, two internal customers and two account managers from the supplier organisation were interviewed. The current form of the SR with the print services provider commenced in 1997 as part of a procurement strategy to consolidate purchasing of certain products/services. There is a 20 year BR with the existing supplier, although the scale and volume of print services provided today is much greater than in the past, and the print services supplier is in fact the largest single supplier to the organisation. The contribution of purchasing managers to the four management areas and the three stages of the development of the SR as well as the atmosphere and interaction environment between the parties in the SR are summarised in the table below.

Environment: Print services markets are dominated on a global scale by large conglomerates that influence the technological developments and in effect the products' capabilities. Although print services do not constitute a very critical product/service for the focal organisation, they are essential for many of its operations that are incorporated in the provision of finance related services

Atmosphere: The SR was established on the financial organisation's necessity to acquire resources that does not possess. As such, although the financial terms, volume and variety of products/services of the BR were determined by the financial organisation, because of the asymmetry of knowledge and expertise in the provision of the products/services and the size of the supplier organisation, there is a mutual share of power in the SR between the trading partners and a sense of gaining mutual benefits.

Processes of interaction and contribution of purchasing in SR management						
	Pre-contractual		Institutional		Operational	
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	Medium	Product variety reduction	Medium	IT responsible for prod/service specs	Low	IT responsible for purchases
Process Management	High	Process flexibility	Medium	Supplier incurs delivery costs	Medium	Varied delivery channels
Contract Management	Medium	Building a total solutions SR	Medium	Segmentation of contracts	High	PD dominates: Internal conflicts
Supplier Development	Low	Cultural awareness	Low	Attempting to develop routines	Medium	Inadequate training resources

Table 6.2 SR for print services and contribution of purchasing managers to its management

6.1.1.3 Case 3 – Stationery

For the stationery SR, the senior SD manager responsible for commodities, the contract manager, two procurement managers from internal departments, and the supplier's account manager were interviewed. The contribution of purchasing managers in the three stages of the

development of the SR in its current form as well as the atmosphere and interaction environment between the parties in the SR are summarised in Table 6.3.

Environment: Stationery is a pure MRO product for the financial organisation. The structure of that market is relatively unregulated, based on market competition and as such the focus of the SR is on price levels. However the financial organisation has a partnership type of SR with the current supplier.						
Atmosphere: The financial organisation established the existing SR with the intention to standardise the provision of stationery throughout the entire organisation. Because of its size and reputation it yields power over decision related to the future direction of the SR.						
Processes of Interaction and contribution of purchasing in SR management						
	Pre-contractual			Institutional		
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	High	Reduction of product variety	High	PD decides product specs & variety	Low	Focus on pricing
Process Management	High	Simplification of delivery process	High	Strongly formalised	Medium	PD focus on routinisation
Contract Management	High	Competitive bidding	High	Focus on premium pricing	High	PD power culture leads to internal dynamics
Supplier Development	Low	Need for product development	Low	Little attempt to supplier development	Low	Good communication

Table 6.3 SR for stationery and contribution of purchasing managers to its management

6.1.1.4 Case 4 – IT Services

The SR for IT services is the most complicated of those studied in the financial organisation, as the contract for their provision involves the collaboration of two independent supplier companies that have to work together. Both suppliers have independent relationships with various groups in the financial organisation and the roles of the parties involved is not as clearly defined as in the case of stationery. Three managers from the computer provider, two managers from the IT infrastructure company, two purchasing managers, and two managers from the IT department were interviewed. The contribution of purchasing managers to the four management areas and the three stages of the development of the SR for the provision of IT services as well as the atmosphere and interaction environment between the parties in the SR are summarised in Table 6.4.

Environment: The strategic importance of IT for the financial organisation makes the provision of IT services a critical supporting service for many of the organisation's core products. The IT industry is extremely volatile and governed by high uncertainty and fierce competition amongst large powerful multinational organisations. It is a knowledge based industry where expertise in a particular area is considered a major competence and a powerful negotiation weapon as it leads to asymmetric power.

Atmosphere: The contract for IT services is probably the most complicated that the financial organisation has for a non-core service. There are many parties involved in the provision, each having a merit of power and responsibility. The BR with the suppliers is very much politicised, power based and reputation and profit oriented.

Processes of interaction and contribution of purchasing in SR management

	Pre-contractual		Institutional		Operational	
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	Low	Updating of IT products/services	Low	IT dept selects type of products	Low	IT dept maintains control of product
Process Management	Low	IT dept focus on process quality	Low	IT dept control of process delivery	Medium	Formalised communication
Contract Management	Medium	Re-establishment of existing BRs	Medium	Highly formalised / politicised	High	Internal dynamics with IT dept.
Supplier Development	Medium	Strong capability for IT development	Medium	PD establishes IT dedicated team	Medium	Limited training activities

Table 6.4 SR for IT services and contribution of purchasing managers to its management

6.1.1.5 Case 5 – Baggage Handling

The provision of baggage handling for the airport operator is the only SR in which the purchasing managers are not involved directly at the operational phase; instead, a department that falls under the PD (the department responsible for connections) manages the operational stage of the SR. The director of connections does however report directly to the director of the PD and the director of operations. Two managers from the logistics supplier of the service (the director of operations and a senior operations manager), two senior managers from the PD, and the director of the representative body for the airlines were interviewed. The contribution of purchasing managers to the four management areas and the three stages of the development of the SR as well as the atmosphere and interaction environment between the parties in the SR are summarised in Table 6.5.

Environment: The provision of baggage handling is the most critical service amongst those studied as it is directly related to customer satisfaction. The market environment is governed by strict security rules and regulations that need to be met constantly. For that reason close collaboration between the partners is required to satisfy the needs of the internal customers.

Atmosphere: Due to the criticality of the service and the investment from both parties to the SR, there is an atmosphere of partnership between the trading partners. They work together on the provision of the service and have extended their BR into other airports (nationally and internationally) and other business areas (logistics provision)

Processes of Interaction and contribution of purchasing in SR management

	Pre-contractual		Institutional		Operational	
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	Medium	Improving of existing service	High	Connections dept. decides service specs	Low	Use of IT tools to control service
Process Management	High	Integration of logistic processes	Medium	Joint collaboration with supplier	Low	Highly automated. No PD participation
Contract Management	High	Highly politicised and formal	High	Authoritative formalised structure	Medium	Connections dept. monitors supplier
Supplier Development	Medium	Focus on joint effort with supplier	Medium	Formation of dedicated team	Medium	Great effort devoted to training

Table 6.5 SR for baggage handling and contribution of purchasing managers to its management

6.1.1.6 Case 6 – Cleaning Services

Cleaning is one of the outsourced services which were rationalised as part of the organisation's airport-wide purchasing strategy launched in 1995 to streamline its supply chains. Four managers from the two cleaning services supplier organisations were interviewed (the directors for operations and one senior operations manager from each supplier). The director, a senior SD manager, and one senior purchasing manager were interviewed from the PD, and three general operations managers from the airports at which the suppliers operate were interviewed from the internal customer side. Purchasing managers' contribution to the four management areas and the three stages of the development of the SR for the provision of cleaning services as well as the atmosphere and interaction environment between the parties in the SR are summarised in Table 6.6.

Environment: Although the provision of cleaning services is not the most critical service provided, it is one that is very closely related to customer satisfaction. The cleaning services market is relatively regulated, with clear laws that govern national and international standards. Due to the specificity of the cleaning requirements of each airport, close collaboration is needed between the partners to achieve high standards and supplier development.

Atmosphere: The new SR frameworks were established to improve the cost efficiency and quality of the service provided. There is a climate of collaboration amongst the partners although the decisions to forward the SR and the control over its financial extent lie within the airport organisation

Processes of interaction and contribution of purchasing in SR management

	Pre-contractual		Institutional		Operational	
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	Medium	Standardisation of service to all airports	High	Incremental improvement target	Medium	Incorporate routines into product design
Process Management	High	Highly structured process mapping	Medium	Focus on service delivery	Medium	Changes well signalled
Contract Management	High	Reestablishment of existing SR	High	Design of detailed contracts by the PD	High	Great effort devoted to communication
Supplier Development	High	Cross functional SD group established	High	Establish training workshops regularly	High	Genuine attempts to disseminate learning

Table 6.6 SR for cleaning services and contribution of purchasing managers to its management

6.1.1.7 Case 7 – Waste Management

The management of waste at the airport is related to the provision of cleaning services, as both contracts for cleaning services deal with recycling and have an environmental policy. The SR studied in this research deals with the provision of the waste management service in one of the airports owned by the organisation. The individuals involved in the management of cleaning services from the PD and the airport's operations are also involved in the management of waste at this airport. One manager from the cleaning provider, two managers from the waste management company, two senior purchasing managers and two airport operations managers were interviewed. Purchasing managers' contribution to the four management areas and the three stages of the development of the SR for the provision of IT services as well as the atmosphere and interaction environment between the parties in the SR are summarised in Table 6.7.

Environment: Waste management is a fairly critical service for the airport organisation; it is not directly related to customer satisfaction but is governed by strict international and national laws that can determine the reputation of the company. Due to the specificity of the service provision, close collaboration is also needed between the partners to achieve high standards and supplier development.

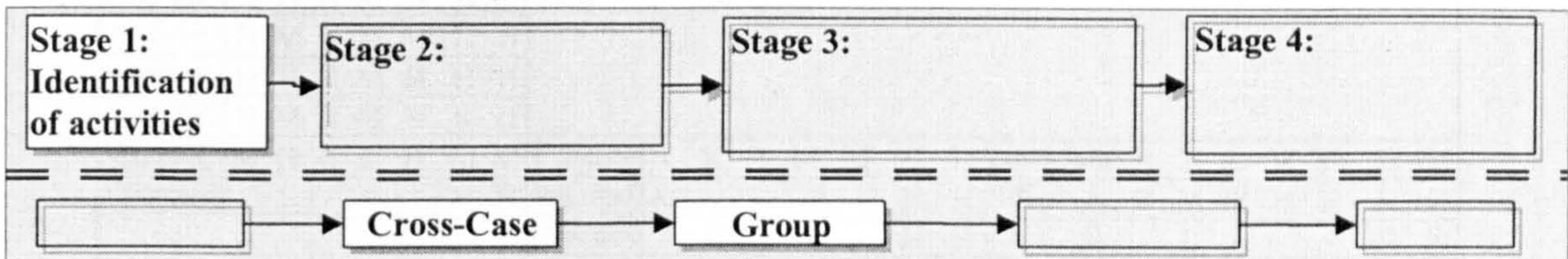
Atmosphere: The SR was established on the airport organisation’s strategic decision to improve the efficiency of the service delivery. Due to the lack of knowledge and expertise in determining the legal aspects of the BRs, much of the power in decision making lies within the legal and environmental specialist employed by the airport organisation although decisions related to operational issues are taken primarily by the PD. There is however a sense of gaining mutual benefits and understanding amongst the trading partners.

Processes of Interaction and contribution of purchasing in SR management

	Pre-contractual		Institutional		Operational	
	C	Key Characteristic	C	Key Characteristic	C	Key Characteristic
Product Management	Medium	Standards updated to comply with environmental laws	Medium	PD focuses on service consistency	Medium	Close collaboration with supplier for NPD
Process Management	Medium	Focus on quality of process	Low	Legal advice sought for service delivery	Low	Highly formal evaluation processes
Contract Management	High	High influence from pressure groups & EU	Medium	Environmental conditions are met	High	Strict monitoring of supplier performance
Supplier Development	Medium	Cross functional SD group established	High	Establish training workshops regularly	High	Genuine attempts to improve service

Table 6.7 SR for the management of waste and contribution of purchasing managers to its management

6.1.2 Cross-case and group analyses



The seven cases studied in this thesis represent a broad range of products/services with different structural characteristics and strategic importance for the focal organisations, and involve companies (industries) with different operating conditions throughout the design, production and delivery of these products/services. In order to provide an overview of these distinctions, and to highlight some of the commonalities (and differences) across the cases, Table 6.8 summarises the involvement and extent of contribution of purchasing managers in various activities of the management of SRs by depicting it as high, medium, low and none,

and Figure 6.1 categorises the extent of contribution of purchasing managers in the four management areas across the three developmental stages of the SRs.

	Pre-contractual							Institutional							Operational									
	Travel	Print	Stationery	IT services	Baggage Handling	Cleaning services	Waste	Travel	Print	Stationery	IT services	Baggage Handling	Cleaning services	Waste	Travel	Print	Stationery	IT services	Baggage Handling	Cleaning services	Waste			
Product Mgmt	Collinfo	M	-	-	-	-	-	Techspec	H	L	H	L	H	H	L	Recprose	-	-	-	-	-	-	-	
	Evalprod	H	L	H	L	H	H	H	Desivari	H	L	M	L	M	M	L	Prdamgmt	M	L	M	M	L	H	H
	Standsim	H	H	H	M	H	H	H	Delivera	H	L	M	M	M	H	L	Altprtec	M	M	-	-	-	-	L
Process Management	Procemap	H	M	H	L	H	M	H	Delfres	H	L	H	M	-	M	M	Ordering	-	-	L	L	-	-	-
	Supproce	H	M	M	M	H	H	H	Sharoper	H	H	L	M	-	M	M	Routacti	-	M	H	-	-	M	-
	Selproce	H	H	H	M	L	M	M	Meandeli	H	L	M	L	M	H	H	Meproeff	H	H	H	H	-	L	H
																Benchpro	H	H	H	H	M	H	-	
																Supaudit	H	H	H	M	H	-	H	
Contract Management	Indnorms	-	M	-	H	H	-	H	Legaform	H	H	H	H	M	H	H	Ensure contract deliverables							
	Strohoic	H	L	H	M	H	H	-	Selcontr	H	M	H	M	H	H	H	Prodeliv	M	L	H	M	-	M	L
	Orgcultu	-	-	M	-	-	-	M	Lengrela	-	-	H	-	H	-	H	Prospecc	M	M	H	L	-	M	M
	Reqcust	H	L	H	M	M	H	-	Contrsaf	H	H	H	M	H	H	H	Kpis	H	H	H	H	L	M	M
	Extmarke	H	M	H	L	-	M	M	Delegate	H	M	H	L	L	H	M	Authorise spending:							
	Intelear	-	-	M	-	-	M	-	Finincen	-	-	M	-	-	-	-	Mandspen	-	-	H	-	-	H	-
	Strissue	-	-	-	M	H	-	H	Adagreem	H	M	M	H	H	H	-	Outospe	-	H	H	H	L	H	H
	Supdatab	-	-	M	L	-	-	-	Fellagre	-	-	-	M	M	-	-	Supactio	H	H	H	H	L	H	H
	Requotat	H	H	H	H	H	H	H	Helpsupl	-	M	M	M	H	H	H	Benchper	H	H	M	H	-	H	M
	Potsuppl	H	M	H	L	M	H	H	Manexper	H	-	M	-	-	H	M	Moniproc	-	H	M	H	-	L	H
	Tenderin	H	H	H	H	H	H	H	Supupdat	H	H	H	-	-	-	M								
	Reputati	H	M	H	M	M	H	H																
	Suprisk	H	H	H	M	H	H	H																
	Screenin	H	M	H	M	M	H	H																
	Negcontr	H	H	H	M	H	H	H																
Certific	H	M	H	M	H	H	H																	
SD	Critproc	M	H	H	L	H	M	M	Crisupde	-	H	H	M	M	H	H	Commsupp	H	H	L	M	H	M	M
	Cfsdteam	-	L	-	-	-	H	H	Reseffsd	M	-	-	-	-	H	H	Meetings	H	M	M	H	H	H	H
									Workshop	-	-	-	-	-	H	H	Invosupl	-	L	-	-	-	H	M
									Rewards	-	H	M	H	M	H	H	Evsupdev	-	-	-	-	H	H	H

Table 6.8 Comparative outline of the contribution of purchasing in activities of SRs⁵³

An initial observation of the activities conducted in the separate cases can reveal that the same patterns of activities are conducted in all cases (Table 6.8), and significant emphasis is given in all cases to activities within the sphere of contract management for which the contribution of purchasing managers is at medium to high level - with the exception of the case of IT services (Figure 6.1).

⁵³ For a description of the abbreviations of the activities see Appendix D. Also **H**= High level of contribution, **M**= Medium level of contribution, **L**= Low level of contribution

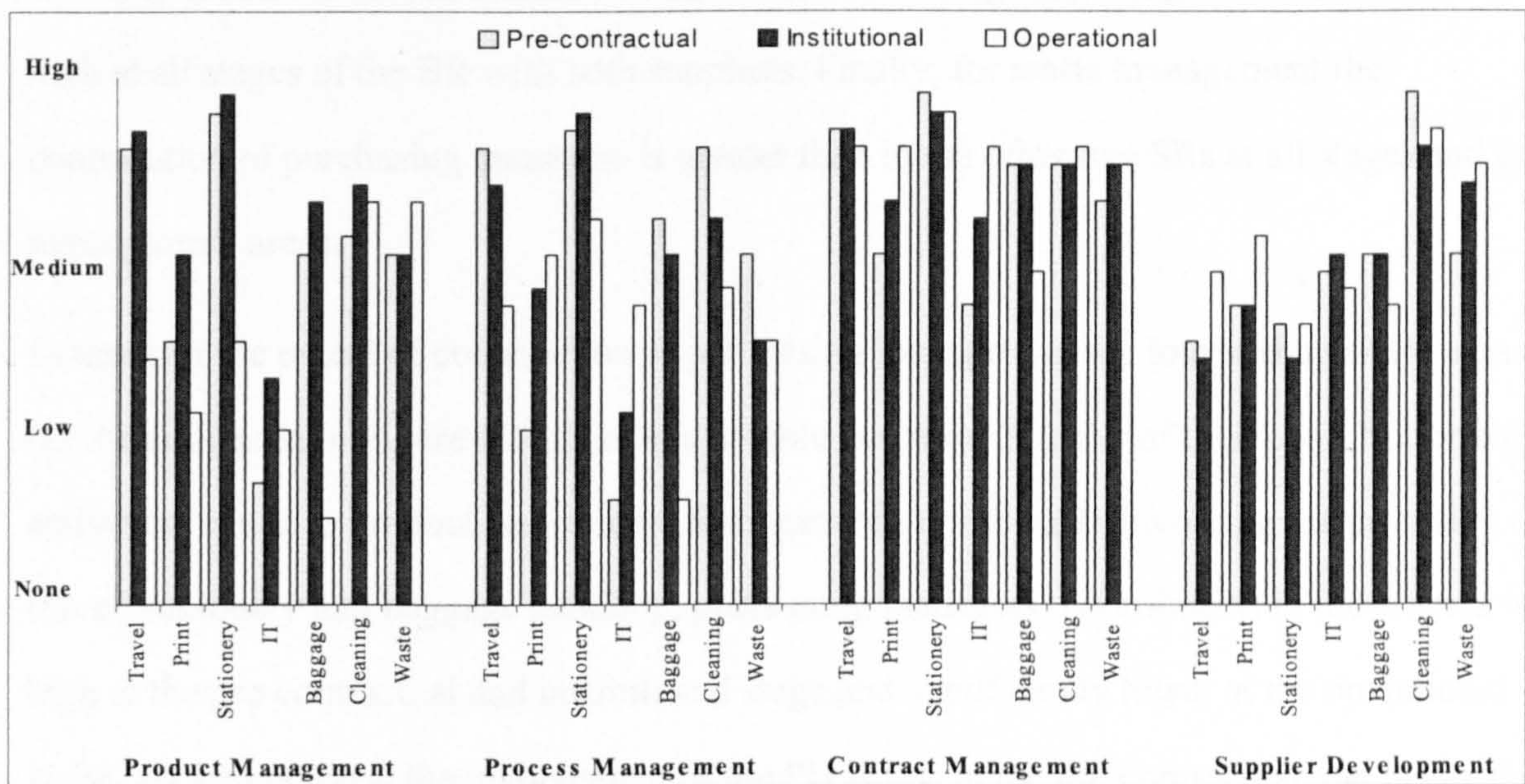


Figure 6.1 Comparative analysis of purchasing managers' contribution to different management areas of SRs

The contribution of purchasing managers to activities however differs substantially between the SRs that are studied and across the four management areas of their involvement. For the stationery SR for example, purchasing managers conducted exclusively the majority of activities at the pre-contractual and institutional stages (with the exception of certain activities in the SD area). Similarly, in the travel SR the contribution of purchasing managers to the implementation of activities is very high in the majority of cases. On the other hand for print services, and more notably for IT services, the contribution of purchasing managers is substantially lower, especially at the pre-contractual stage for contract management (although their input is substantiated by the decision-making authority they have in these areas).

In the cases involving the PD of the airport organisation, there is also a variation in the contribution of purchasing managers. For the SR involving the provision of baggage handling, purchasing managers have a greater contribution to activities at the pre-contractual stage for all management areas, and at the institutional stage for contract management. At the operational stage, their contribution is high only in the auditing of suppliers and authorisation of mandated levels of spending. For cleaning services, purchasing managers' involvement is

similarly greater at the pre-contractual and institutional stages, although in terms of SD it is high at all stages of the BR with both suppliers. Finally, for waste management the contribution of purchasing managers is greater than in the other two SRs at all stages and in all management areas.

In terms of the extent of contribution of purchasing managers in the four management areas, (as it can be seen in Figure 6.1) there is a notable variation in terms of their contribution to activities related to product and process management. For the SRs involving the provision of travel, stationery and baggage handling, purchasing managers' contribution in these areas is high at the pre-contractual and institutional stage and significantly lower at the operational stage. To the contrary, the involvement of the PD is low at the pre-contractual and institutional stages for the provision of IT and print services, and significantly higher at the operational stage. As for the contribution of PDs in the organisation and management of SD programmes, with the exception of cleaning services and waste management, it can be characterised as being medium for the rest of the cases that were studied.

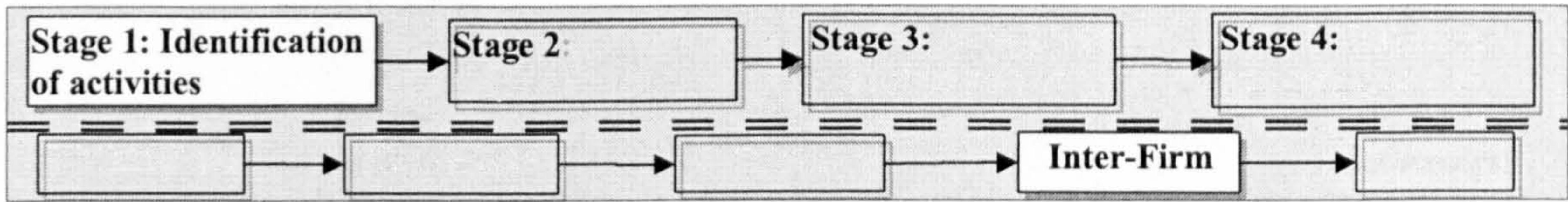
Group analysis: By comparing the activities that purchasing managers conduct in all cases, (and taking into account all the products/services that are exchanged in each SR) four generic different groups of SRs can be identified⁵⁴. A summary of the grouping of different cases based on the product/service that is exchanged along with the contribution of purchasing in each phase is provided and the distinctive characteristic of each phase is presented in Table 6.9.

⁵⁴ The levels of asset specificity and criticality, as evaluated in this thesis, are particular to the context of the organisations and the characteristics cases that are studied and on different occasions may be different.

	Product Management	Process Management	Contract Management	Supplier Development
1st group low asset specificity & criticality (stationery and travel)	Pre-contractual	High Focus on standardisation	High Competitive bidding	Medium Little attempt to form cross functional teams
	Institutional	High Highly formalised	High Structured contracts	Medium Under resourced
	Operational	Low Focus on standardisation	High Dictatorial / power based	Medium Preliminary stage
2nd group low asset specificity & high criticality (cleaning, printing maintenance)	Pre-contractual	High Focus on standardisation	High Attempts to signal change	Medium Hierarchical
	Institutional	High Homogeneous structure for all products / services	Medium Developing flexible senior manager roles	High Development of training resources
	Operational	Medium Focus on delivery	High Mixed approach to product / service delivery	High Focus on communication
3rd group high asset specificity & relatively low level of criticality (waste mgmt, IT maintenance)	Pre-contractual	Low High consistency	Low Focus on compromising mixed attitudes	Low Informal forums of communication
	Institutional	Low Specialist advice on product/service parameters	Medium Functional orientation to delegation of roles	High Attempting to develop partnership atmosphere
	Operational	Low Varies across departments	High Technical expertise sought	High Focus on communication
4th group high asset specificity & criticality (baggage handling, IT network installation)	Pre-contractual	High Much political activity	Low Focus on contract management skills	Medium Development of cross functional teams
	Institutional	Low Product and technical expertise sought	High Functional orientation to delegation of roles	Low Development of training resources
	Operational	Low Focus on delivery	High Technical expertise sought	Medium Fragmented

Table 6.9 Summary of group analysis

6.1.3 Inter-firm analysis



The comparison of the activities that purchasing managers conduct in the two focal organisations indicates that there is not a great difference in terms of the variety of the activities conducted, and similar situations arise in both with regard to the four management areas of SRs. The PDs in both organisations put great emphasis on establishing clear guidelines at the outset of all the SRs that were examined. However, although both organisations have established make-or-buy decision processes and prescribed associated activities that support outsourcing decisions, these processes are not followed and as a result the terms and conditions of the contracts in the majority of the cases were incomplete at the beginning of the SRs.

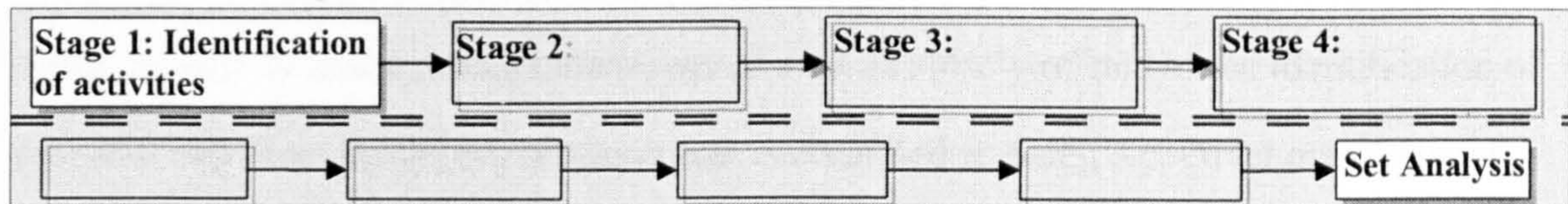
The most notable difference between the two organisations is found in their approach to the SD programmes. The PD of the airport operator evidently has a more established training scheme than the one in the financial organisation. It organises workshops on a fortnightly basis, where several managers from different SRs are invited to work on a specific development area. Examples of topics discussed are outlined in Table 6.10.

Supplier operational support:	Includes courses which aim to improve the efficiency of a supplier's processes
Supplier communication:	Aims to create processes that improve the level of communication between trading partners for joint product development, joint cost reduction, or other areas
Supplier e-commerce enablement	Aims to ensure that suppliers are informed of the technologies used by the organisation to transact electronically and that they are able to use e-commerce applications, such as e-procurement and ERPs
Supplier training programmes in various areas	Involves training in new management areas such as six sigma, lean supply, use of statistics and stochastic models for forecasting, or other training methods
Supplier advancement recognition/reward programmes	Aims to increase the volume of transactions with excellent suppliers
Supplier contingency planning	Aims to work with suppliers to develop alternative plans for the manufacture and delivery of goods and services

Table 6.10 SD workshops at the airport operator

As discussed later in the chapter, the organisation and management of SD programmes can provide a determining factor in the scope and involvement of the PD in SRs management.

6.1.4 Set Analysis



The set analysis develops an integrated framework of activities that purchasing managers conduct in SRs by aggregating the data collected for the individual cases into the four management areas that were identified. It should be noted at this point that a for more accurate representation of the activities that purchasing managers contribute to the management of SRs a survey amongst a large number of representative organisations would arguably be a more appropriate research tool. The framework provided in this thesis however is not claimed to be exhaustive and does not probably cover all the activities that purchasing managers conduct in SRs. The objective is instead to highlight how different management areas are served through the execution of certain activities by purchasing managers with an ultimate aim to enhance the ‘*professionalisation*’ of the purchasing function. It could be used by purchasing managers to manage, audit and potentially find areas of improvement in SRs. In companies that embark on supplier base reductions for example, it could be used as a reference point for the type of activities that need to be considered, and for established SRs it could be used to locate areas for improvements by investigating the effectiveness of each activity.

Table 6.11 illustrates the integrated framework of activities that purchasing managers conduct in SRs. This framework supports the proposition P1 s as it identifies a broad range of activities that purchasing managers contribute or conduct from all four management areas. These four management areas are complimentary in the management of SR and may sometimes overlap. The delegation of responsibilities for example (contract management), relies to a great extent on the mapping of the procurement process and selection of the process by which the product or service will be delivered to the customer (process management). Similarly, the evaluation of new goods/services that are available in the market (or being developed) overlaps with the evaluation of potential suppliers’ capabilities and reputations. The collection of information on

new goods / services being developed or already available in supplier markets, classified as being an activity in the product management area, is closely related to the identification of potential suppliers for the organisation that is classified as being a contract management activity. SD could be seen however as having a long term orientation and scope as opposed to the everyday concerns of process and product management.

	Pre-contractual		Institutional		Operational	
	Activities	Abbrev	Activities	Abbrev	Activities	Abbrev
Product Management	1. Collect information on new goods / services being developed, or already available in supplier markets	collinfo	4. Establish goods / services technical specifications	techspec	7. Receive products / services	recprose
	2. Evaluate goods /services in terms of value to organisation, applicability in organisation's operations, lead-time, quality, and costs	evalprod	5. Establish goods / services design variations	desivari	8. Product Data Management (data creation, transfer, use)	prdamgmt
	3. Promote standardisation & simplification of parts	standsim	6. Establish goods / services deliverables	delivera	9. Suggest alternative products and technologies than can result in a higher quality of the final product	altprtec
Process Management	10. Procurement process mapping	procemap	13. Delegate flow of resources (information., financial, material, knowledge)	delfres	16. Ordering	ordering
	11. Examine potential supplier's processes to identify areas of expertise and areas that need improvement	supproce	14. Establish shared operations with partners	sharoper	17. Routinisation of activities	routacti
	12. Select preferred process type for exchange of product or service	selproce	15. Establish processes and means of delivery	meandeli	18. Measure effectiveness of processes	meproeff
Contract Management	Determinants of Relationships		Contractual Agreements		Monitor & Control	
	21. Evaluate market / industry norms, forces	indnorms	37. Select the legal form of the relationship (partnership, alliance)	legaform	Ensure clear contract deliverables	
	22. Evaluate strategic choices of firm	stroic	38. Select the contract type	selcontr	48. Product or Service	prodeliv
	23. Evaluate organisational culture	orgcultu	39. Select the length of the relationship	lengrela	49. Product specifications	prospec
	24. Evaluate requirements of customers	reqcust	40. Establish the extent to which partners are bound to the agreement (contractual safeguards)	contrsaf	50. Key Performance Indicators	kpis
	25. Explore external market and supplier information	extmarke	41. Delegate roles and responsibilities with suppliers and internal customers	delegat	Authorise all appropriate spending for	
	26. Capture and transfer internal learning for (shared services, outsourcing, supplier performance)	intlear	42. Provide suppliers with financial incentives	finincen	51. Mandated levels of spend	mandspen
	Supplier selection		43. Adapt relationship specific agreements	adagreem	52. Outsourcing	outsospe
	27. Identify appropriate strategic and tactical issues	strissue	44. Spirit of fellowship agreements	fellagre	53. Screen supplier's actions	supactio
	28. Develop and maintain supplier databases	supdatab	45. Provide unconditional help to suppliers	helpsupl	54. Benchmark supplier performance vs. external market & contract criteria	benchper
	29. Prepare requests for quotations	requotat	46. Devote managerial expertise	manexper	55. Monitor procurement from other suppliers	moniproc
30. Identify potential suppliers	potappl	47. Ensure supplier regularly updated	supupdat			
31. Tendering	tenderin					
32. Evaluate supplier (reputation, capabilities, cost)	reputati					
33. Evaluate business cost, supplier risk, exit strategy	suprisk					
34. Supplier approval (screening)	screenin					
35. Negotiate terms of contract	negcontr					
36. Supplier certification	certific					
Supplier Development	56. Identify critical processes / products for development	critproc	58. Identify critical suppliers for SD	crisupde	62. Initiate communication with suppliers	commsupp
	57. Form cross-functional supplier development team	cfsdteam	59. Provide resources and effort to implement SD programme	reseffsd	63. Arrange meetings with partners	meetings
			60. Organise workshops	workshop	64. Involve supplier in internal operations	invosupl
			61. Establish rewards	rewards	65. Evaluate SD programme	evsupdev

Table 6.11 Framework of activities conducted by purchasing managers for the management of SRs

6.1.5 Review and discussion of results

The analysis of the data collected to identify the activities that underlie purchasing involvement in the management of SRs has been rather descriptive, as its focus is to delineate purchasing's contribution to the management of SRs and not to explain why or how purchasing managers conduct certain activities. Adopting a view of SRs as processes of interaction between the trading partners, 65 activities that purchasing managers conduct or contribute to the management of the different SRs were identified with the use of pattern matching and codification. These activities were then classified and put together into an integrated framework of purchasing involvement in the management of SRs, in terms of the pre-contractual, institutional, and operational phases of development of SRs and four management areas that constitute purchasing involvement in organisations: product management, process management, contract management and supplier development.

Having considered the patterns that emerge from the identification and classification of the activities, it is evident that the scope of purchasing managers' contribution to the management of SRs is exceptionally broad, involving 'operational' and 'strategic management' activities (which in turn involve more specific tasks). This finding verifies several reports in the purchasing literature that speak of a more informed involvement of purchasing in organisations.

The identification and classification of purchasing's involvement in SRs fills a gap in the literature that is dominated by anecdotal accounts that speak of enhanced purchasing involvement in this area, but lack academic rigour and systematisation. The seven case studies demonstrated that it is useful to describe and analyse purchasing managers' contribution to SRs by using these four management areas and the developmental phases of SRs, as they can provide a systematic framework that can be used as a benchmark tool in organisations to assess and validate this contribution.

In both focal organisations there is a clear distinction of the activities that are conducted by purchasing managers with different organisational rank. CPOs are involved mainly at the pre-contractual and institutional phases of the SR in activities that fall under the contract management area. Senior managers are involved mainly at the pre-contractual and operational phases in most of the activities that fall under the SD area and have an advisory and supervisory (but not decision making) in activities that fall under the contract management area. Junior purchasing managers on the other hand are involved only at the operational phase of SRs in activities that fall mainly under the product and process management areas.

With the increasing recognition of the central role of purchasing in organisations and the increasing need to manage effectively SRs, a general implication of the findings of this question is the imperative for purchasing managers to possess multivariate skills in these four management areas to deal with the complexity of SRs. Other researchers such as Hallenberg et al (1999) also articulate the need for purchasing managers to enhance their skills as it is required from them to provide vision and pragmatic solutions. Humphreys et al (1998) for example conclude that purchasing managers should be seen as individuals that *'are responsible for developing the intellectual capital for the procurement process'*.

Suitable characteristics for purchasing managers however could be manifold. Apart from the managerial skills for effective division of responsibilities and tasks and of specialised knowledge of the peculiarities inherent for the exchange of products / services, it has been evidenced that purchasing managers should develop their interpersonal communication and social skills, their self confidence, maturity and emotional stability; i.e. develop 'hybrid' manager skills that can bring together technical, managerial and behavioural areas. The process of negotiation of the terms of a contract is a very good example where all these skills are needed. In the case studies that were conducted many purchasing managers possess

predominately managerial/operational skills that do not adequately conform to the hybrid purchasing manager model.

It would therefore assist organisations to ensure that purchasing managers have the skills to work across different management areas and contribute positively to the management of SRs. In order to recruit and develop such skills the organisations that participated in this research are attempting develop or acquire employees with suitable skill-based and socio behavioural profiles, and support those people to grow within the organisation. In the case studies that were examined the airport operator is more successful than the financial organisation as it has a more organised training programme for its purchasing managers, whereas the financial organisation appears to be saddled with a number of long serving middle purchasing managers who are holding this process back.

6.2 Research Question 2

As discussed in chapter 4, this question deals with the conditions under which certain activities need and can actually be performed. It seeks to identify the activities that purchasing managers focus their attention on in different contexts by identifying those that are considered to be the most significant (based on the second survey amongst managers of the participating organisations). The necessity to conduct an activity is identified in terms of the perceived level of significance ascribed by the managers that participated in this study⁵⁵, and the ability to conduct certain activities by the perceived performance in conducting them. By considering the differences in the level of significance across cases, answers are given to sub-questions 2a, 2b, 2c, and 2d, exploring whether empirical evidence supports propositions P2i and P2ii.

P2i. *The level of asset specificity of a product or service exchanged in a SR, can determine the importance of certain activities conducted by purchasing managers and as a consequence their contribution to the management of SRs.*

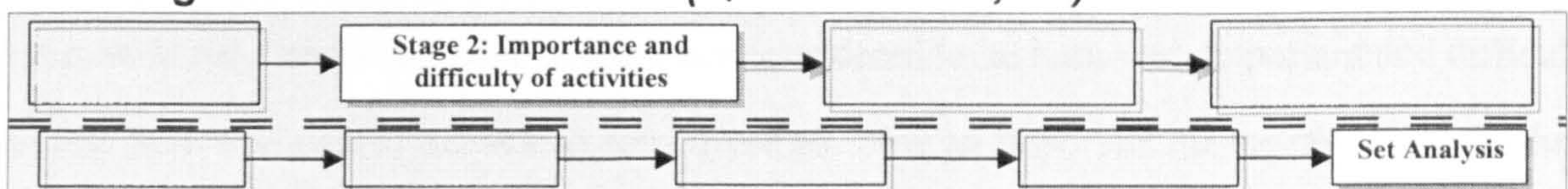
⁵⁵ The overall significance of an activity to the management of a SR is conceptualised in terms of the perceived importance of this activity as well as the level of difficulty in conducting it.

P2ii. *The level of criticality of a product or service exchanged in a SR, can determine the importance of certain activities conducted by purchasing managers and as a consequence contribution to the management of SRs.*

Using descriptive statistics from the second survey a set analysis is initially conducted in order to determine the perceived levels of importance and difficulty of the activities undertaken by purchasing managers that are included in the framework, and to identify those that are perceived as being more significant to the management of SRs.

The question also explores how the levels of asset specificity and criticality of the products / services exchanged affect the implementation of certain activities. Two different sets of analysis are conducted for this matter: firstly, with a group analysis of the cases with similar levels of asset specificity and criticality, the impact of the level of asset specificity and criticality of the products/services exchanged on the importance of certain activities (as well as purchasing managers' involvement in certain areas) is revealed. Then through an inter-firm analysis, potential variations between the two PDs of the focal organisations in terms of the difficulty to conduct certain activities are identified, leading to a tentative hypothesis about the impact of the organisation and infrastructure of the PD on their ability to conduct these activities.

6.2.1 Significance of activities (Questions 2a, 2b)



The results for the perceived significance of each activity in the management of the SR that are studied are presented in the scatter diagrams of Figure 6.2. The numbers in the scatter diagrams correspond to each activity as presented in the numbering sequence of Table 6.10 and the values of their perceived importance and difficulty for each case are presented in Appendix D.

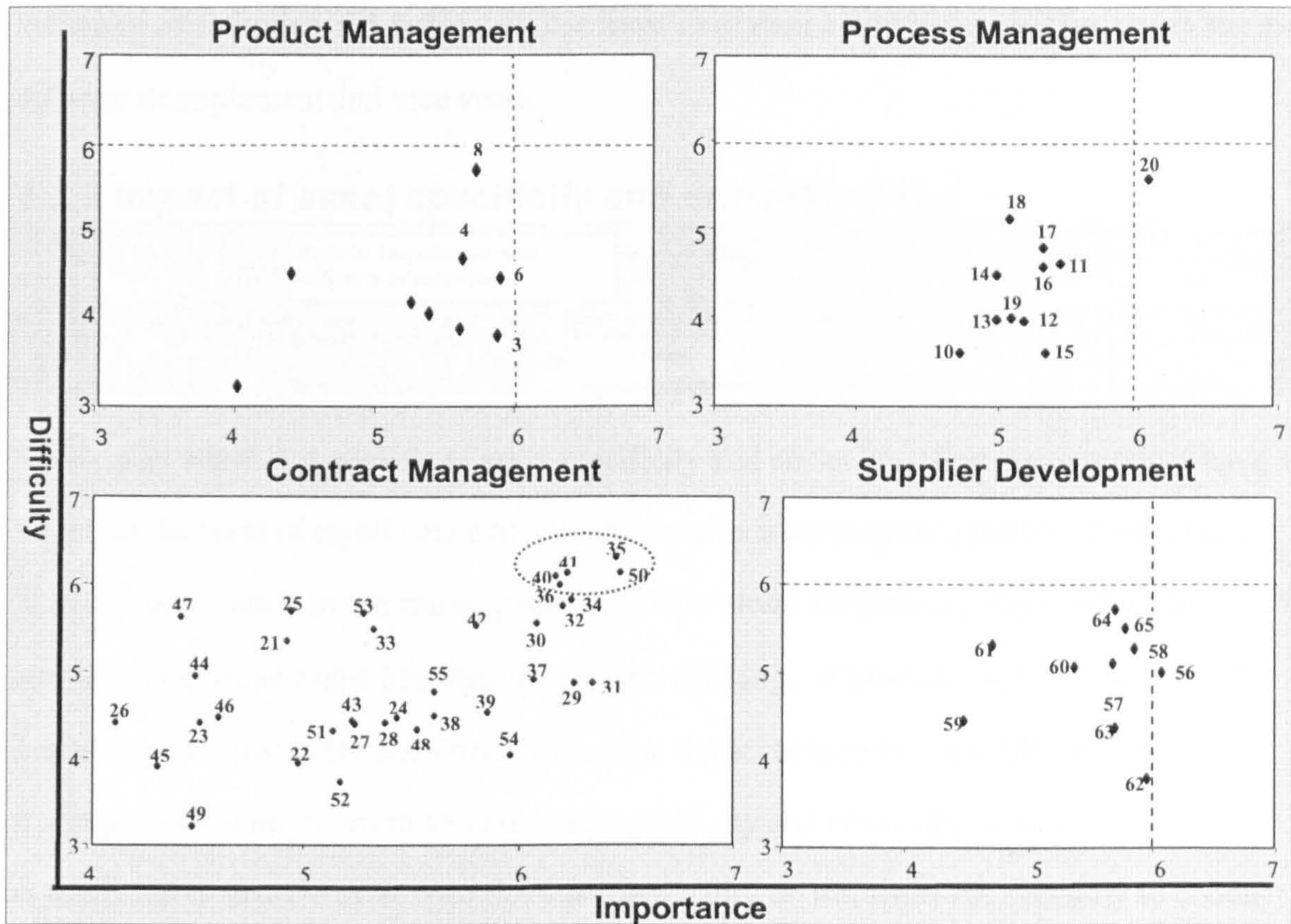
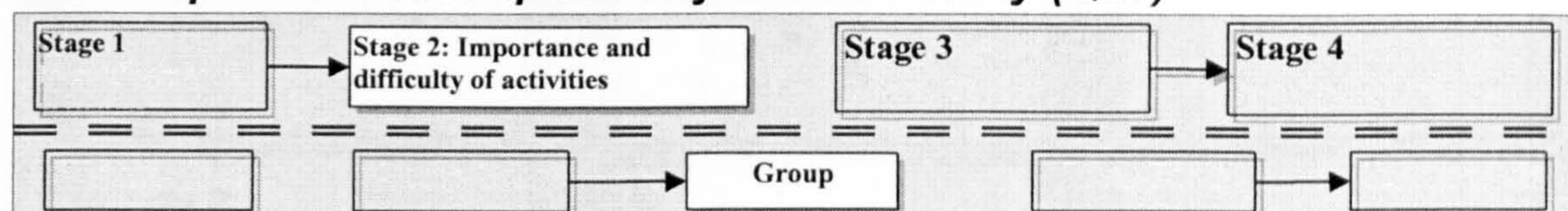


Figure 6.2 Overall significance of activities in the SRs

An initial observation of scatter diagrams reveals that there is significant variation between the activities in terms of their perceived importance and difficulty. Most of the activities that are identified as carrying more ‘weight’ in SRs (considered both important and difficult to implement) fall within the contract management area. Eleven activities are considered to be more than very important (five of them are considered to be both very important and difficult) in this area. The area of SD is also considered as being an important management area as the majority of the activities approximate the degree of being ‘very important’. None of the activities however are considered very significant in this area. Process and product management activities are on the contrary not perceived as being central to the management of SRs. Only one activity in the product management area (product data management) and one in the process management area (supplier auditing) are perceived as vital. The analysis however does not reveal any significant correlation between the level of importance and level of

difficulty of activities and factors, i.e. the most important activities are not necessarily the most difficult to implement and vice versa.

6.2.2 Impact of asset specificity and criticality (Q2c)



To identify whether the levels of asset specificity and criticality of products/services have an effect on the level of significance of activities and as a consequence purchasing managers' level of contribution to the management of SRs, a group analysis is conducted. If identifiable similarities exist amongst SRs that involve the exchange of products/services with similar levels of asset specificity and criticality, and at the same time evident differences exist amongst cases with different level of asset specificity and criticality, a conclusion can be reached safely that the asset specificity and criticality do influence the necessity to conduct these activities.

A detailed observation of the scatter diagrams of Figure 6.3 indicates that certain activities at all three stages of the SRs (such as negotiation of contract terms, risk assessment of potential suppliers, delegation of roles and responsibilities, monitoring of supplier's performance) are considered to be significant in all SRs, irrespective of the level of asset specificity and criticality of products/services exchanged.

For products/services with high level of asset specificity however (IT services, waste management) the activities at the pre-contractual and institutional stages of the SRs appear to be the most significant. On the other hand, for products/services with low asset specificity (travel, stationery, cleaning services), operational activities (such as monitoring and screening of a supplier's actions) appear to be the most significant.

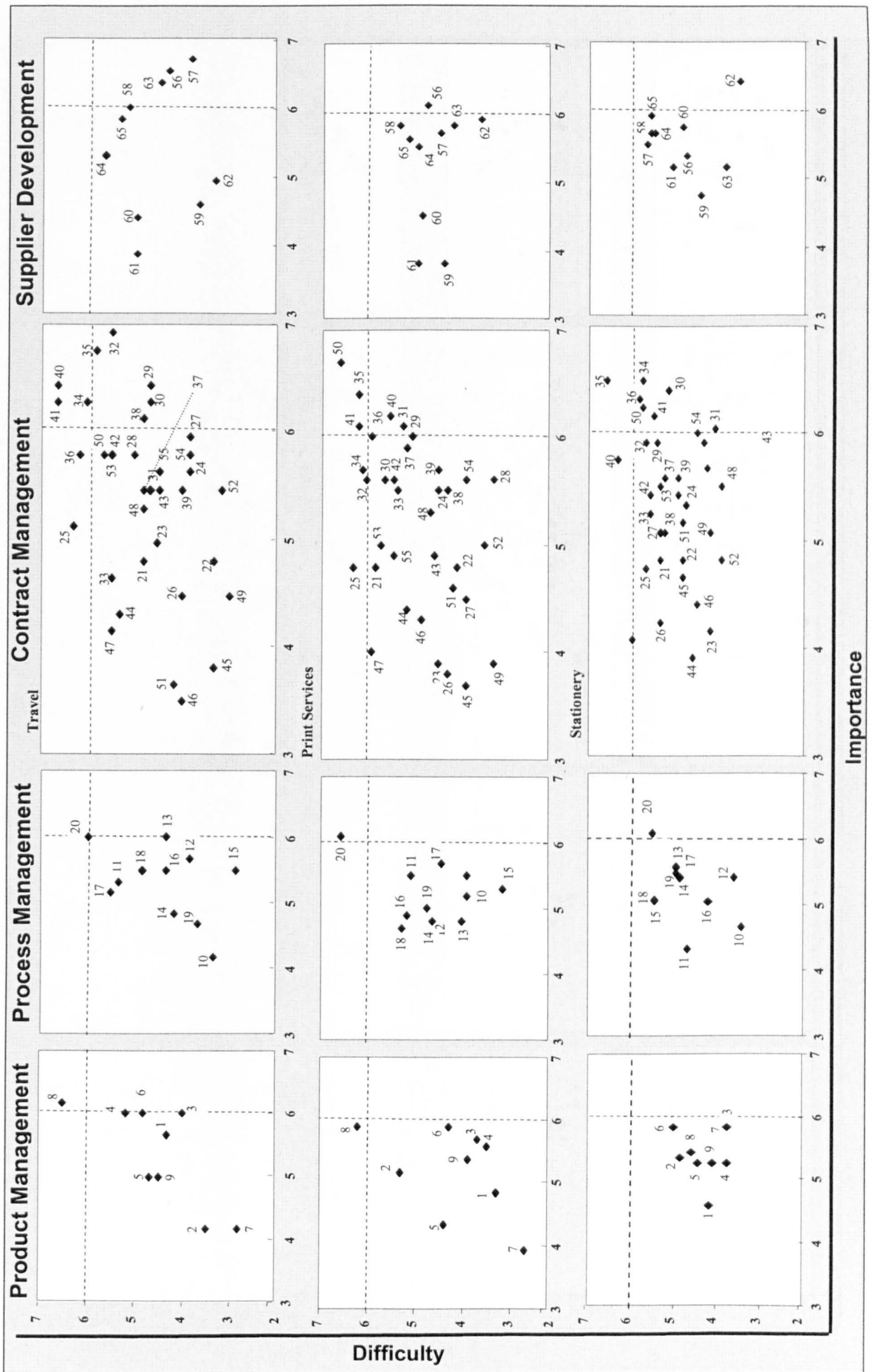
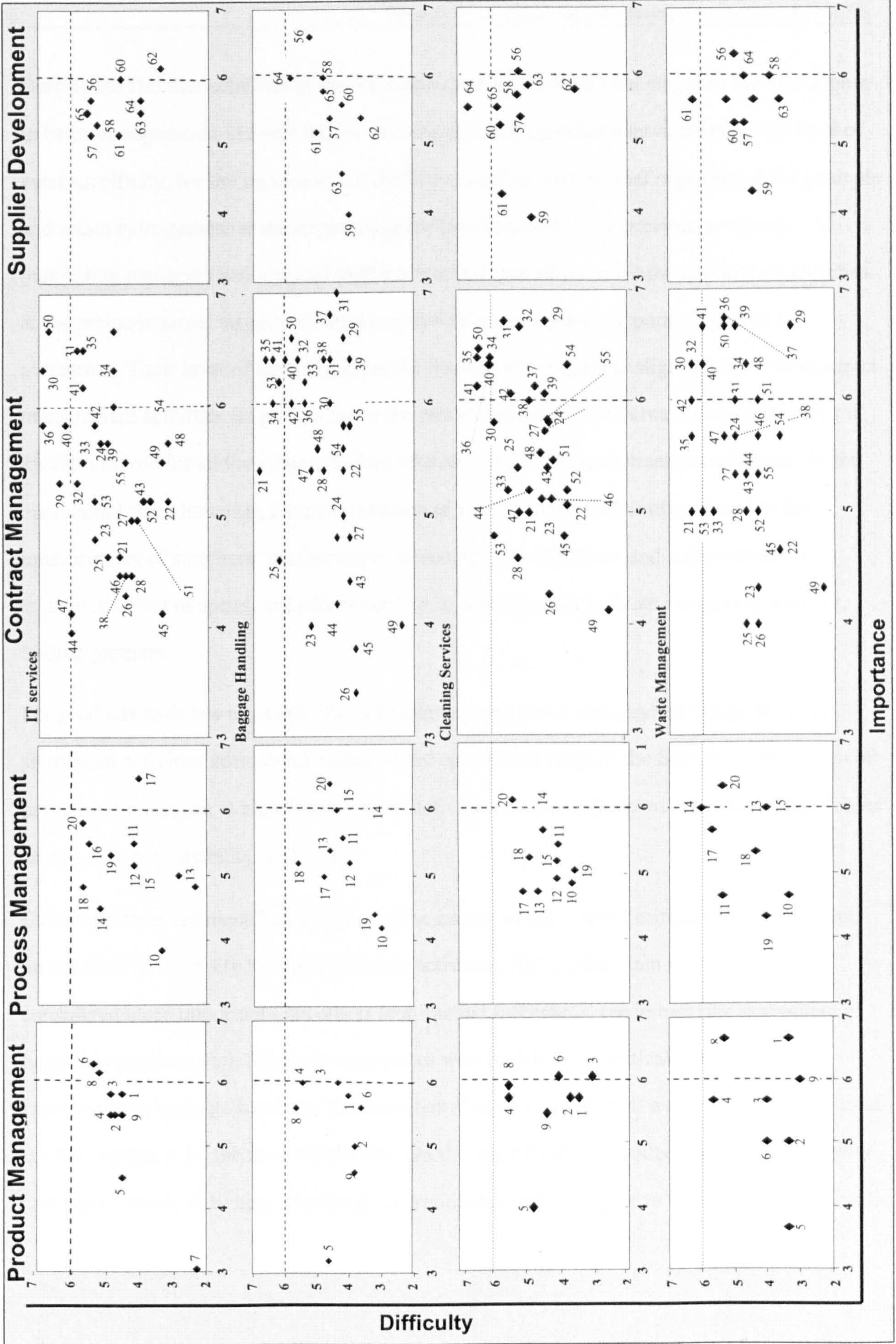


Figure 6.3 Significance of each activity in each SR (continued to the next page)



Despite the fact that activities at the pre-contractual and institutional stages of the SRs appear to be more significant in cases that involve the exchange products/services with high level of asset specificity, for the installation of the IT network in the financial organisation for example and waste management at the airport operator (as discussed in the previous sections), purchasing managers had low and medium levels of contribution for the majority of activities at the pre-contractual stage, with the exception of tendering and preparing requests for quotations. Their level of contribution at the institutional stage was slightly higher for contract management activities (in particular for the establishment of contractual safeguards), but still medium to low for all the other activities related to the other three management areas. At the operational stage however, their contribution is more evident in activities related to the measurement of suppliers' performance, screening of their actions and authorisation of mandated levels of spend, but still rather low in activities that indicate interaction with the trading partners.

For products with low asset specificity (stationery and travel services), although the most significant activities seem to take place at the operational stage of the SRs, the contribution of purchasing managers is high for almost all activities, as the majority of activities in these cases are the sole responsibility of the PD.

Certain patterns are identified in terms of the impact of the level of criticality of the products on the level of necessity to conduct certain activities. Although certain activities are considered more important than others (contractual safeguards, tendering, risk assessment of potential suppliers, etc), for products/services with high level of criticality (IT network infrastructure, baggage handling) the activities at the pre-contractual and institutional stages of the SRs appear to be the most significant. On the other hand, for products/services with lower criticality (travel, stationery, cleaning), operational activities appear to be the most significant.

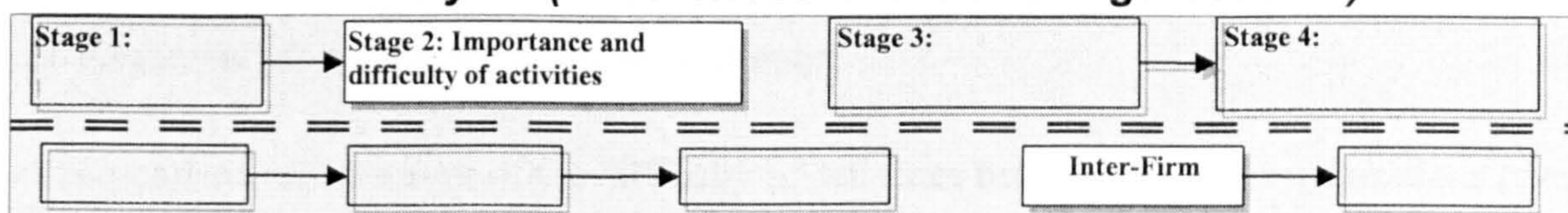
Opposite to the influence of the level of asset specificity, in the SRs that involve the exchange of products/services with high criticality (as the provision of baggage handling in the airport operator and IT network installation and maintenance), the more significant activities are observed at the operational stage of the SRs, but purchasing managers' contribution is more evident at the pre-contractual and to a lesser extent the institutional stages and is lower than in the cases of cleaning services, travel and stationery (which have lower criticality). As discussed earlier, in baggage handling in particular the involvement of the PD at the operational stage of the SR is limited to the non-frequent activities of evaluating of the SD programme, auditing the supplier, and authorising spending for outsourcing. This may be related to facilitating factors in the organisation of the PD and the available infrastructure, rather than the characteristics of the product/service per se.

Based on the results of the survey data the following hypotheses can be raised about the impact of the asset specificity and criticality on the significance of the activities that purchasing managers are involved in for the management of SRs as well as the level of their contribution to these activities that can be tested with statistical methods.

Hypothesis 1. *The level of asset specificity of products/services influences the necessity to conduct certain activities for the management of the SR in that (ceteris paribus) the greater the level of asset specificity, the greater the significance of activities at the pre-contractual and institutional stages of the SR is, and the lower purchasing managers' contribution at these stages of the SRs is.*

Hypothesis 2. *The level of asset specificity of products/services influences the necessity to conduct certain activities for the management of the SR in that (ceteris paribus) the greater the level of asset specificity, the greater the significance of activities at the operational stage of the SR is, and the lower purchasing managers' contribution at this stage of the SRs is.*

6.2.3 Inter-firm Analysis (Differences in the two organisations)



An inter-firm analysis of the difficulty to conduct the activities that have been identified may reveal tentative insights into the effect of the organisation and infrastructure of the PD on the ability of purchasing managers to conduct certain activities.

From the presentation of the two focal organisations (in chapter 5) it is evident that in both organisations the PDs have evolved from being administrative units, supporting mainly the operations departments, to acquire gradually a strategic role that can provide significant savings to the organisations. Both organisations have established organisation-wide PDs in order to consolidate the purchases of certain products/services and moved from fragmented procurement activities across different departments to a more centralised system whereby the procurement processes are controlled to a large extent by the PDs. During the period of the fieldwork both PDs employed a large number of purchasing managers and administrative staff (83 for the financial organisation and 65 for the airport operator) that are organised in a fairly complex structure around functional teams.

From the discussion about the contribution of the two PDs to the four management areas of contract management, product management, process management and SD it is clear that the PD of the airport operator more than the PD of the financial organisation has developed a set of policies and guidelines for the responsibilities of the PD regarding activities conducted in the management area of SD. Although the financial organisation has an established SD group employing 16 senior and junior managers, the problem is that the policies and targets set by the head of the group are not communicated to the various internal customers (departments) of the organisation. Since the financial organisation is a very large and complex organisation, this leads to the situation where for several SD initiatives the suppliers' managers (and sometimes the customers) do not have a direct contact point.

A comparison of the scores of the difficulty of activities between the two organisations reveals that there is an evident difference only in activities that fall within the area of SD, in which the

participants of the SRs at the airport operator perceive that they are easier to conduct. In the other three management areas the level of difficulty does not differ substantially (Figure 6.4).

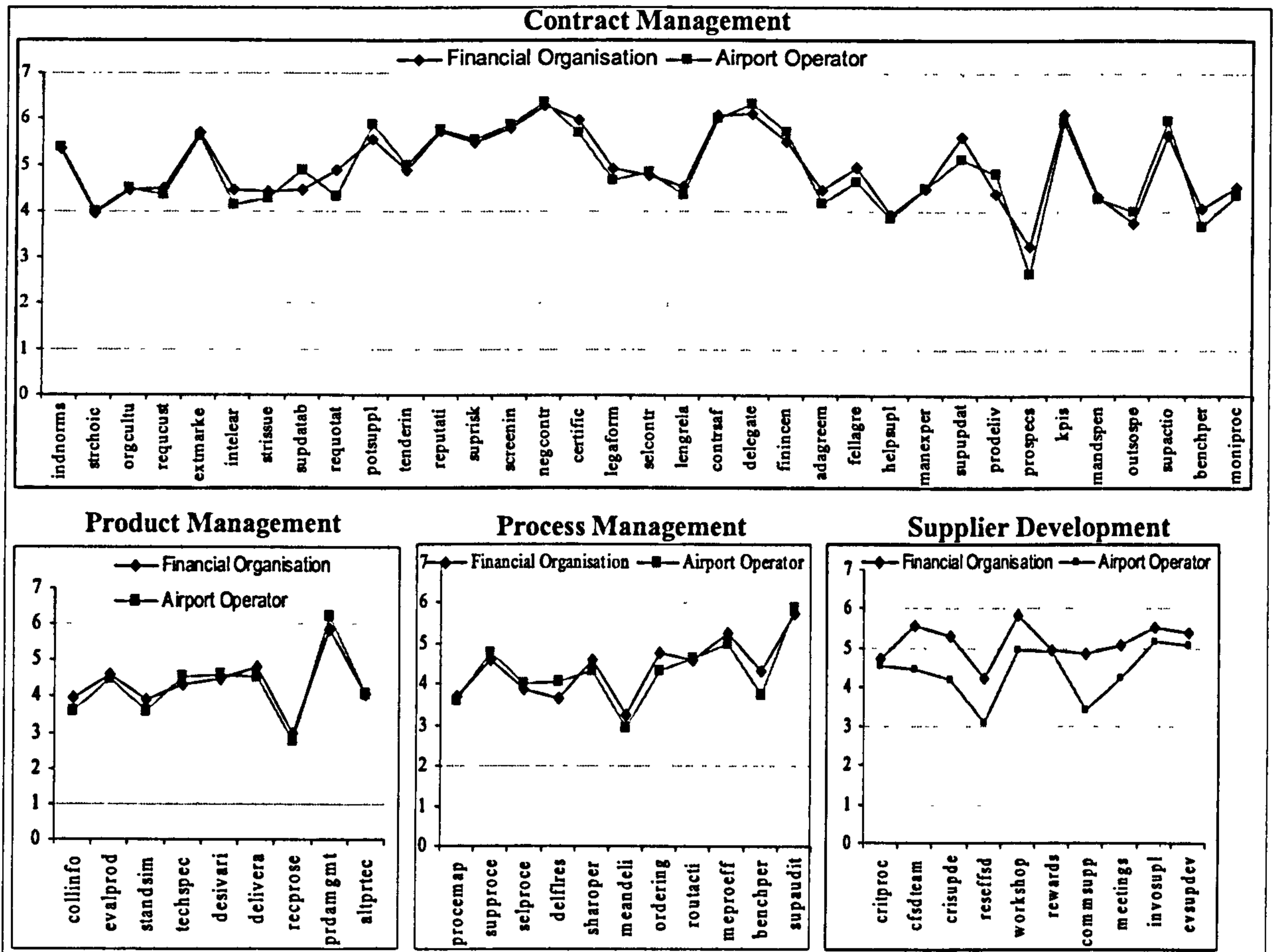


Figure 6.4 Difficulty of activities in the two focal organisations

In terms of the performance of the purchasing managers it is evident that in all management areas the performance of the PD of the airport operator is perceived clearly to be superior to that of the PD of the financial organisation (Figure 6.5).

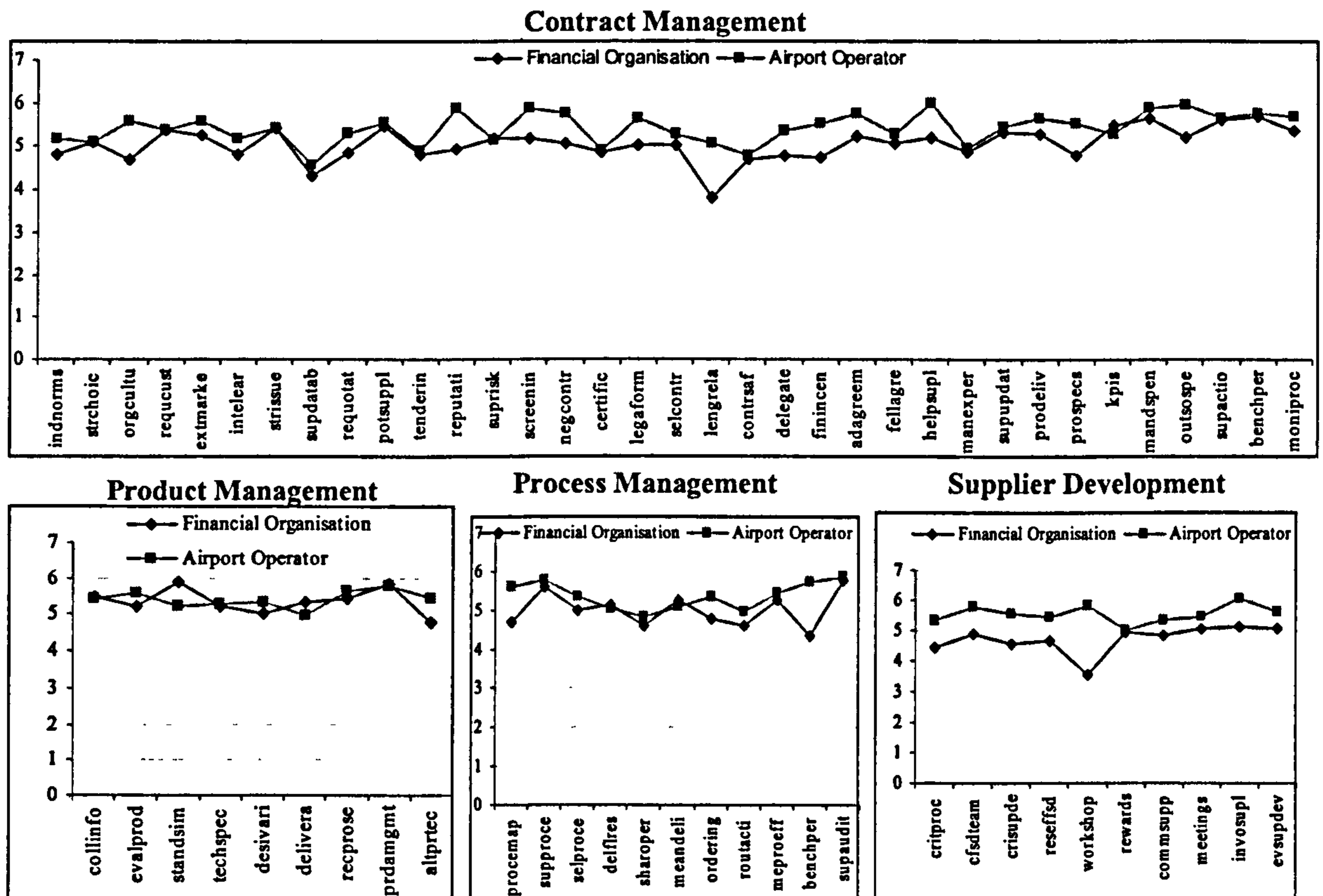


Figure 6.5 Performance of the PD in the two organisations

Based on the above observations the following tentative hypothesis can be raised about the impact of the degree of organisation and infrastructure of the PD on the difficulty of the activities that purchasing managers conduct for the management of SRs as well as their performance to these activities, which can be tested with statistical methods.

Hypothesis 3. *The organisation and infrastructure of the PD does influence the ability of purchasing managers to conduct certain activities for the management of the SR in that (ceteris paribus) the greater the level of organisation and available infrastructure, the lower the difficulty to conduct these activities*

6.2.4 Review and discussion of findings

Similar to the findings of research question 1, the findings for this question also reflects the widely accepted view in the purchasing and SCM literature of the evolving strategic role of purchasing in organisations (see for example models summarized in Table 3.1). Although constituent activities of all four managerial areas can be found in most of the cases, activities that fall with the contract management area seem to be the most significant (and/or

problematic), and thus the one that PDs focus their attention, followed by activities in the SD area. Process and product management activities on the contrary are not perceived as being central to the management of SRs.

It is acknowledged however that a possible explanation for the apparent dominance of contract management activities that has been evidenced, may be due to the fact that the majority of the purchasing managers that were interviewed could have added an additional bias, by being predisposed to emphasise the more strategic issues of purchasing involvement such as contract management, as opposed to the more operational and tactical activities of product and process management.

The case studies have also shown great variation in terms of the importance and difficulty of these activities across different SRs. Strong evidence was provided and hypotheses were raised that the necessity to conduct certain activities (especially for contract management and SD) increases when products/services with high levels of asset specificity and criticality are exchanged. At the same time, the involvement of purchasing managers in these activities is lower for these products/services. Similarly, tentative results provided evidence that the ability and level of involvement of purchasing managers to conduct certain activities increases when the level of organisation and infrastructure of the PD is high.

For products/services with low level of asset specificity and criticality, strong evidence was provided that the contribution of purchasing managers is very high in activities of all the management areas and development phases of the SRs. The focus of these SRs is on the standardisation of processes and activities and structured contracts based on competitive bidding are designed so that maximum savings can be achieved. For SRs that involve exchange of products/services with low level of asset specificity and high level of criticality, the contribution of purchasing managers is more evident at the institutional stage of SRs, and although the focus is on standardisation of processes/activities, the contracts are more flexible

giving greater flexibility to the purchasing managers, and greater effort is being put to the development of SD programmes. For products/services with high level of asset specificity and low level of criticality, the contribution of purchasing managers is more evident at the institutional stage and for activities that fall under the SD area. Finally, for SRs of products/services with high levels of asset specificity and criticality, the contribution of purchasing managers is only evident at the pre-contractual and institutional stages mainly for activities related to contract management. At the operational stage, their role is rather consulting and supportive to the role of the interested departments.

A possible explanation for this phenomena may be that organisations designs and strategies attempt to fit the contexts within which they operate that is associated with the contingency theory (Lawrence and Lorsch, 1967).

Even though the intention has never been to make a comparison between the two focal organisations in terms of the success of their approach to the management of SRs, the airport operator appears to have a more established SCM strategy (at least with respect to the management of SRs). This does not necessarily mean that the financial organisation has not made progress in developing a holistic purchasing strategy in terms of the management of SRs. The business context of the airport operator conduces to closer collaboration between the trading partners, as it is geographically less disperse. In the financial organisation on the other hand, elements of the traditional Anglo-Saxon approach of exercising authority appear to exist that is common amongst the financial organisations industry.

6.3 Chapter Summary

This chapter presented and discussed the findings of the empirical research for answering research questions 1 and 2 of the study, which explore the activities that purchasing managers contribute to the management of SRs and analyse how the level of asset specificity and

criticality of the products/services exchanged influence the necessity for purchasing managers to be involved in certain activities as well as their ability to conduct them.

An elaborate analytical process was employed that involved the critical evaluation of the business environment of each SR that was studied, codification of the data collected and pattern matching in five different levels of analysis to identify certain activities that purchasing managers contribute to the management of SRs. These activities were then classified in an integrated framework of purchasing involvement in SRs, in terms of four management areas, i.e. product management, process management, contract management and supplier development and across the three stages of the development of SRs. A range of fifty five principal administrative and managerial activities were identified that justify the strategic role that purchasing has acquired in organisations over the last twenty years. At the same time this highlights the new challenges for the purchasing professionals who need to develop new managerial, technical and socio-behavioural skills for effective contribution in SRs.

Activities related to contract management are perceived to be more important and difficult to conduct in all the SRs that were examined and for more highly specific and critical products/services the necessity to conduct these activities increases. Purchasing managers however are involved to a lesser extent in these activities for these types of products/services, but have a greater involvement in all the management areas of products/services with low levels of asset specificity and criticality.

Based on the findings in this chapter the next chapter deals with the primary issue of the thesis; the exploration of the 'actual' role that purchasing managers have in SRs as well as the impact that this role has on SRs' performance.

Chapter 7 - Role of purchasing in SRs and its impact on their performance

“As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality”.
Albert Einstein (1879-1955)

In the previous chapter the activities that purchasing managers conduct in the management of SRs were identified, an integrated framework that classifies them into four management areas was proposed, and the impact of two conditioning and two facilitating variables on the necessity of conducting certain activities in different contexts and the ability of PDs to successfully implement them was investigated. This chapter addresses research questions 3 and 4, which explore the ‘actual’ role of purchasing in the management of SRs and the impact that this role has on their performance, following the analytical process defined in Figure 5.14. Similarly to the previous chapter, this chapter is organised in two distinctive sections that deal with research question 3 and research question 4 respectively which are in three steps.

1. The methodology used in terms of data collection and analysis is presented first
2. The analysis of the data collected across the five different levels is discussed and the findings are presented.
3. Finally the findings are reviewed and considered in relation to the existing literature and their potential implications for purchasing practice, in order to uncover the contributions and insights that they generate.

The chapter concludes with a summary of the results for the research questions and implications for purchasing management are considered.

7.1 Research question 3

This section addresses the core issue of this thesis, the exploration of the ‘actual’ role that purchasing managers have in SRs. It is identified by following process outlined in Figure 7.1⁵⁶.

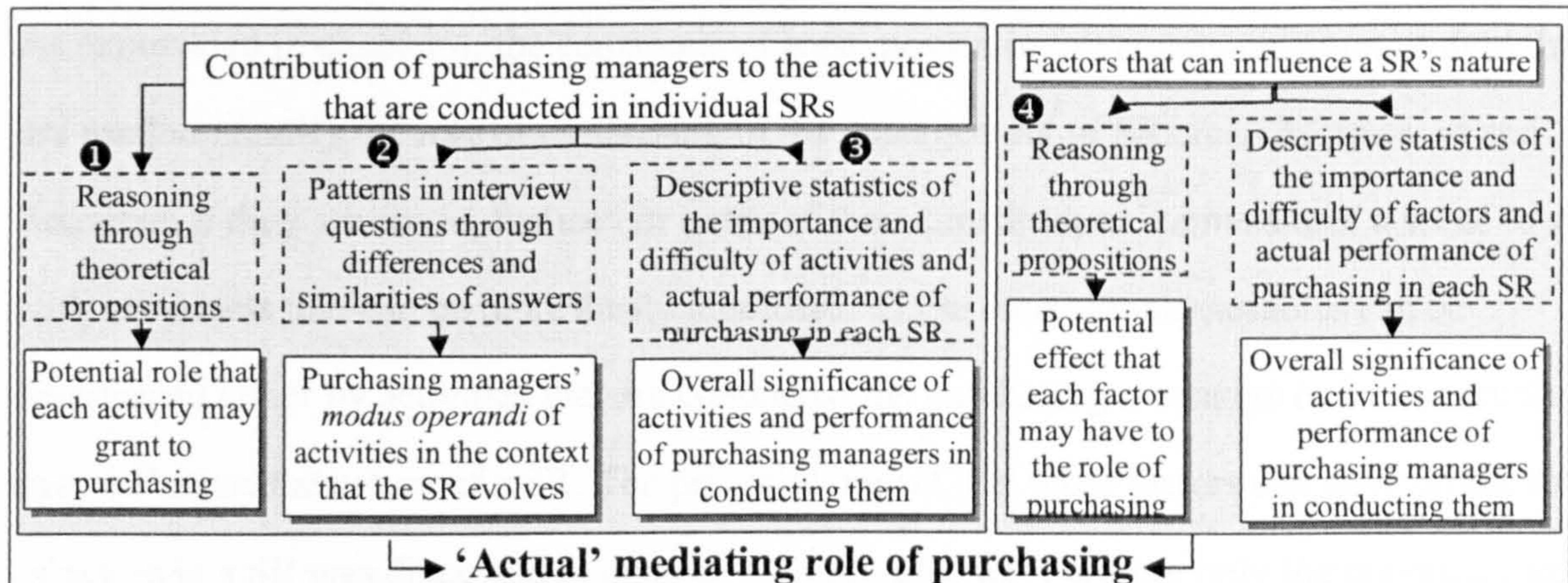


Figure 7.1 Analytical process to identify the role of purchasing in SRs

- Initially the activities that purchasing managers conduct in SRs are analysed using theoretical reasoning, to identify the potential role that these activities may grant to them.
- Then the way that purchasing managers conduct the activities they are involved in is considered (qualitative analysis) and their performance (quantitative analysis) in the separate cases is analysed to ascertain how and how well they conduct these activities. Finally how well they handle or implement certain factors that can potentially influence their nature is also considered.

7.1.1 Potential role of purchasing in the management of SRs

The purpose of the analysis in this section is to provide the basis for identifying the role that purchasing managers intend to assume in the SRs that are studied, and to juxtapose it to the ‘actual’ role they have which is identified later in the chapter. This process enables not only the identification of the potential mediating role of purchasing in various SRs, but also

⁵⁶ The analysis of data for the role of purchasing managers in the management of SRs occurred simultaneously with the process of identifying the activities that purchasing managers conduct in an iterative process. The literature of purchasing and supply management had to be revisited several times to elucidate issues that might not have been considered at the outset of the study.

generates further insights into the conditions that lead to the adoption of this role and to areas that the PDs should focus their attention on in order to accomplish the strategic intents of their organisations.

As expounded in chapter 4, the constructs of trust, power, involvement and commitment that are used to identify the role of purchasing in the management of SRs may be assessed and described if they are conceptualised in terms of their constitutional dimensions, a set of lower rank constructs that can be more easily identified. These second rank variables can be determined either by activities that are conducted the purchasing managers or by factors that may influence the nature of a SR. The potential impact that these factors can have on the role of actors in a SR was discussed in chapter 4. In this chapter therefore only the potential role of the activities that are conducted by purchasing managers in SRs (as identified in chapter 6) is examined and theoretically linked to the dimensions of the structural variables.

It is contended that a particular activity may be related to more than one construct and, depending on the way it is conducted, may exert multiple attributes to the role of purchasing managers in SRs. In addition, the way that these activities are conducted may be also conditioned by the factors that potentially influence SRs, (incorporated in the first questionnaire that was sent to managers of the companies that participated in this study).

The screening of suppliers' actions for example is an activity that indicates involvement in the complexity and scope of the SR, the existence of calculative trust on behalf of the customer organisation, and signifies the exertion of control, power and influence in decision making regarding the future of the SR. Depending on the way that screening is executed however, this activity may also provide the basis for the development of cognitive trust and demonstrate effort and commitment to the SR.

A summary of the role that each of the activities that purchasing managers conduct (or are involved in) may grant to them is presented in Table 7.1.

	Pre-contractual		Institutional		Operational	
	Activities	Role	Activities	Role	Activities	Role
Product Management	<ul style="list-style-type: none"> ✓ Collect information on new goods/services being developed ✓ Evaluate goods / services in terms of value to organisation ✓ Promote standardisation of parts 	<ul style="list-style-type: none"> CP, EC CP IP 	<ul style="list-style-type: none"> ✓ Establish goods / services technical specifications ✓ Establish goods / services design variations ✓ Establish product deliverables 	<ul style="list-style-type: none"> AP, CI AP, CI AP, CI 	<ul style="list-style-type: none"> ✓ Receive products / services ✓ Product Data Management (data creation, transfer, use) ✓ Suggest alternative products and technologies 	<ul style="list-style-type: none"> II II IP
Process Management	<ul style="list-style-type: none"> ✓ Procurement process mapping ✓ Examine potential supplier's processes ✓ Select preferred process type for exchange of product or service 	<ul style="list-style-type: none"> CP, CI CI AP, CI 	<ul style="list-style-type: none"> ✓ Delegate flow of resources ✓ Establish shared operations with partners ✓ Establish processes and means of delivery 	<ul style="list-style-type: none"> AP, CLT SI, EC AP 	<ul style="list-style-type: none"> ✓ Ordering ✓ Routinisation of activities ✓ Measure effectiveness of processes ✓ Benchmark processes ✓ Supplier audits 	<ul style="list-style-type: none"> II II II SI II
Contract Management	<p>Determinants of Relationships</p> <ul style="list-style-type: none"> ✓ Evaluate market / industry norms, ✓ Evaluate strategic choices ✓ Evaluate organisational culture ✓ Evaluate customers' requirements ✓ Explore external market ✓ Capture and transfer internal learning <p>Supplier selection</p> <ul style="list-style-type: none"> ✓ Identify appropriate strategic and tactical issues ✓ Develop supplier database ✓ Prepare requests for quotations ✓ Identify potential suppliers ✓ Tendering ✓ Evaluate supplier reputation ✓ Evaluate supplier risk ✓ Supplier approval (screening) ✓ Negotiate terms of contract ✓ Supplier certification 	<ul style="list-style-type: none"> CI, NT, SI CI, NT, SI CI, NT, SI CI, NT, SI CI, NT, SI CI EC IP CP CI IP AP CLT CLT AP AP AP 	<p>Contractual Agreements</p> <ul style="list-style-type: none"> ✓ Select the legal form of the SR ✓ Select the contract type ✓ Select the length of the SR ✓ Establish contractual safeguards ✓ Delegate roles and responsibilities ✓ Provide suppliers with financial, or franchising incentives ✓ Adapt SR specific agreements <p>Non-contractual agreements</p> <ul style="list-style-type: none"> ✓ Spirit of fellowship agreements ✓ Provide unconditional help to suppliers ✓ Devote managerial expertise ✓ Ensure supplier regularly updated 	<ul style="list-style-type: none"> IP IP AP, LGC CLT, AP AP CP, AP AP, EC CT, EC CT, EC SI, EC, CP AP, SI, CP 	<p>Monitor & Control</p> <ul style="list-style-type: none"> ✓ Ensure clear contract deliverables: • Product or Service • Product specifications • Key Performance Indicators ✓ Authorise all appropriate spending for: • Mandated levels of spend • Outsourcing ✓ Screen supplier's actions ✓ Benchmark supplier performance vs. external market & contract criteria ✓ Monitor procurement from other suppliers 	<ul style="list-style-type: none"> CLT, CP CP CLT, CP AP AP SI, CLT CLT CP, CI
Supplier Development	<ul style="list-style-type: none"> ✓ Identify critical processes / products for development ✓ Form cross-functional supplier development team 	<ul style="list-style-type: none"> CI, EC, LC LC, EC, SI 	<ul style="list-style-type: none"> ✓ Identify critical suppliers for SD ✓ Provide resources and effort to implement SD programme ✓ Organise workshops ✓ Establish rewards 	<ul style="list-style-type: none"> LC, NT, EC LC, NT, EC LC, EC, CT LC, AP, SI 	<ul style="list-style-type: none"> ✓ Initiate communication ✓ Arrange meetings with partners ✓ Involve supplier in internal operations ✓ Evaluate SD programme 	<ul style="list-style-type: none"> LC, CT, II LC, II SI, LC, EC EC, AP

* **Trust:** Calculative (CLT), Cognitive (CT), Normative (NT), Trustworthiness (TRW) **Power:** Authority (AP), Control (CP), Influence (IP) **Involvement:** Scope (SI), Complexity (CI), Intensity of interaction (II) **Commitment:** Loyalty (LC), Effort (EC), Length of SR (LGC)

Table 7.1 Summary of potential role that activities may grant to purchasing managers

7.1.2 'Actual' role of purchasing in the management of SRs

The framework developed in chapter 4 that conceptualises the role of actors in SRs (in terms of the levels of trust, power, involvement and commitment) is used as a template to identify the 'actual' role of purchasing. Initially, the activities that purchasing managers conduct (and certain factors that affect the nature of a SR) are theoretically associated with the second rank variables that characterise the structural variables (as defined in chapter 4). Depending on the way these activities are conducted and the way certain factors are handled by purchasing managers, the level of these second rank variables is then identified. The level of each of the

second rank variables is also triangulated by assessing the performance of purchasing managers against these activities and factors⁵⁷.

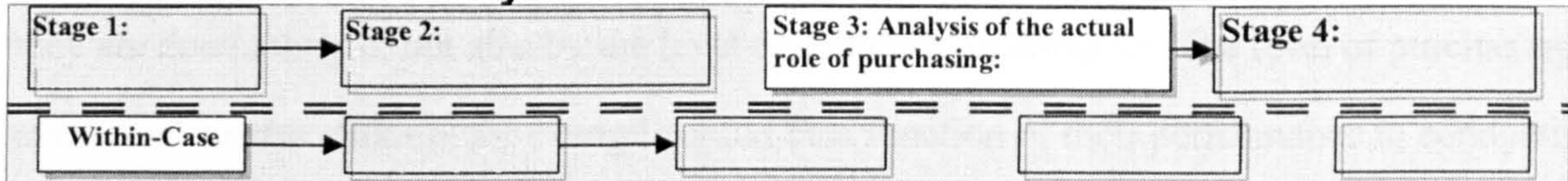
The analysis is conducted at all five levels in order to identify potential similarities and differences in the role of purchasing in different SRs and/or different organisations. It involves a codification process as well as quantitative analysis of data collected with the surveys. The codification process is more complex than in the analysis of research question 1, involving carefully categorising data initially into the second rank variables and then into the higher structural variables. For example, if there is reference in a transcript to a purchasing manager being involved in monitoring the performance of a supplier, this is codified as giving authoritative power to the PD, since this is suggested by the theory (as discussed in chapter 4).

The codification of the activities that purchasing managers conduct in SRs is only the first step in identifying the role they have in SRs. During the interviews, managers were asked to describe and discuss in more detail the way they conduct these activities, to get a better picture of their actual role. Moreover, the managers did not necessarily refer to particular activities that they conduct, but to incidents, or attributes of their partners' personality. These incidents may indicate certain attributes of their role in the relationship. For example, a reference to common values with the trading partner can lead to the conclusion that there is normative trust in the relationship, or a reference to informal meetings taking place in their social life and working overtime with their partners, can lead to the conclusion that cognitive trust exists effort commitment between the partners. For this reason the codification method has been cyclical rather than linear, constantly referring back to the transcripts and questionnaire responses, and refining the categorisation and synthesis of data in an attempt to ascertain the pertinent issues and patterns, and to isolate key phrases within the framework of the study.

⁵⁷ In other words the analysis theoretically associates the activities and factors with the second rank variables; it explores how purchasing managers conduct these activities, and then how well they conduct them, to obtain a picture of their role in SRs in terms of trust, power, involvement and commitment.

Furthermore, the performance of purchasing managers in conducting these activities is considered (using quantitative data), as it can indicate whether or not their mediating role is the one that is intended.

7.1.2.1 Within-Case Analysis



The *within-case* analysis for this question involves an exploration of the ‘actual’ mediating role of purchasing managers (and departments) in each of the individual SRs examined. The implementation of (or involvement in) certain activities as discussed in chapter 6, can provide evidence of the role of purchasing managers (and departments) in individual SRs, although only in some dimensions of the four structural variables⁵⁸. It is posited that in order to obtain a complete understanding of the role of purchasing managers and departments in the SRs studied, it is also necessary to demonstrate and analyse evidence of the way in which activities are conducted and the relative performance of purchasing managers in conducting them. For example the level of purchasing managers’ influence in decision making, or the level of their contribution to the development of cognitive trust, can only be evaluated if a deeper understanding is developed of how (and how well) they conduct certain activities, or resolve critical incidents. Consequently, the *modus operandi* whereby purchasing managers conduct the activities they are involved in is discussed and their performance in conducting these activities is presented in order to expound their mediating role in SRs.

The primary data used for the analysis is the narratives collected during the interviews with the people involved in these SRs. Minutes and referrals from meetings (obtained with the consent of the senior purchasing managers of the SRs) are also used, as well as observation of the SRs in action. The process is complemented and triangulated by assessing the level of

⁵⁸ The involvement in the process/activity of assigning contractual safeguards for example can provide evidence that purchasing managers have an active role in the development of calculative trust and that they have legitimate authority in a SR.

importance of these activities and the factors that determine the nature of SRs, the performance of the purchasing managers in conducting them, and the level of difficulty of conducting them. If a particular activity is perceived to be very important in a SR, the mediating role of purchasing managers would be conditioned and determined by how well they are conducting it, but also by the level of difficulty in doing so. The level of purchasing managers' trustworthiness for example could be a function of their performance in conducting certain activities. Similarly, the influence they exert may be determined by how well they conduct those activities.

Descriptive statistics of the data collected through the surveys that were undertaken are utilised to assess the level of importance of each activity and the difficulty in conducting them (and of the factors that may influence each SR). The performance of the purchasing managers is assessed in terms of how individual purchasing managers rate their performance, as well as how the internal customers and suppliers perceive the performance of the purchasing managers. The level of purchasing managers' contribution to certain activities for the management of SRs and their perceived level of importance, and the PD's performance in conducting each activity as well as the perceived level of difficulty in conducting them are illustrated for each separate SR in Appendix D.

7.1.2.1.1 Role of purchasing in the SR for the provision of travel

Trust

Calculative: The contribution of purchasing managers to activities related to the development of calculative trust is very high: in fact these activities are solely conducted by purchasing managers. Pre-contractually the PD was the only department involved in the assessment of the travel agent's reputation, and the potential business risk if engaging in a BR with them. The CPO established the contractual safeguards of the contract and at the operational stage the contract manager has complete responsibility for monitoring and screening the supplier's actions. All these activities are perceived as being very important to extremely important in

the management of the SR, and the purchasing managers' performance in conducting them is rated by themselves and their trading partners as being very good (see Appendix D). It can be concluded therefore that the contribution of purchasing managers to calculative trust for the provision of travel services was and continues to be very high.

Cognitive: Since the purchasing managers are involved in the majority of the activities conducted for the management of the travel SR, their contribution to the development of cognitive trust is crucial and depends primarily on the way they conduct these activities. The PD has developed an atmosphere of mutual advantage for all the parties involved in the provision and usage of travel services, and with the implementation of the internet transaction system that was adopted two years before the interviews were conducted, they managed to achieve pure cost transparency with their trading partners. Their performance is perceived as being very good since for almost all of the factors (with the exception of establishing cost transparency) (Appendix E, Table 1). The contract manager stated for example of the interpersonal SR she has with both the travel company's managers and operators, and internal customers: *"I talk to [the supplier manager] a few times every day and to [the international banking manager] very frequently. I'm very close to what they do, and try to help them when they're experiencing a problem"* (1.6: 5)⁵⁹. In terms of understanding the supplier's needs and requirements the contract manager stated: *"At the moment we're being very fair and not pushing as much as we normally would because we appreciate that they're short of resource, but even so they do need to be a bit more reactive to what we need"* (1.6: 3).

Normative: The contribution of PD's to the activities that may lead to normative trust between the partners of the SR is smaller than for those associated with calculative and cognitive trust, which can be attributed to the fact that this SR is fairly new (only six months old at the time of

⁵⁹ The numbering convention for the citations taken from the interviews indicates that the quotation is located on page 5 of interview 1.6. This convention is used in the remaining of the thesis. The number identified for each interview is contained in Appendix F.

the data collection process). Pre-contractually, the PD was not involved in the evaluation of the organisational culture or industry norms/forces, although their involvement and performance in evaluating the requirements of customers is regarded as being close to 'very good' (mean=5.80). Both suppliers and internal customers however believe that the communication processes are very open and their behaviour is very honest. The senior account manager from the travel agency reported: *"I think they [the PD] are very open. For any problem that we have they are always eager to help us"* (1.14: 4). Similarly, the general manager of the international banking department said: *"Generally I think people find the set up that the PD established very open and if we have any complaints, they will make sure to direct it promptly to the travel agent"* (1.26: 3).

Trustworthiness: As a result of the way purchasing managers conduct the activities that lead to the development of all facets of trust at the three stages of the SR's development, and the fact that their perceived performance is rated overall as being close to 'very good', their trustworthiness is regarded as being very high. In terms of keeping their promises for example their performance is rated as being between 'very good' and 'extremely good' (with a mean of 6.17), and in terms of inspiring their partners' confidence in them their performance is rated by their partners as being even better (mean=6.30).

Power

Authority: The PD has complete authority over decision making for the major activities that indicate legitimate power (i.e. evaluating the supplier's reputation, tendering, negotiating contract terms, delegating roles and responsibilities for the transactions, authorising the appropriate levels of spend, and evaluating the supplier's performance). With the exception of the delegation of roles and responsibilities of the parties involved, in which purchasing managers have relatively lower performance than other activities indicating authority in the SR (mean 5.40), their overall performance in these activities is rated as being very good. This may be reflected in the high level of trustworthiness that purchasing managers have in the SR.

Control: The control power of the PD is equally high because it possesses critical information on procurement processes, financial and organisational data about the supplier, knowledge of the information system that controls data related to travel arrangements, and because it controls and administers the overall financial resources devoted to travel services. The performance of purchasing managers against the activities that are associated with control power can be found in Appendix D. It can be seen that although their contribution to the activities that are related to control power is not as high as in the case of authority, their performance in those activities that are perceived as being more significant is considerably higher. For example, for the measurement of supplier performance in terms of monitoring the KPIs, the performance of purchasing managers is rated as being more than ‘very good’.

Influence: By having control and authority for the majority of activities, and managing those factors that can lead to their implementation in an effective manner, purchasing managers do not need to have influence in decision making. The only activities in which the PD did not have full responsibility for decision making at the institutional stage of the SR are the selection of the length of the SR, the selection of the type of the SR, and the type of the contract. However, as the CPO has all the necessary information about the scope and potential of the relationship, and by virtue of the high levels of centrality of the purchasing managers that are involved in almost all the activities at the pre-contractual and institutional stages of the SR, it can be said that his/her influence over these decisions is very high. This is also reflected in the perceived performance of purchasing in these areas.

Involvement

Complexity: As mentioned in chapter 5, there are ten senior and junior purchasing managers involved directly or indirectly in the management of this SR. The large number of purchasing managers, the fact that a contract manager was appointed exclusively to administer the SR, and the high level of performance of purchasing managers in conducting them indicates that

their contribution to the complexity of the SR is quite high (Appendix D). The only exception is the monitoring of procurement from other suppliers.

Scope: The large number of purchasing managers involved in the management of the SR, and the decision of the CPO to propose the formation of a long term SR with the travel agent, indicate that the contribution of the PD in terms of SI is high. However the PD does not involve the suppliers in its operations as it is not considered necessary, nor is there a SD programme for the travel agent. The PD does though provide managerial expertise and help to both supplier's and internal customers' managers, as mentioned earlier.

Intensity: The level of the intensity of interaction that purchasing managers have in the management of the SR is evident primarily at the operational stage of the SR. Purchasing managers do not order the travel services and work in a place remote from both their trading partners in the SR. They do however have daily communication with both partners to resolve minor problems which may arise regarding the utilisation of the information system, and have weekly meetings with the supplier's managers to monitor the smooth functioning of operations. Their performance in those activities connected with intensity of interaction is rated as being between fairly good and very good, by the supplier's managers as well as the internal customers. This is slightly less than their performance in other areas.

Commitment

Effort: Most of the activities related to the effort that purchasing managers put into the continuation of the SR fall within the management area of SD. However, since the financial organisation does not have an established, integrated SD programme, the contribution of purchasing managers in these activities is relatively low. The SD manager acknowledged this: *"Our SD programme is in its infancy. We aim to develop a group-wide programme. We are very committed though to our existing SRs and we try to help them in anything they need to provide us with a better service, but no we do not have an established programme"* (1.4: 5).

Despite their relatively low contribution to these activities, their performance is quite high, especially in providing help to the supplier (mean=6.03). They perform well in accepting supplier's ideas (mean=5.83) and adapting the relationship as the environment changes (mean=5.67), but their understanding of the supplier's ideas is relatively lower (mean=5.17).

Loyalty and length of the relationship: The resolution of the PD to establish a long term relationship with the existing supplier is evident in their activities as well as the manner in which they conduct them. There is no evidence of opportunistic behaviour on behalf of purchasing managers. On the contrary, the frequent level of communication that exists between purchasing managers and supplier's managers, the frequent regular meetings which are initiated and arranged by the PD, and the effort to maintain and improve the relationship, indicate that the PD contributes to the development of loyalty in the SR. As mentioned however, a SD programme does not exist yet, something which limits further 'bonding' between the partners.

In terms of their contribution to the establishment of the length of the relationship as mentioned in chapter 6, although the final decision was not taken by the PD its role in influencing the decision that was taken by a chief executive committee was catalytic, as the majority of the pre-contractual and institutional activities were conducted by purchasing managers. The director of the PD put into perspective the way the length of the contract was negotiated: *"We left the issue of the length of the contract open. We anticipated the initial contract will be between 3 and 5 years but suggested to the supplier that if they can offer us something which makes us think about a contract for 7 years. If they were prepared to offer something at lower cost or something that would be of benefit to us, then we would have considered a longer term contract – as we did"* (1.1: 4).

Summary of the role of purchasing in the provision of travel services

Figure 7.2 presents the 'actual' and intended role of the PD in the management of the SR for the provision of travel services. It illustrates the role that they have in each of the second rank

variables, using an ordinal scaling system that draws on the qualitative and quantitative analyses conducted. The vertical axis refers to whether their role has a positive or a negative impact on the management of the SR (as perceived by the participants in the study), and the horizontal axis refers to the extent of their contribution in each of the second rank variables.

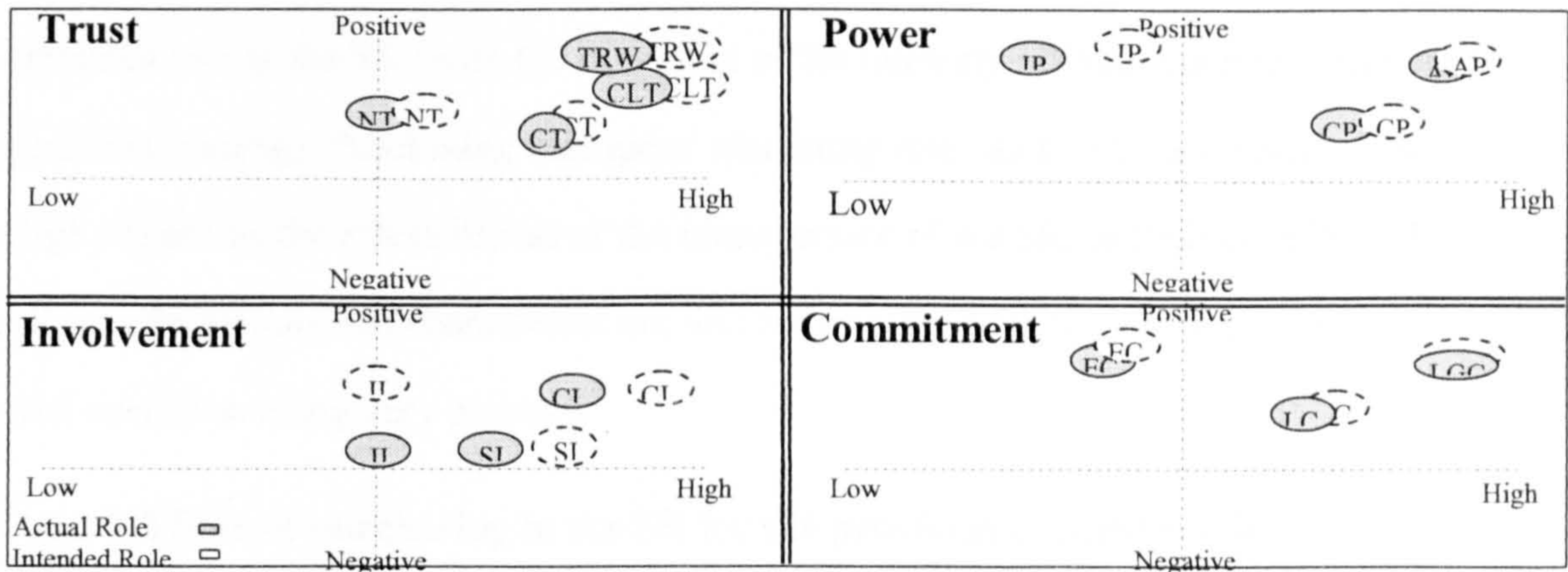


Figure 7.2 Intended and ‘actual’ role of purchasing in the SR for the provision of travel services⁶⁰

The position of the second rank variables for the actual role is determined by taking into account the participation (or not) of purchasing managers in certain activities that provide evidence of the existence (or not) of trust, power, involvement and commitment to the SR, the comments made by the participant managers about the nature and role of purchasing in the SRs’ and the performance of purchasing managers as perceived by themselves and their training partners. The position of the second rank variables that represent the intended role is determined by taking into account the participation of purchasing managers in certain activities, their perceived performance as expressed by themselves and documents of the organisations that lay out their purchasing strategy. In this way, the contribution of purchasing managers to the development of cognitive trust for example will be considered low if they are not involved in activities that can indicate the potential for development of common cognitions, and/or if their performance against these activities and the factors associated with cognitive trust is perceived to be low. Similarly if purchasing managers’ performance in these

⁶⁰ The illustrations should not be interpreted as numerical accounts of the role of purchasing in each of these dimensions, hence the use of an ordinal scale. Their main point is to provide a visual representation of the actual role of purchasing as evidenced by the empirical research and to facilitate and generation of insights.

activities that are associated to the development of cognitive trust is low, their actual role will be considered as having a negative impact on the management of SRs.

It can be seen that for the majority of the dimensions that characterise the mediating role of purchasing managers in the management of the SR their 'actual' role approximates their intended role in the SR (with the exception of the intensity of interaction and influence in decision making). Purchasing managers' mediating role can be characterised as having a very high impact on the effectiveness of the management of the SR, as their contribution in almost all the dimensions that characterise the SR is very high (with the exception of IP, II and EC), and overall as being very positive.

7.1.2.1.2 Role of purchasing in the SR for the provision of print services⁶¹

Trust

Calculative: The contribution of the PD to activities related to the development of calculative trust is quite high. At the pre-contractual level, the PD was actively involved in assessing the risk of a potential BR with the current supplier, and the director of the PD was part of the committee that established the contractual safeguards and the contract manager is responsible for monitoring and evaluating the performance of the supplier. These activities are perceived as having a paramount significance to the SR. The performance of purchasing managers is rated by their trading partners however as being slightly less than their perceived significance. The monitoring of the supplier's performance in terms of the provision of the overall service for production printers is conducted by the IT department, rather than the PD. Therefore their role in terms of the development of calculative trust does not appear to be very important for the 'overall' SR that involves the exchange of all the printing and office equipment products/services provided by the supplier.

⁶¹ This SR involves the provision of structurally different types of products and services. As the same managers are involved for the procurement of all the products/services, an overall figure for the performance of purchasing managers in each activity is calculated (Appendix D).

Cognitive: In terms of contributing to the development of common cognitions between parties from both organisations, a senior account manager stated of the personal relationship he has with his counterpart, the senior SD manager: *“Simply because we have known each other for so long and we are both of a similar mind set, we both know that when we say something, there’s no hidden agenda. We have indeed an open and honest communication and our personalities fit as well”* (1.17: 9). The contract (purchasing) manager reinforced this view and referred to a willingness to adapt to changes in the contract and to understand the supplier’s requirements: *“They have a technical knowledge I don’t have, so I simply accept the changes they propose and their advice about something which is not possible”* (1.7: 4).

In terms of their contribution to the development of cognitive trust in the BRs with the internal customers, there is a considerable variation between the IT and facilities groups. The senior SD manager clearly distinguished the BR she has with these groups: *“the BR I have with IT is much closer than the one with facilities because I have direct contacts with them.”* (1.3: 5). Since the IT department is responsible for operational issues, they communicate and have more frequent meetings than the managers from facilities. The performance of purchasing managers in activities and the factors related to cognitive trust is perceived as satisfactory, being largely rated between ‘fairly good’ and ‘very good’ (Appendix D). It can be concluded therefore that the purchasing managers’ contribution to the development of cognitive trust is quite high and positive, especially for the dyadic BRs with the supplier’s managers.

Normative: The purchasing managers’ contribution to the development of normative trust, as identified by their partners’ rating of their ethics, attitude, openness and honesty (rated as being close to very good) is highly positive. At the pre-contractual level the purchasing managers participated in the evaluation of the industry norms for the provision of print services, the strategic choices of the organisation and the requirement of the customers, although the chief purchasing manager was not the coordinator of these processes. Their

performance was ranked as being 'fairly good'. The facilities general manager suggested however that although the purchasing managers are "*quite open*", they do not always communicate their choices and decisions effectively. Referring to a particular example that involved a change of a member of staff he stated: "*I don't expect them to tell me everything. I expect them though to tell me about changes to their staff that would affect our relationship, which they haven't always done that*" (1.28: 4).

Trustworthiness: Although the performance of purchasing managers in the activities related to the development of all facets of trust is satisfactory, being rated overall between 'fairly good' and 'very good', their performance in terms of the factors that indicate their level of trustworthiness as expressed by whether they keep their promises and the level of confidence they inspire in their partners is evidently lower (5.55 and 5.20 respectively). This can be attributed to the failure to communicate their decisions and actions effectively to the internal customers, as reflected in the comments made by the facilities general manager.

Power

As most of the activities for the management of the SR are conducted jointly with the IT department, the level of power is sometimes shared between the PD and the IT department.

Authority: The PD has greater legitimate power at the operational stage of the SR because it establishes and authorises the levels of spend and outsourcing, and monitors the supplier's performance. At the pre-contractual and institutional stages however the decision on the selection of the current supplier and the delegation of operational roles and responsibilities in the SR was eventually taken by the director of the IT department (although the PD contributed to the decision making process). Furthermore, the IT managers perform the supplier evaluation routines and it was the director of the IT department that chaired the committee for the establishment of the contractual safeguards. Because of the varied and peculiar nature of the printing products/services that are exchanged, this SR is less formal than for the exchange of travel services, and as such the control power and influence are more illustrative in depicting the mediating role of purchasing in its management.

Control power: As print services are provided exclusively by the current supplier, a degree of power in the decision making process lies with them. The contract manager for print services summed this up as follows: *“I have some of the power to dictate the future direction of the relationship, but since we single source if our supplier decides to change a range of their products, we have to follow their decision”* (1.7: 4). This also indicates that the development of common cognitions between individuals identified previously is necessitated by resource scarcity and resource dependency on behalf of the financial organisation, rather than a feeling of mutual understanding between individuals. In addition, since the IT managers have a more direct BR with the ultimate users of print services, and their technical expertise in issues related to large production printers is superior to that of purchasing managers, they have more control power than purchasing managers do. Nevertheless, the performance of purchasing managers in the activities that can potentially lead to control power is rated being close to ‘very good’ by their counterparts (Appendix D).

Influence: The PD and IT department both lie at the ‘centre’ of the processes and decision making for the management of the SR. On one hand the IT managers, as they are closer to the ultimate users of the print services and have more expertise of technical issues associated especially with the production printers, they can influence decisions taken - especially for the types and volumes of printers to be purchased - and the processes that need to be followed to solve a problem. On the other hand because purchasing managers lie between the ultimate customers and the suppliers, at times when new products need to be bought, or when a problem arises with conventional printers or other printing related small projects, they have a greater influence over decision making.

This division of power between the PD and IT department has implications for the internal dynamics of the financial organisation. Putting this into perspective, a senior manager from the IT department stated: *“Honestly we feel that we should owned the contract with [the*

supplier]. *Most of the decisions are taken by us, but they have to go through to the PD to get authorisation. This is a waste of time and many times we are frustrated that we do not receive the required attention. PD's aim is to reduce the cost, but our main focus is the quality of the printing services we provide to our business units and ultimately our customers*" (1.27: 6).

Involvement

Complexity: The contract for the provision of print related services is the largest that the financial organisation has with a single supplier, involving the provision of a multitude of different types of products/services. The PD has a dedicated SD team to manage this SR: this comprises the senior development manager and contract manager responsible for the contract administration, and a team of eight junior managers who are concerned with the everyday management of the SR. The purchasing managers perform operations jointly with IT managers and were involved in most of the activities at the pre-contractual and institutional stage (although in most of these activities their involvement was not significant).

Scope: The large number of managers that the PD devotes to the management of this SR and the extent of the shared operations they have with the IT department (such as the evaluation of the industry norms and requirements of customers at the pre-contractual stage), as well as the screening of supplier actions on an everyday basis indicates a high level of scope involvement of the PD in the management of this SR.

Intensity of interaction: As can be seen in Appendix D the activities related to the intensity of interaction in the SR are those in which the PD makes the greatest contribution. At the operational stage the purchasing managers conduct frequent meetings with both the suppliers and internal customers to review the delivery processes and identify any potential problems. The senior account manager from the supplier spends 20% of his time at the premises of the financial organisation, attending meetings with both the IT and purchasing managers. A junior procurement manager commented on the intensity of interaction with the both the facilities and IT managers: *"I take many calls a day from facilities managers asking me to give them*

advice on the type of printers and the process that they need to follow in order to place an order, or to fix any problems they have. Obviously the relationship I have with the IT managers is different. We discuss other, more strategic issues related to the provision of print services” (1.11: 7). The purchasing managers obviously have a more intensive interaction with the IT managers, given that the two departments share a large number of operations.

Commitment

Effort: Similar to the SR for the provision of travel services, the effort of purchasing managers to maintain, develop and continue the BR with the supplier would be evidenced by the existence of a SD programme. Since the financial organisation does not have an established SD programme however, this effort can be identified by looking at the role of purchasing managers in the re-establishment of the contract with the current supplier⁶². Putting this into perspective, the director of the PD stated: *“The contract was initially for a period of five years, but over the last year we’ve actually renegotiated an extended contract for both the copier and the printer side” (1.1: 4).* Their performance in the activities and factors related to EC are characterised by a major contradiction. Whereas the supplier’s perception of purchasing managers’ willingness to receive their ideas is rated as more than ‘very good’ (a mean of 6.30), the perception of the IT managers is significantly lower (mean of 4.10). This disparity in perceptions can be found in most of the activities and factors related to commitment and can be attributed to the fact that the IT managers perceive their role to be more active.

Loyalty and length of relationship: Evidence of the lack of opportunistic behaviour by the purchasing managers can be found in the comments of the senior account manager from the supplier about the personal relationship with his counterpart in the PD (described in the section on cognitive trust), and the efforts of purchasing managers to maintain the relationship.

⁶² It should be noticed however that most of the activities that are related to SD are rated as being ‘very important’ by the managers that are involved in the management of this SR.

Their performance in terms of maintaining loyalty and deciding the length of the relationship in fact is very highly rated (means of 6.10 and 5.95).

Summary of the role of purchasing in the provision of print services

The ‘actual’ and intended role of purchasing managers for the provision of print services as presented in the previous sections can be summarised and illustrated in the figure below.

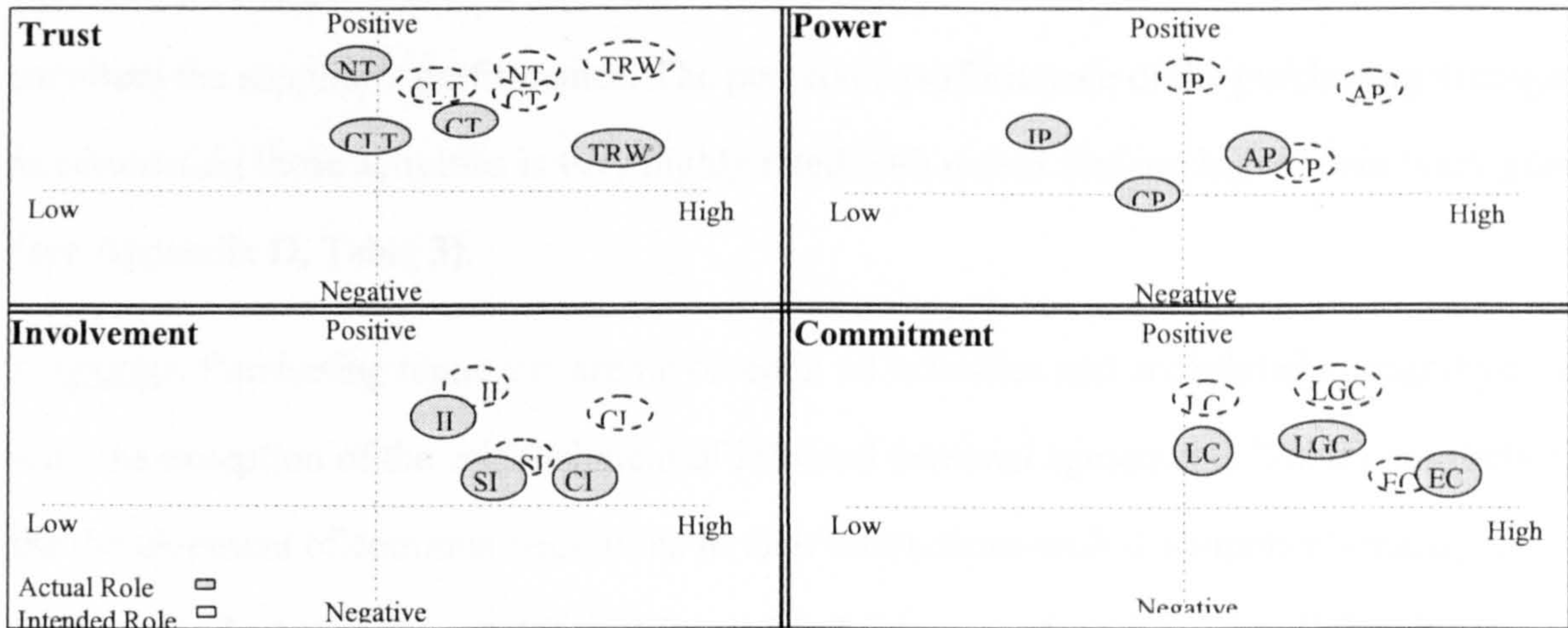


Figure 7.3 Intended and ‘actual’ role of purchasing in the SR for the provision of print services

It can be observed that they are perceived as having a high impact on the development of trustworthiness and a relatively low impact on effort commitment. Overall their role is perceived as being generally very positive in the development of trust and commitment, but their involvement and the way they exercise their power in decision making are perceived as being less positive. There are however great discrepancies between the intended and ‘actual’ roles in each of the structural variables, especially in terms of their contribution to the development of trust, and the level of power in decision making, something that indicates that the PD was set to have a substantially more active role than the one it does for the management of the SR. Their level of involvement to the management of the SR is more prominent at the institutional phase of the SR, rather than the operational and pre-contractual phases of the SR, where the IT department seems to have a more active role.

7.1.2.1.3 Role of purchasing in the provision of stationery

Trust

Calculative: The PD was the only department involved in the evaluation of stationery provision, and it decided to renew the contract with the existing supplier. The pre-contractual and institutional activities related to calculative trust were therefore conducted entirely by purchasing managers. The PD furthermore coordinates the supplier evaluation process and monitors the supplier's performance. The perceived performance of the purchasing managers in conducting these activities is very highly rated with means that are higher than 'very good' (see Appendix D, Table 3).

Cognitive: Purchasing managers are involved in all activities that are related to cognitive trust, with the exception of the establishment of informal personal agreements. Their contribution to the development of common cognitions in their interactions with the supplier's managers (which is reflected in these activities) is rated as being more than 'very good' for all activities. However the perceptions of managers from the insurance company differ considerably from those of the branch network department. Similar to the supplier's managers' views, the branch network managers, who represent the area where the bulk of stationery is consumed, rate the PD's performance in many of these areas as 'very good'. The managers from the insurance company on the other hand perceive the PD's performance as being less than 'fairly good' for many activities. The branch network director put this into perspective: *"The purchasing managers are the ones managing the contract really. I don't need to worry too much about stationery and I am overall quite happy with what the PD does"* (1.29: 3). The account manager for commodities in the insurance company had a different view about their relationship with the PD: *"I don't think the [PD] have ever quite understood what [the insurance company] is and therefore that is where, we get these contentious issues or retire. We try to explain that we are a complete organisation and what suits the [financial organisation] doesn't always suit us"* (1.30: 4).

Normative: Despite the differing perceptions of the involved parties about the role of purchasing managers in the development of common cognitions in the SR, there is a general consensus in terms of their contribution to the development of norms-based trust. Their performance in those activities related to normative trust or concerned with their overall interaction in the PD, i.e. honesty, openness and ethical behaviour, is rated as being close to 'very good'. This indicates that there are not any personal problems between the partners in the SR and that the purchasing managers contribute positively to the creation of trust in their dealings with their partners.

Trustworthiness: As a result of differing opinions on the strategic direction of the insurance company and the PD, the overall trustworthiness of the PD in terms of the level of confidence they inspire in their partners and their performance in keeping their promises drops down to 'fairly good' (means of 5.20 and 5.24 respectively). It should be noted however that the branch network and the supplier's managers rate the trustworthiness of purchasing managers as being more than 'very good' (mean of 6.34 and 6.27 respectively). It can therefore be concluded that as purchasing managers have complete responsibility for managing the SR for the provision of stationery, and also for a corporate strategy to standardise the products provided across the entire organisation irrespective of the peculiarities of individual internal customers, their contribution to the development of calculative trust is more evident at the inter-departmental and inter-organisational levels. Nevertheless, at the inter-personal level their interaction attributes (behaviour, honesty and openness) are perceived as being very effective in fostering a trusting relationship between the involved parties.

Power

Authority: The PD has complete responsibility for managing the SR with the stationery supplier. The PD coordinated and decided the supplier selection processes, negotiated and set the contract terms, and now monitors the supplier's performance and authorises the level of spending. The general manager of the branch network said of the operational stage of the SR:

“There are specific contract terms and processes. The formal route to go would be through the PD” (1.29: 3). The performance of purchasing managers is rated by the supplier and internal customers as being close to ‘very good’ in all the activities related to AP, with the exception of the authorisation of mandated levels of spend. This can be attributed to the objection of the insurance company to the selection of certain items (e.g. standard fax paper).

Control: As the PD keeps a database of all the information necessary for the purchasing of stationery and authorises appropriate levels of spend for most of the internal customers, the purchasing managers possess information that is crucial to decision making processes. This information gives control power to the director of the PD to establish financial rewards (or penalties) to the supplier in the case of success (or failure) of product delivery. On certain occasions some level of control power - especially in decisions involving the procurement of new or additional products - is given to the insurance company, because it has a strong brand name and can leverage this to obtain better prices for the whole organisation. The descriptive statistics in Appendix D illustrate that the performance of the PD in harnessing its control power is rated as being slightly less than ‘fairly good’, which can be attributed to the feeling that the PD does not frequently use the brand name of the insurance company to obtain better prices for the organisation:

Influence: As the PD has a high level of authority in decision making at all developmental stages, and a central role in disseminating information from internal customers to the supplier and vice versa, the influence of the purchasing managers in decision making between the internal customers and the supplier is increased.

Involvement

Complexity: In terms of the number of managers involved, this SR is less complex than those for travel or print services. Although the procurement of stationery involves the provision of a wide variety of office equipment and paper products, the PD does not share any operations with either the supplier or internal customers, except when a problem is identified and the

input of the supplier is necessary. The knowledge required to administer this process is not as complicated as for print services and the skills and technical expertise required is smaller.

Scope: The PD does not share its operations with either the supplier or internal customers, but the purchasing managers devote much of their time and managerial expertise into managing it and are responsible for all stationery products and services. The contract manager stated:

“Dealing with the contract management of stationery takes about 75% of my time. I have to sort out every problem that our departments have, and ensure that we are getting the best value for money” (1.8: 2). Their performance in devoting managerial expertise to the relationship and dealing with soft issues in the relationship is highly rated by the supplier and internal customers (mean=6.00).

Intensity: As can be seen in Appendix D the purchasing managers conduct most of the activities related to II in the SR. They hold frequent (weekly) informal meetings with the supplier’s managers to review certain issues that arise, and the contract manager talks to his counterpart on a daily basis. However, there do appear to be shortcomings in the level of communication and interaction that the internal customers have with the purchasing managers. The account manager of the insurance company complained that: *“We communicate very rarely, if at all. In the past we used to have a stationery forum every three months when we met various parts of the organisation and the suppliers. Now that we’re all with one supplier, we don’t get together at all”* (1.29: 4). On the other hand, both the internal customers’ account managers communicate on a daily basis with someone from the supplier to coordinate the process of stationery provision.

Commitment

Effort: The majority of activities related to EC are not considered to be important (or difficult) in the management of the SR and the contribution of purchasing managers is not very high. Their performance however when they are involved is rated as being close to ‘very good’. Although the financial organisation does not have a formal SD programme for the stationery

provider, the senior SD manager and his team from the PD have established an informal programme, organise frequent meetings with the supplier, and provide unconditional help in order to improve in areas where the supplier requires it.

Loyalty and length of SR: Evidence of the desire to maintain the SR with the current supplier can be found in the PD's policy of developing a long term SR with frequent communication with the supplier, and also in their effort to help the supplier with no strings attached. Their performance in terms of loyalty is in fact rated quite high (mean=5.85). Since the PD administers this SR in its entirety and takes all key decisions regarding its future direction, their role in terms of contributing to a working relationship based on loyalty is considered to be very high.

Summary of the role of purchasing in the provision of stationery

The contrasting perceptions of the role the PD has or should have, have an impact on the overall nature of the SR and reflect a general division between the different cultures that exist in the financial organisation and the insurance company. On one side the PD is concerned with reducing the cost of the provision of a commodity, and on the other the insurance company is concerned with maintaining its identity as a company with a high profile in the insurance industry. The PD however has the authority and control over the management of the SR, and as such the insurance company managers report to the contract manager and senior SD manager for stationery. This creates internal dynamics within the financial group, but the PD does not act positively to reduce these dynamics. The intended and 'actual' role of purchasing in terms of the four structural variables as perceived by the participating managers is illustrated in Figure 7.4.

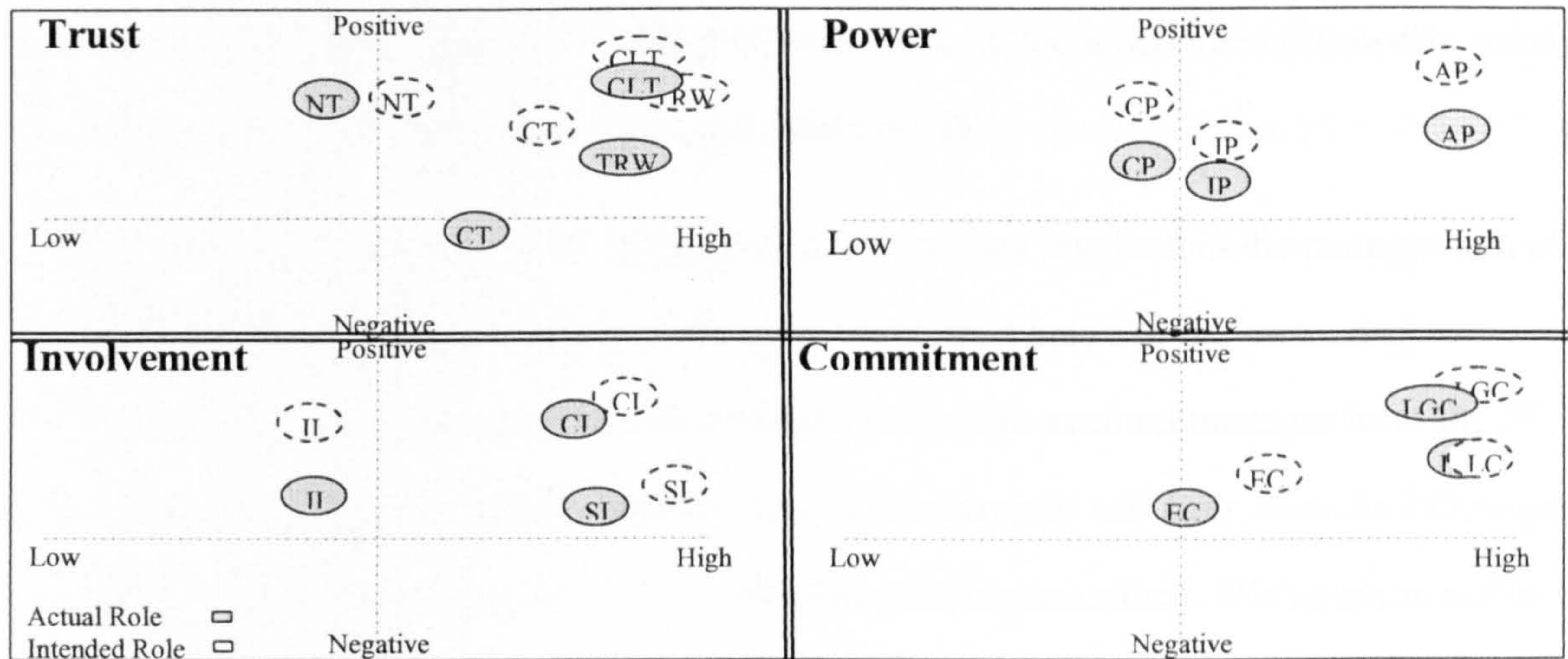


Figure 7.4 Intended and ‘actual’ role of purchasing in the SR for the provision of stationery

Although their contribution to the development of trustworthiness is perceived as being very high and relatively positive, their contribution to the development of cognitive trust is slightly negative, but nevertheless quite high. Despite their negative role in this dimension the overall picture of the role of purchasing managers as perceived by their trading partners is that they are greatly involved in the management of the SR (with the exception of their level of intensity of interaction) and that their contributions are generally positive. Furthermore, there are not great discrepancies between their intended and actual roles, with the exception again of CT and II, which illustrates that for the provision of stationery the purchasing managers fulfil their intended role as managing the SR.

7.1.2.1.4 Role of purchasing in the provision of IT services⁶³

Trust

Calculative: The contribution of purchasing managers to activities related to calculative trust is the smallest of the four SRs studied. Although the PD has responsibility for monitoring the suppliers’ performance in terms of predetermined KPIs, its contribution to the assessment of business risk at the pre-contractual stage and the establishment of contractual safeguards for the SR with both the supplier organisations was at medium level, because these activities were

⁶³ Similar to the SR for the provision print services, the SR for IT services involves the provision of a multitude of products and services that have different infrastructural characteristics. It is the only SR studied that involves collaboration between two independent suppliers. In terms of investment, the provision of IT services is the largest of those studied, and one of the biggest that the financial organisation has.

coordinated by the IT department. Their performance in all these activities is however rated as being ‘very good’ by their counterparts (see Appendix D).

Cognitive: From discussions with managers at all the parties involved in the management of the SR, it appears that there is a lack of common cognitions between the partnering organisations: the SR is based on calculativeness. The senior account manager from the IT infrastructure supplier for example stated: *“The statements you will hear from the PD people of the [financial organisation] are: ‘We’re [the financial organisation]. We’ve got to get the price and this is what we will try to do.”* (1.23: 4). There also appears to be a lack of full and open communication between the partners. The contribution of purchasing managers to activities related to the development of cognitive trust is the lowest of all the case studies, and their performance in handling the factors contributing to the development of common cognitions was rated only as being between moderately good and fairly good. However, despite the competitive atmosphere that exists, the inter-personal relationships between managers develop in an atmosphere of common cognitions. The level of honesty and openness for example amongst the individuals involved is at a very high level. The PD is willing to receive its partners’ ideas (in consultation with the IT department) concerning issues on which it does not have expertise.

Normative: Since the involvement of purchasing managers in activities and decisions that are related to the development of normative trust is not very high, it can be said that the PD does not have the same level of contribution to the development of normative trust as in the other cases studied in the financial organisation. As mentioned earlier however, their performance in terms of those factors that refer to the overall interaction between the partners, e.g. honesty and openness, ethical behaviour and communication, is perceived as being more than ‘fairly good’ and on some occasions close to ‘very good’, reinforcing the fact that although the BRs

are characterised at the inter-organisational level by mistrust and a competitive ethos, at the inter-personal level the BRs are more open, based on norms of equality and mutual benefits.

Trustworthiness: It appears that the partnering organisations do not share common cognitions with their partners, and that the SRs are built on a pragmatic calculative ground based on self-benefit. This does not however impinge on the BRs that individual purchasing managers have with their counterparts, which are characterised as being exceptional. The senior account manager from the infrastructure supplier for example stated of his personal relationship with his counterpart from the financial organisation: *“If somebody from the PD of the [financial organisation] says something, I believe what they say”* (1.23: 5). The performance of purchasing managers is in fact rated as being close to ‘very good’ (a mean of 6.00 for keeping their promises and 5.77 for inspiring confidence in their partners).

Power

Authority: Similar to print services, the IT department - in addition to being a customer and the primary receiver of the IT services - takes part in the management of the SR and has an active role and decision making authority in many areas. The IT director decided and authorised the current hardware supplier, established the contract terms and delegated the roles and responsibilities of the parties. The director of the PD had an input only in the negotiation of the terms and conditions of the contract in these processes. Given the superior technical expertise and direct operational involvement of the IT department for the provision of IT services, the role of purchasing managers in these activities was simply participatory. In contrast, the PD has the authoritative power to decide the appropriate levels of spend for IT services for the entire organisation, and to adapt agreements with the suppliers if the financial organisation believes it is not receiving an appropriate level of service.

The performance of purchasing managers in the activities (and factors) that give evidence of authority in the SR is considerably lower compared to the other cases. Only for the activities at the pre-contractual level is their performance perceived by their trading partners to be more

than ‘fairly good’ (Appendix D). At the operational stage their performance is perceived as being relatively poor when compared to other cases (close to ‘fairly good’). This can be attributed to the fact that, given the IT department has the authoritative power in decision making over technical and issues in the SR, it feels that it should in many respects ‘own’ the contract, instead of needing to seek the authorisation of purchasing managers who do not have knowledge of the technical issues inherent in IT systems. A senior IT manager for example said: *“I believe that we should have full control of the IT contract. To be honest I do not understand why we have to go via the PD in order to get something done. This is a waste of time for us, for the PD and for our supplier”* (1:32: 3). The senior purchasing manager for IT however linked this to the organisational structure of the bank: *“The IT department of course wants to bypass us completely and have a direct relationship with the suppliers. It is true that in terms of technical issues they need to be consulted but the management of the contract and budget have to be central”* (1.13: 5). These conflicting views of the way that the IT services contract should be managed create in many instances internal dynamics in the organisation that surpass the coordination problems that both suppliers have.

Control: The control power in the SR is also shared between the PD and the IT department. Since the PD controls the budget for the provision of IT services and has the authoritative power to take decisions on the levels of spend and outsourcing, the director of the PD dominates the decisions taken on the future direction of the SR. Furthermore, since the contract manager from the PD and her team monitors the performance of the suppliers for the provision of the IT services, the PD possesses the information needed to take certain decisions. On the other hand, the purchasing managers do not have the necessary knowledge regarding technical issues related to IT services and as such their *contextual pertinence* is limited. The IT department has a control power advantage as the IT managers do have expertise in issues related to IT infrastructure.

Influence: As the IT department receives a large number of contract deliverables (with the exception of PCs) before reaching the ultimate users, this puts the IT managers in a strategic position. Their ‘closeness’ to the ultimate users of IT services gives them power in the form of influence over decision making. On the other hand, the purchasing managers’ legitimate position in managing the contract with the suppliers gives them a certain level of influence in selecting the legal form of the SR and selecting the contract type, although for the latter the decision was taken by the IT director. The performance of purchasing managers in these activities is considered satisfactory (although it does not exceed the ‘very good’ limit).

Involvement

Complexity: The PD has a dedicated team of purchasing managers responsible for managing the contract for the provision of IT services, composed of 14 individuals that include 2 senior managers and 12 junior purchasing managers (Figure 6.2). This team was involved in the management of the SR since the inception of the PD, and the individual senior purchasing managers took part in the pre-contractual and institutional stages of the SR. Despite the fact that its everyday operations involve the management of contracts with the suppliers though, the IT department has a more complicated matrix of individual managers who have more direct contact with the suppliers and share operations to a greater extent. The IT director decides which IT products/services will be outsourced by coordinating a team of 40 IT managers that evaluates the strategic choices of the organisation and analyses the requirements of internal customers across the organisation.

Scope: As mentioned earlier, the PD has a dedicated team of purchasing managers working exclusively on the contract of the provision of IT services. Despite the resources devoted by purchasing managers to the management of the SR, the transfer of technology/knowledge between them and the suppliers’ managers is minimal because they do not possess the necessary technical IT knowledge. As a result, the suppliers have different points of contacts in the financial organisation. The senior account manager of the hardware provider stated:

“Our main point of reference is the IT department. But we also talk to PD about issues related to the contract and problems we might have, or the future direction of our BR” (1.21: 5).

Intensity: Purchasing managers responsible for IT services have frequent (daily) interactions with both suppliers and managers from the IT department, either by telephone or by physically meeting them at their premises. Their performance however is not perceived as being of a high standard (a mean of 4.87), mainly due to the perception of IT managers that the contract should be owned by the IT department.

Commitment

Effort: The extent of the effort that purchasing managers put into maintaining and developing the SR with the existing partners can be evidenced in their willingness to receive their partners ideas (as discussed earlier), to adapt agreements as the environment changes, and to compromise the sometimes conflicting interests of and antagonism between the two main suppliers. The purchasing manager, head of IT and outsourcing, referred to this role: *“Both [the hardware provider] and [the IT infrastructure supplier] have a long history of conflicting interests as our suppliers. I don’t think they will ever become true partners as they are competitors in many areas. On many occasions we aim to mediate and reconcile their interests so that we can get the best for us” (1.4: 6).* Their performance in activities that indicate effort in maintaining the SR is not rated highly however (Appendix D). This can be attributed to the dynamics that exist internally in the financial organisation between the PD and the IT department, in terms of which department should have control of the contract.

Loyalty and length of SR: The contribution of purchasing managers to the development of loyalty to the suppliers is evidenced in the PD’s strategy to maintain the SR with the hardware provider and promote the involvement of the IT infrastructure supplier, and indeed to form long term SRs with both of them. However, their performance is not rated as being close to ‘fairly good’ by their partners. This can be attributed to the somewhat authoritarian style of

contract management that is practised by the head of IT procurement which emphasises cost reduction rather than service enhancement.

Summary of the role of purchasing for the provision of IT services

The SR for IT services is probably the most complicated of those studied. The role of purchasing managers is not very clear and in many areas is confused with that of the IT department. Although the contract management activities of the SR are conducted jointly with the IT department, the legitimate power in decision making in the key areas of spending and authorisation of appropriate levels of spend lies with the PD. The IT department does however have a high level of control power in the SR, mainly due to the technical expertise of the IT managers in computer related issues. This creates internal tension within the financial organisation and confusion to the suppliers, as they do not have a single reference point in the organisation. A summary of the intended and actual role of purchasing for the provision of IT services is illustrated in the figure below.

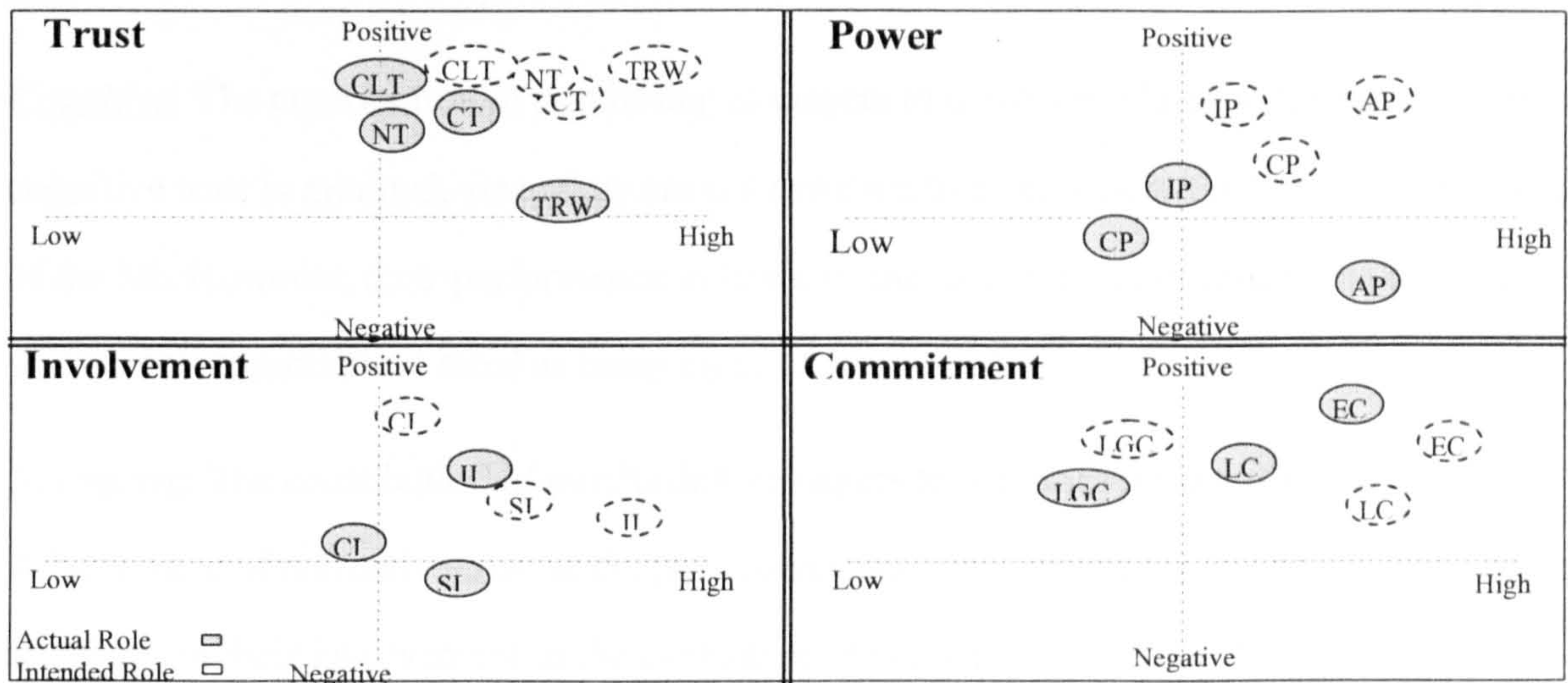


Figure 7.5 Intended and ‘actual’ role of purchasing in the SR for the provision of IT services

It can be seen from the diagrams that the intended and actual role of purchasing differs substantially on every dimension of the four constructs. On the one hand this marks the significant role that the PD is designated to play in the management of the SR, and on the other it highlights the friction and internal problems that are created in the financial

organisation with the confusion on the clarity of the roles that the PD and IT departments have. Nevertheless the PD is perceived as having a positive contribution to the development of trust and commitment to the SR as it stands.

7.1.2.1.5 Role of purchasing in the provision of baggage handling

The PD is not involved directly in the management of the SR at the operational stage⁶⁴. It was however the sole department in the organisation responsible for setting up the SR in its current form. The SD group is the only department from the organisation-wide PD involved at the operational stage of the SR.

Trust

Calculative: Evidence of the extent of purchasing managers' contribution to calculative trust in the SR can be found in their involvement in evaluating the business risk implicated with a potential BR with what is now the current supplier, the setting up of contractual safeguards and the establishment of the connections department which is responsible for managing the operational activities in the provision of the service in conjunction with the logistics supplier.

Cognitive: The contribution of purchasing managers to activities related to the development of cognitive trust is minimal, since they are not involved to a great extent at the operational stage of the SR. However, their performance in terms of the factors that can lead to the development of common cognitions is rated as being close to 'very good' in almost every case.

Normative: The contribution of purchasing managers to activities potentially leading to the development of normative trust at the pre-contractual and institutional stages of the SR can be identified in their involvement in the evaluation of strategic choices for the organisation and coordination of the selection of the supplier in compliance with corporate strategy, as well as their evaluation of the requirements of internal customers (the airlines). Their performance in

⁶⁴ A single team (the connections department) was formed by the PD, employing managers and technical staff from the airport operator and the logistics supplier to work towards this common objective, and a senior manager from the technical operations department was appointed as its director. The new department was housed in a separate building, where employees from both organisations could work together.

conducting these activities, as well as their performance in terms of those factors that can lead to the development of normative trust in the SR (ethical behaviour, honesty and openness), is rated by their trading partners very highly (very close to ‘very good’).

Trustworthiness: The perceived performance of purchasing managers in terms of the factors indicating the level of trustworthiness in the management of the SR (confidence and keeping their promises) approaches the ‘very good’ limit (5.70 and 5.80 respectively). This illustrates the emphasis which the airport organisation’s executive management committee puts on the effective functioning of baggage handling.

Power

Authority: As the purchasing managers (apart from SD managers) are not directly involved in the everyday operation of the SR, their authority is limited to decisions taken at the pre-contractual and institutional phases, in activities in which they had high involvement. At the operational stage of the SR, the connections department (which reports to the director of the PD) has the immediate legitimate power to authorise the mandated levels of spend and to monitor the performance of the supplier. The director of the connections department communicates the performance indicators to the senior purchasing managers, who then decide whether the supplier needs to participate in the SD programme conducted by the SD managers. Authoritative power is devolved to a great extent in the organisation, with many decisions at the operational level being taken by the connections department and those at the business/corporate level by the senior purchasing managers.

Control: As the PD is not directly involved at the operational stage of the SR, the control power of purchasing managers is very limited. The Connections department however maintains a database on the performance of the baggage handling, and as a result it controls resources which give its managers leverage to take decisions at the operational level of the SR.

Influence: The influence of the PD in decision making was evident only at the pre-contractual stage of the SR, when based on the internal evaluation of the baggage handling process it recommended the complete overhaul of service delivery, standardisation of the process, and assignment of the entire operation to a single supplier. The final decision was taken by the executive committee of directors in consultation with the directors of the operations and financial departments. The influence of the director of the PD however was evident given that the decision to build a single SR with the current logistics provider was based on his recommendations, rather than the external consultant employed by the representative body of the airlines. This high level of influence is also evidenced in the perceived performance of purchasing managers in these activities (Appendix D).

Involvement

Complexity: As previously mentioned, the PD coordinated the pre-contractual and institutional stages of the development of the SR with the current supplier, dedicating a large number of senior and junior purchasing managers who identified the need to overhaul the baggage handling process, selected the current supplier, negotiated the length and terms of the contract, delegated the roles and responsibilities in the SR, and established the contractual safeguards. Furthermore, the establishment of the cross-functional Connections department (set up by the PD) which is responsible for coordinating the supplier's operations with those of the airport operator illustrates that the PD's contribution to the complexity of the SR has been prominent.

Scope: As the direct involvement of purchasing (SD) managers at the operational stage of the SR is limited to the SD area, it can be said that the PD does not share its operations with either the supplier or the representative body of the airlines. On the other hand, the connections department (coming under the PD) works very closely with the supplier's managers at every organisational level, since they jointly provide the baggage handling service to the airlines and also exchange confidential information and managerial expertise. However, the determination of the PD to appoint a single supplier for the provision of the service and to establish the

dedicated connections department for handling baggage transfer for connecting flights illustrates a high contribution to the determination of the scope of the SR.

Intensity: The extent of the intensity of interaction of purchasing managers with their trading partners at the operational stage is limited to the extent that the SD managers communicate with the managers of the logistics provider, invite them to workshops and courses which they organise (as part of the organisation's development strategy for its key suppliers), and audit the supplier's processes on a quarterly basis. Apart from the SD activities, the purchasing managers do not have any involvement in the supplier's processes. The director of the PD nevertheless meets with the director of the representative body of the airlines to discuss issues related to the future of the SR, but this is done on an ad hoc basis. The connections department however does have a very intensive BR with the logistics supplier because it works in the same building and exchanges confidential information about the performance of operations and key areas which need to be developed.

Commitment

Effort: Even though the PD is not directly involved in the everyday management of the SR, the degree of effort that the purchasing managers put into developing the SR in its current form can be evidenced by their involvement at the pre-contractual and institutional stages, when they decided to invest in a single SR and establish the framework of flexible contract terms upon which the SR is managed today, and actively helping the supplier with no strings attached. Furthermore, the SD group (which also comes under the PD) is actively involved in the maintenance of the SR, devoting managerial expertise in many areas and adapting certain areas needing development. Although these activities are not perceived to be very important (or difficult) in the management of the SR, the performance of purchasing managers is rated as 'very good' in terms of providing help to the supplier and more than 'fairly good' in terms of adapting the SR's agreements and establishing spirit of fellowship agreements.

Loyalty and length of the relationship: The contribution of the PD to the establishment of the SR in its current form was of key importance because the director of the PD recommended to the executive committee of directors the desired length of the SR and the establishment of a long term partnership with the supplier. The PD currently involves the supplier in other areas in which the airport operator is investing that cross the boundaries of the UK.

Summary of the role of purchasing for the provision of baggage handling services

The SR for baggage handling is the case of those studied in which the PD has less involvement (at least at the operational phase of the SR). Despite this, the role of PD (mainly in the pre-contractual and institutional phases of the SR) is perceived as being positive in all the four dimensions (Figure 7.6). Exceptions are their contribution to the development of calculative trust and the intensity of interaction with their trading partners.

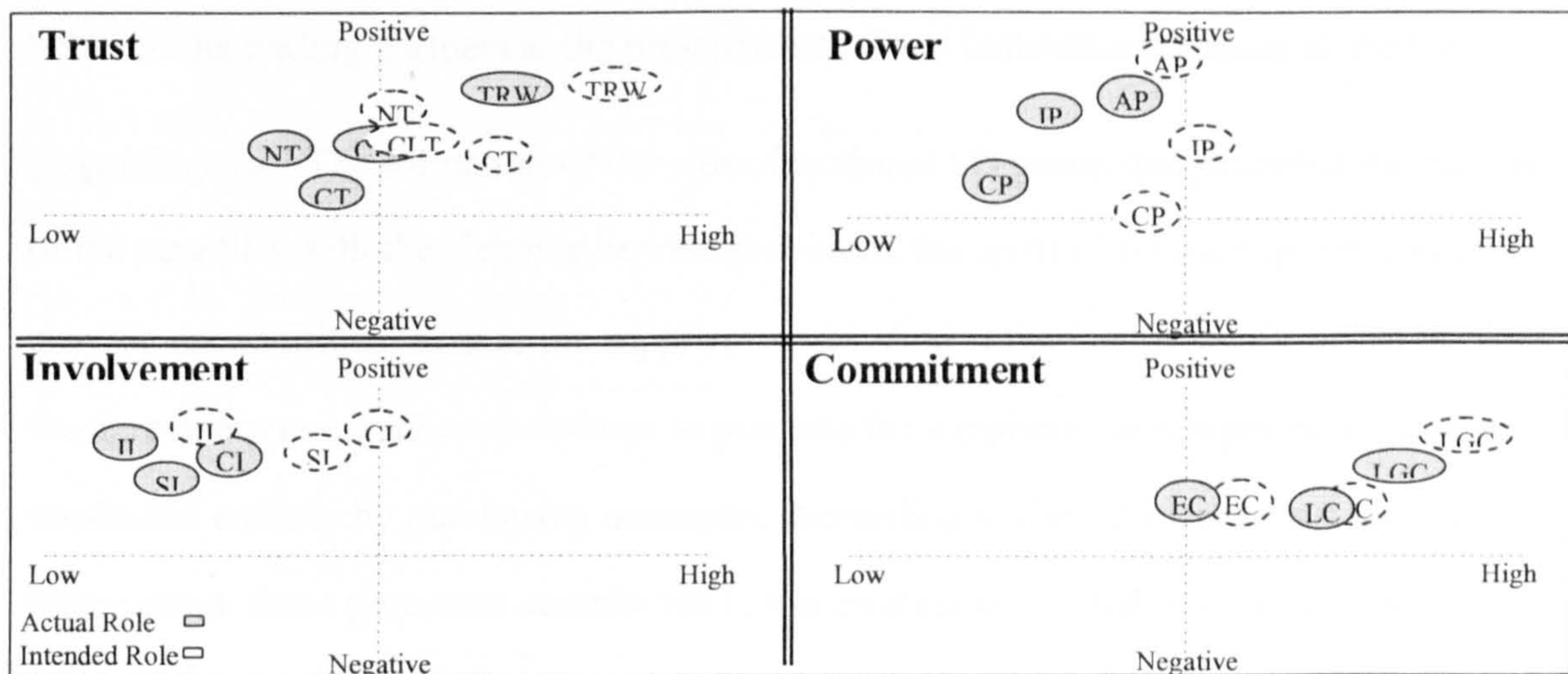


Figure 7.6 Intended and ‘actual’ role of purchasing in the SR for the provision of baggage handling

Their contribution to the management of the SR however does not have a great impact on its effectiveness (with the exception of their contribution to the development of commitment to the SR). This is understandable as the connections department (established by the PD) manages the everyday operations of the SR. Their level of power is limited and as they do not work closely with their trading partners and their contribution to the development of trust is very low. A noticeable observation is that their level of authority, as perceived by them and

their trading partners and described in the contract agreement, was intended to be higher and have a more positive role. This illustrates that the PD delegated most of its operational authority to the connections department in order to increase the efficiency of the operation.

7.1.2.1.6 Role of purchasing in the provision of cleaning services

Trust

Calculative trust: The PD coordinated the evaluation of the procurement process for cleaning services and of the capabilities and exit risk of the two existing suppliers before the new contractual arrangements were made. The director of the PD in fact coordinated the screening process and authorised the selection of the suppliers. At the institutional phase, the PD had high involvement in those activities that signify a contribution to calculative trust (i.e. authorisation of contractual safeguards and remedies, and delegation of the flow of resources). This evidences that the PD made a direct contribution to the development of calculative trust between the trading partners at the pre-contractual and institutional phases of the SRs.

Cognitive trust: The formation of the cross functional SD group that preceded the reformation of the new SRs with the cleaning service providers, the spirit of fellowship agreements to provide unconditional help to the suppliers established at the institutional level of the SRs, and the agreement to organise workshops to promote the suppliers' development were all activities conducted entirely by purchasing managers. According to the SD managers who were interviewed, these processes contributed to the creation of a collaborative environment, which in turn indicates the existence of cognitive trust between the trading partners. For example, the director of the SD group, describing the atmosphere in the workshops, stated: *"The workshops are highly participative. Delegates learn about partnering through doing, while at the same time experience working together in a non-threatening environment"* (2.14: 3). These activities are perceived to have been fairly important to the development of the SRs, and the performance of the PD in conducting them is rated as being better than fairly good; the organisation of workshops for example, it is rated as being exceptionally good (Appendix D).

At the operational phase of the SR, the PD's performance in most of the factors connected with the cognitive trust is rated as being close to very good. The only factor in which the purchasing managers have a perceived lower performance is that of full and open communication, which is rated as being very important to extremely important.

Normative trust: The high level of involvement of purchasing managers in activities intended to assist understanding of the airport operator's strategic choices in terms of the provision of cleaning services, and in activities involving evaluation of customer requirements, indicate partly at least an intention to contribute to the development of NT in the SR. However, the relatively low performance of the PD in evaluating customer requirements (5.13), and identifying the business drivers of suppliers (4.90), combined with the relatively high importance of these activities (5.73 and 5.63 respectively), indicates that the PD has achieved less than expected at the pre-contractual phase of the SR in terms of fostering the development of normative trust with internal customers. At the institutional phase however, there is also considerable provision of resources to the dedicated SD team to implement SD programmes. Likewise, at the operational phase, purchasing managers have high level of contribution in coordinating activities. Furthermore, their performance is particularly good (close to very good), which indicates that the PD (especially the SD group) has adopted an active role in the development of normative trust between the trading partners.

Trustworthiness: Most of the interviewees expressed a general satisfaction with the way the PD handled the developmental phases of the two SRs for cleaning services. The supplier manager for one of the cleaning contractors indicated stated: *"I would say [the senior purchasing manager responsible for cleaning services] is very trustworthy. I know him for a long time. Cleaning is about relationships. At the end of the day, I would say that we trust the way they manage the contract"* (2.11: 5). Nevertheless there is a difference in the level of the

confidence in purchasing managers in their role at the pre-contractual/institutional stages and their role at the operational stage.

Power

Authority: At the pre-contractual and institutional level the PD had great contribution to all the activities that indicate existence of authority, and the performance of purchasing managers in conducting them was exceptionally good in all four management areas (in almost all activities the mean is more than 6.00-very good at the pre-contractual level and nearing the very good limit at the institutional level) (Appendix D). At the operational phase however, monitoring of the everyday performance of the suppliers is conducted by the internal customers rather than the PD. The PD does however have the authority to assess the quarterly and annual performance of the suppliers, to authorise the mandated levels of spend and outsourcing, and to evaluate the suppliers' development programmes. For all these activities the performance of the PD is rated as being between fairly and very good.

Control: The level of control power of the PD at the operational stage is limited, as only the SD managers have a frequent interaction with both the internal customers and the suppliers. The involvement of purchasing managers at the operational stage is limited to the coordination of the supplier evaluation process, which is conducted once a year. As the internal customers control all the information and monitor supplier performance on a weekly basis their level of control power is the greatest in these SRs. Even though the suppliers control the critical resources of equipment and managerial expertise for cleaning, their level of control power is limited due to the fact that the direction of the SRs is steered by the airport organisation.

Influence: The airports' general managers conduct the suppliers' performance checks and communicate on an everyday basis with the suppliers' managers, and as such they have more influence in decision making processes. SD managers are the only managers related to the PD that are involved at the operational stage of the SRs, conducting the supplier evaluation

process and organising workshops for the suppliers. As such they influence decisions at a strategic level of the SRs.

Involvement

Complexity: In all four management areas at the pre-contractual and institutional levels, the PD had dedicated a large proportion of its resources into coordinating the sourcing, selection and negotiation processes of the contract with the cleaning providers. Their contribution in terms of enhancing the complexity of the SRs was therefore very important. Although purchasing managers are not directly involved at the operational stage of the SRs, several senior and junior SD managers coordinate, monitor, evaluate and work towards the alignment of the suppliers' operations with those of the airport terminals.

Scope: The PD does not share any of its operations with the suppliers nor is it involved directly in their operations. It has however established a SD programme (which is administered by the SD managers) that covers both cleaning providers to the organisation. This programme involves very frequent meetings with the suppliers to identify any potential problems, and fortnightly workshops where all members of the SRs are trained through analysing and discussing best practice models which can be used in the provision of cleaning services to all the airports. A senior SD manager overlooks the performance of the suppliers supported by a team of four other junior SD managers, lending expertise to the management of the SRs with both suppliers.

Intensity: As can be seen in Appendix D, the contribution of purchasing managers to the activities that are related to the intensity of interaction is relatively low, with the exception of those activities that are conducted by SD managers. The SD manager responsible for one of the two cleaning suppliers said of the level of interaction with her counterparts: *"I see [the supplier's director of operations] twice a month and spend at least one hour on the phone every week with him. Usually we review the progress against their targets"* (2.7: 3). Due to the nature of their jobs, the SD managers do not work in a particular venue but rather travel to

all the airports that belong to the organisation in order to deal with issues related to several suppliers of commodities and other products/services.

Commitment

Effort: At the institutional phase of the SRs, the PD incorporated the two cleaning providers into the SD programme that they had established. As part of this programme, the SD managers communicate frequently with their counterparts and regularly invite several suppliers' managers to participate in the workshops that they organise. This indicates that the PD puts a great degree of effort into maintaining and developing the SRs. All the activities that are related to effort commitment are rated as being very important by the managers that are involved in the SRs, and the performance of purchasing (and SD) managers is perceived as being more than very good for almost all the activities. For the organisation of workshops, their performance is in fact rated as almost extremely good (mean of 6.60).

Loyalty and length of the SR: The contribution of purchasing managers to the development of loyalty can be evidenced in the organisation's business strategy of consolidating certain outsourced products/services and maintaining close collaborative BRs with a few suppliers, having long-term agreements with them. The director of the PD said of this strategy: "*The long contracts period was decided to enable us to align our corporate strategies and investment programmes for long-term gain*" (2.1: 1). The performance of purchasing (and SD) managers in these activities is in fact rated as being close to very good (Appendix D).

Summary of the role of purchasing for the provision of cleaning services

From the graphic representation of the role of purchasing in the management of this SR (Figure 7.7) it can be seen that the PD is perceived as having a very positive contribution to the management of the SR. Their contribution in particular to the development of trust and commitment to the SR is very high and positive, and contrary to the other SRs although their level of power is very high, this does not have a detrimental effect on the perception of the positive influence that their contribution has on the management of the SR. This can be

attributed to the fact that the SD group (part of the PD department) is actively involved in the everyday operations of the provision of the cleaning services. There are not great discrepancies in terms of the intended and actual role that the purchasing managers have in the management of the SR. Small discrepancies exist in the level of influence in decision making and the level of intensity of interaction. These can be attributed to contextual factors on the everyday management of the service provision (such as the unexpected situation of the aftermath of the 9/11 terrorist attacks in New York), rather than the purchasing managers' shortcomings.

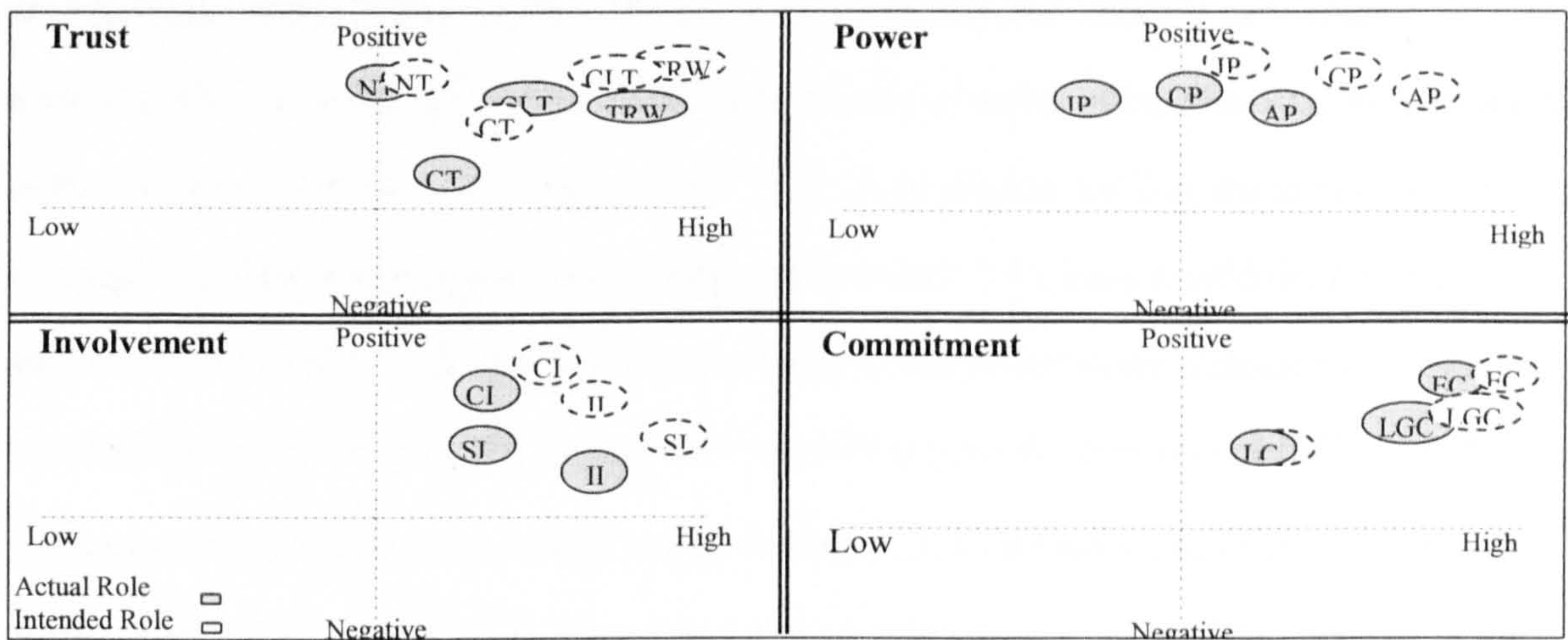


Figure 7.7 Intended and actual role of purchasing in the SRs for the provision of cleaning services

7.1.2.1.7 Role of purchasing in the provision of waste management

Trust

Calculative: In the presentation of the pre-contractual and institutional stages of the waste management case in chapter 6, it was discussed that the PD coordinated the selection of the current supplier and the establishment of the contractual safeguards, thus contributing to the development of calculative trust. The performance of purchasing managers in calculating the business risk and establishing the contractual safeguards related to calculative trust is perceived to be very high, indicating that the PD was a major contributor to the development of calculative trust between the trading partners.

Cognitive: As the PD coordinated and performed most of the activities at the institutional stages of the SR, the interaction of the purchasing managers involved with the suppliers' managers and the terminal managers was very high, and as such their behaviour and the way they performed their roles had a major impact on the development of common cognitions among the trading partners. For all the factors that can potentially lead to the development of cognitive trust the performance of purchasing managers is perceived as being more than very good (see Appendix D). This is reflected in the atmosphere of common understanding that exists between the interacting parties. The purchasing manager responsible for waste management stated: “[The supplier’s operations manager] *and I have a very clear understanding in terms of what we both want in terms of waste management. I’m very mindful of their business and he is mindful of ours*” (2.6: 3). In similar fashion, the senior operations manager from the waste management company stressed: “*We have established a very amicable relationship with [the senior purchasing manager for waste management]. We are respectful of each other’s abilities and understanding of each other shortfalls*” (2.15: 4).

Normative: The contribution of purchasing managers to those activities related to the development of normative trust can be traced pre-contractually to their involvement in the assessment of the governmental and EU environmental regulations and norms, and alignment of the organisation’s strategy to comply with these regulations. It can also be seen at the institutional stage in the involvement of purchasing managers in the establishment of the SD for the suppliers. It should be noted however that although the involvement of the team of purchasing managers in the activities related to complying with environmental norms, their role was participatory since their knowledge of environmental issues was limited. They merely confirmed the arrangements that were coordinated by a specialist legal consulting firm that was employed for this particular reason. Nevertheless, their participation indicates a high level of contribution to the development of normative trust, which is reflected in the way that their trading partners rate their performance.

Trustworthiness: The trustworthiness of purchasing managers in this SR as evidenced by the way in which their trading partners rate their performance in terms of keeping their promises and the confidence they inspire in them is one of the highest in all the cases studied (with means of 5.83 and 6.00 respectively).

Power

Authority: As the PD coordinated the whole process of sourcing, negotiating, establishing the contract terms and managing the SR, the authority of the purchasing managers in terms of decision making is one of the highest in the cases studied. Similar to print services and IT services in the financial organisation, at the institutional stage of the SR, part of this authority was handed to legal consultants employed to set the terms of the contract and the contractual safeguards, due to the lack of in-house expertise on environmental and regulatory issues. At the operational stage of the SR however, the PD is fully responsible for authorising the level of spend and budget for the SR. Their performance in terms of the way they practice their authority is (as expected) relatively low for the activities related to the institutional stage, but at the operational stage is rated quite highly (see Appendix D).

Control: According to the definition for the sources of control power, the highest level of control in the entire SR is possessed by the waste management company, as they have the technical expertise and infrastructure to provide the service. However, the PD, by coordinating the whole process of supplier sourcing, selection of the governance structure, possessed information and resources that gave purchasing managers a high level of control over their trading partner's managerial behaviour. On the other hand, by virtue of his managerial post, the airport terminal director wields high levels of control power because of the information that he handles in the management of the entire contract. The level of control power of purchasing managers was therefore high only at the pre-contractual stage of the SR. At the operational stage, the waste management supplier and the airport terminal managers hold much of the control, as they interact on a more frequent basis.

Influence: As the legal advisors of the airport organisation possesses the knowledge related to the peculiarities of the waste management contract, their influence in decision making was prominent at the institutional stage, although the decision on the selection of the most appropriate contract was finally taken by the director of the PD. The influence of purchasing managers on decisions not taken by them is limited, due to their limited knowledge of the sensitivities relating to the provision of waste management.

Involvement

Complexity: The number of purchasing managers involved in the management of this SR is relatively low compared to the other cases studied in the airport organisation, with only one junior and two senior purchasing managers having direct involvement with their counterparts. The PD did not share any of its operations with its counterparts at the pre-contractual and institutional stages (nor does it at the operational stage), but on the other hand it is involved in many of the operations of both the cleaning services and waste management companies. The strategic importance of the waste management provision required the PD to appoint senior managers responsible for the management of the contract and to focus on the environmental and business strategy implications of the service.

Scope: Although the complexity involvement of purchasing managers is relatively low, the PD involvement in terms of the scope of the SR has been extensive throughout its developmental stages. The PD was highly involved in the evaluation of industry norms regarding waste, the evaluation of the terminals' requirements, the selection of the supplier, and the subsequent establishment of the long term contractual relationship with the waste management company. At the operational stage, a senior purchasing manager is fully involved in the contract management areas of the evaluation of the supplier's performance and the establishment of new environmental standards.

Intensity of interaction: Because of the new initiative mentioned above between the waste management company and the airport organisation, the senior purchasing managers

responsible for the management of the contract with the waste management company meet very frequently (on a daily basis). These meetings take place either at the offices of the waste management company (based at the airports) or at the airport organisation's offices.

Commitment

Effort: The PD puts a great emphasis on the management of waste generated at the airports, given that the social responsibility of the airport organisation is not restricted to its shareholders and its customers, but extends to the general public, and the UK and other European governments. Strict rules and regulations govern the management of waste, which need to be updated and assessed on a yearly basis. As such the PD puts a great effort into adapting the contractual conditions governing the specifications of the service, and provides assistance to both suppliers in order to meet the criteria set by international laws. The performance of SD managers in determining certain processes that need to be developed, in organising workshops, and in establishing shared operations with the suppliers at the institutional stage are rated as close to very good (Appendix D).

Loyalty and Length of SR: The PD's contribution to the development of a long term SR with both suppliers of the waste management service at the institutional stage can be evidence of its intention to maintain the SR. The organisation of workshops, establishment of rewards, and frequent communication with and involvement in the operations of both suppliers and internal customers are all activities in which the performance of purchasing managers is rated highly.

Summary of the role of purchasing for the provision of waste management

From the above discussion it can be inferred that the PD has a very active mediating role in this SR, both in terms of the contribution to the second rank variables that are used to identify their role in the SR, and in terms of the impact that this contribution has on the efficiency of the waste management provision for the airport operator. In Figure 7.7 below it can be observed that the perceived levels of their contribution and the perceived impact of this contribution on the management of the SR is very high and very positive in terms of the

development of trust, their level of involvement in the SR and the development of a commitment to the SR. Their power in decision making is however somehow limited by the fact that due to the highly specialised nature of the provision of waste management, legal advisors and operations managers from the airport terminals have the authority and exert more control and influence over decisions at the institutional and operational stages respectively. As a result their contribution in terms of decision making is viewed often as less beneficial for the management of the SR. For this reasons the discrepancies between the intended and actual role of the PD in the management of the SR are greater in terms of the level of power to decision making and level of involvement, rather than the development of trust and commitment.

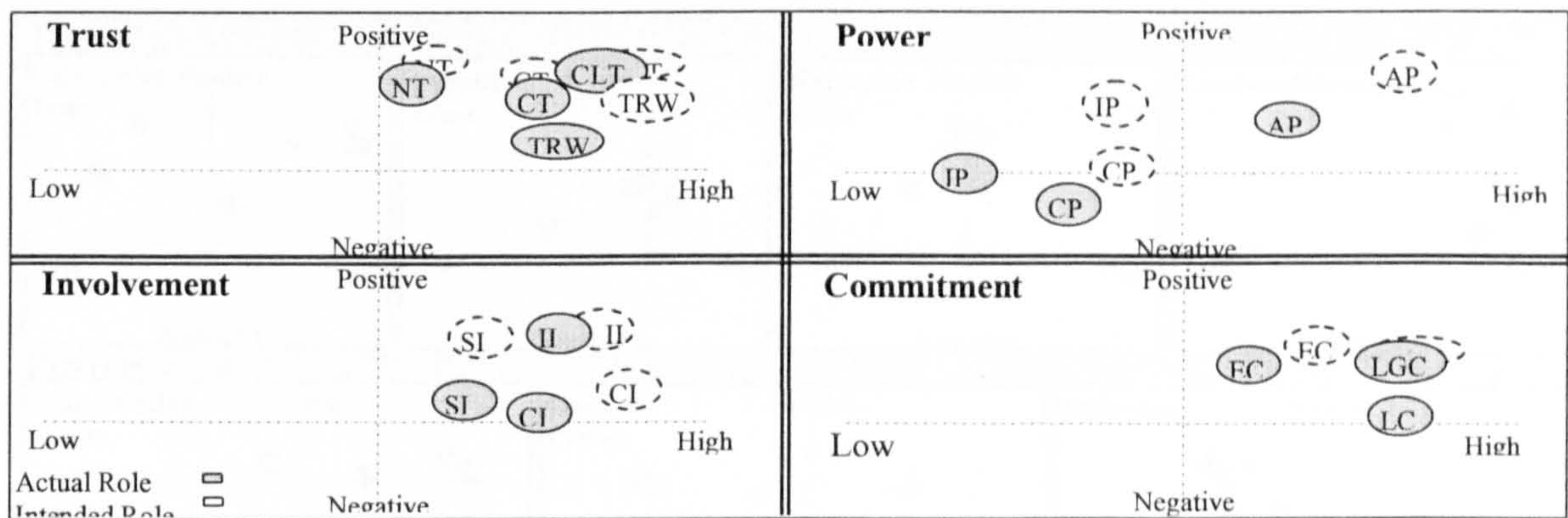
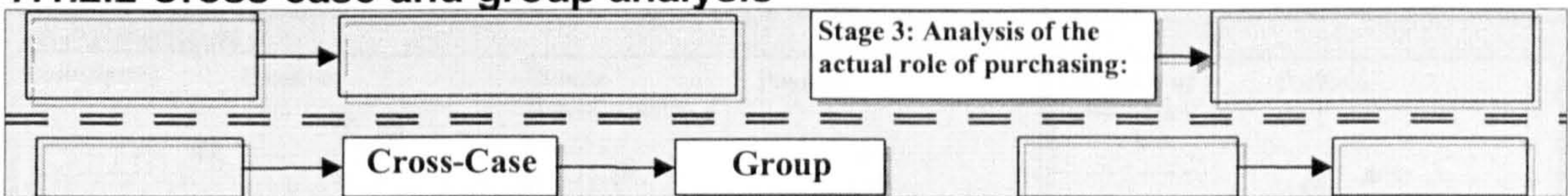


Figure 7.8 Intended and actual role of purchasing in the SR for the provision of waste management

7.1.2.2 Cross-case and group analysis



Cross-case analysis: In order to highlight the commonalities (and differences) across the separate cases, Figure 7.9 in the next page summarises the role of purchasing managers in the individual cases as it has been identified in the within-case analysis.

An initial observation of the scatter diagrams reveals a great variation of their role across the different cases, in terms of their contribution to the development of trust, their level of power, their involvement and their contribution to the development of commitment to the SRs.

Although that role appears to be considered by their trading partners as being positive, it does

not always perceived to be constructive. In the cases of the provision of IT services and print services, purchasing managers' role in areas such as their exertion of authoritative power, control power, complexity and scope involvement is considered to have a negative contribution. Furthermore their level of involvement in the management of the SR is not very high in all cases, a finding that challenges the conviction of the purchasing management literature that accepts this contribution as being of high level. For the baggage handling and the IT services SRs the levels of scope involvement and complexity are low; in fact the intensity of interaction of purchasing managers with their trading partners is very low for the SR of baggage handling provision.

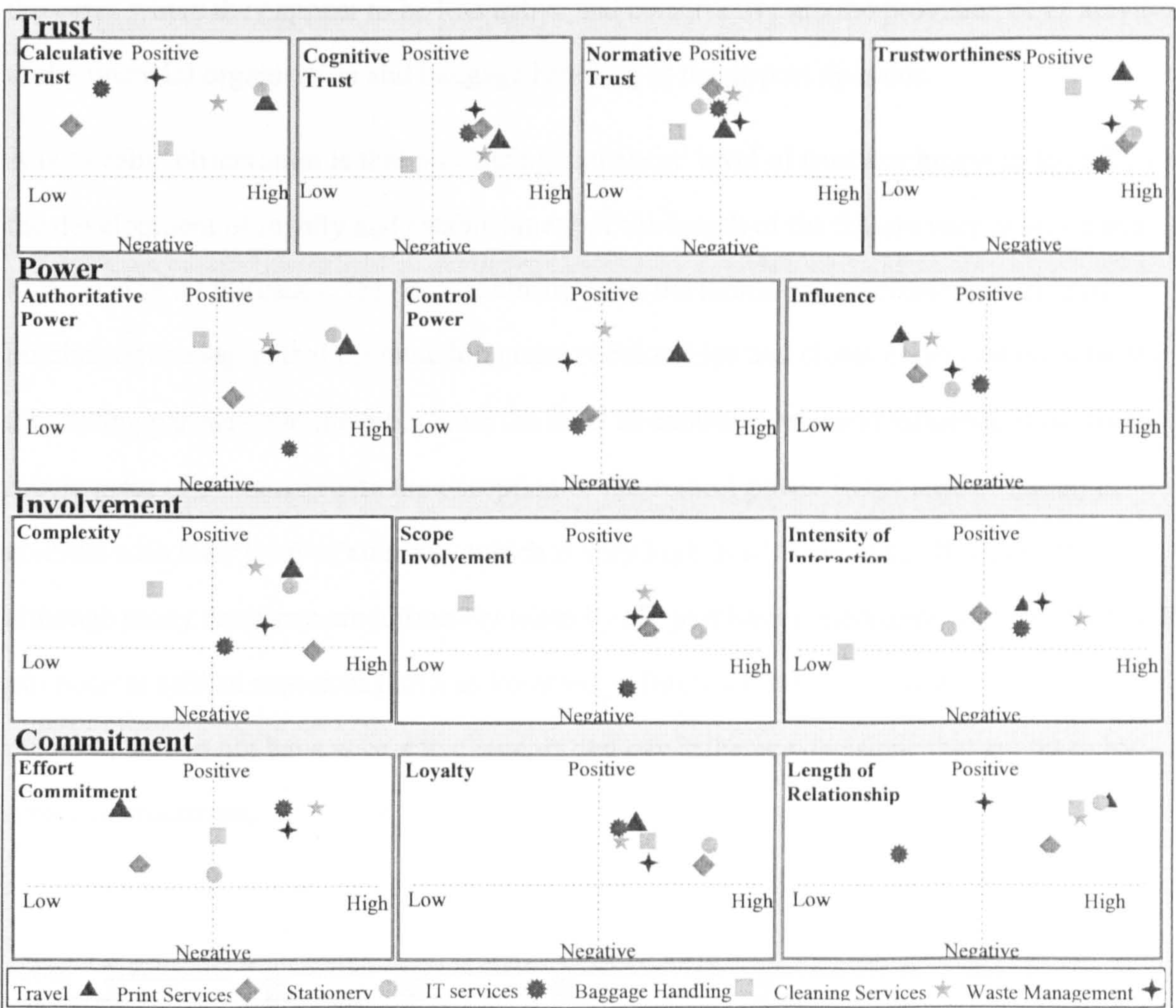


Figure 7.9 Cross case analysis of the role of purchasing in the management of SRs

Purchasing managers have a very high and positive contribution to the development of cognitive trust and trustworthiness between the trading partners in almost all cases, and generally speaking high levels of authoritative power. Their level of influence in decision making however is low something that can be attributed to the fact that the intensity of their interaction with their trading partners is relatively lower than that of the internal customers and suppliers. Exceptions to this are the SRs for cleaning and waste management in which the SD group is actively involved in the every day management of the SR. They appear to be more active and constructive in the SRs for the provision of travel services at the financial organisation and cleaning services and waste management at the airport operator⁶⁵. In contrast the cases where they appear to be less active and constructive are the provision of IT services at the financial organisation and baggage handling at the airport operator.

A noticeable observation is that purchasing managers' level of trustworthiness in the SRs, to the development of loyalty and establishment of the length of the SR are very positive and of high level in all the cases. This can be attributed to the increasing professionalisation of purchasing managers that promote long term relationships and closer collaboration between the trading partners. On the other hand the level of control power and influence is relatively low in most of the cases (with the exception of the control power in the case of travel) in contrast with their level of authority which is very high in all cases. This illustrates that although many decisions are ultimately taken by the purchasing managers, these managers do not possess critical resources (such as knowledge, information) or a central position in the network, and do not have access to channels that can influence decisions that are taken by senior management.

⁶⁵ An interesting observation is that the role of purchasing managers in the management of the SR involving the provision of cleaning services is considered positive and having a great active role in all the dimensions examined followed by the case of travel.

Group analysis: Based on the classification of groups of cases in chapter 6 in terms of the activities conducted by purchasing managers (according to the structural characteristics of the products/services that are exchanged), the group analysis regarding the role of the PD reveals that similar distinctions and patterns exist in terms of their level of involvement and their commitment to the SRs for the four groups. There are some notable differences in terms of the level of power they possess and to a lesser extent in terms of their contribution to the development of trust which are discussed in the next section. Due to the large variety of IT services that are procured by the financial organisation, the contract for this SR is more complicated with distinctive roles of the trading partners in the management of the SRs. For this reason the role of purchasing managers (with the same trading partners) in the management of the IT maintenance and IT network installation are particularly considered. Figure 7.10 outlines these differences and similarities.

It can be seen that for the 1st group (low criticality and asset specificity) the PD has an authoritative and supervisory role, with high levels of power and involvement in the majority of the activities throughout the three stages of the SR and low contribution to the development of cognitive and normative trust, as the SRs are based on clear contract terms. These types of SRs are based on the premise that standardisation and simplification of processes are required, and have the primary objective of reducing the overall cost of the exchange, which is the primary objective of the establishment of group-wide PDs in both organisations. For that reason the PD is solely responsible for the contract management and has great level of involvement in product and process management. SD activities are not evident, nevertheless the purchasing managers work closely with the suppliers to ensure effective delivery of the products/services.

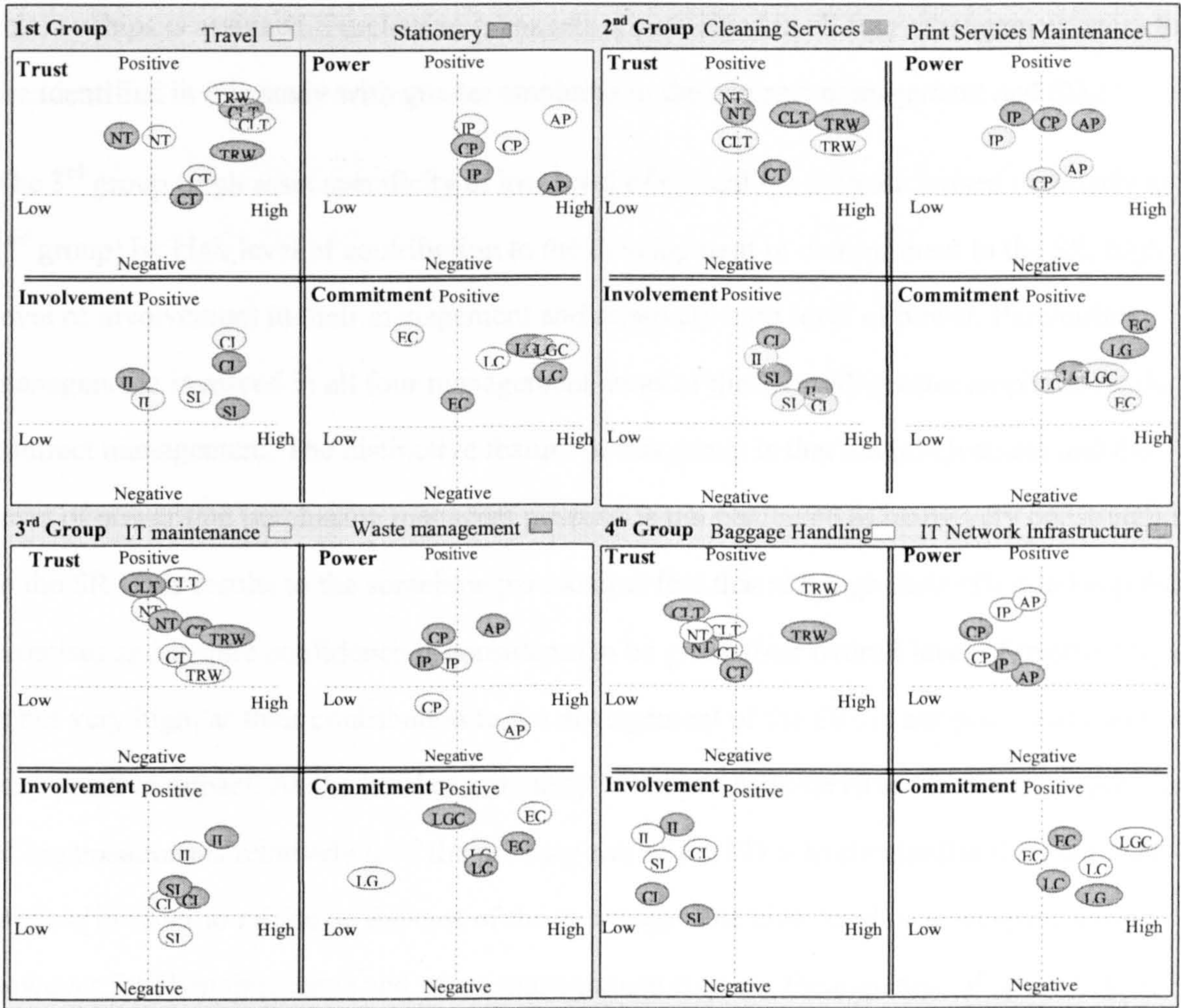


Figure 7.10 Group Analysis of cases

The 2nd group (high criticality & low asset specificity) is characterised by high level of contribution to the development of trust and commitment and high level of involvement due to the evolutionary character of the contracts for both SRs (print as well as the cleaning services). The level of power however is lower than the cases in the 1st group, as the internal customers (the general managers of the airport terminals and IT department of the financial organisation) possess more power in decisions regarding the everyday operations. The PD however took most of the decisions at the pre-contractual and institutional stages of the SRs. Due to the higher level of criticality more care is given in these SRs to the soft aspects of their management. More involvement in the everyday operations of the suppliers and internal customers is observed and greater emphasis in the establishment of the individual working

relationships is assigned. Purchasing managers are involved in all four management areas that are identified in this study with greater emphasis in the contract management and SD.

The 3rd group (high asset specificity & low level of criticality) is characterised (similarly to the 2nd group) by high level of contribution to the development of commitment to the SR, high level of involvement in their management and relatively high level of power. Purchasing managers are involved in all four management areas of the SR with greater emphasis on the contract management. The distinctive feature of this group is that the involvement and the level of power that purchasing managers possess, is not perceived as being very constructive to the SR. This results to the somehow paradoxical fact that although their effort to keep their promises and inspire confidence is considered to be great, their overall level of trustworthiness is not very high, as their contribution to the management of the SRs is not perceived that has a very positive impact. As the level of criticality of the products/services for the core operations of organisations is relatively low, the primary aim of the PD is to standardise their delivery process in order to minimise the cost of the exchange. The high level of asset specificity however for IT maintenance and waste management requires the expertise of specialists in order to ascertain the efficiency of the delivery of the service. Given that the purchasing managers do not have this expertise, they have to rely on either IT managers in the financial organisation, and legal advisor or/and operations managers before they take a decision. This appears to generate confusion in the SRs in terms of the level of authority that the PD should have in these types of SRs and has the result of reducing the level of trustworthiness of the PD in the management of the SR.

Finally the 4th group (high asset specificity & criticality) is characterised by low level of contribution to the development of trust, substantially low level of involvement (at least at the operational stage of the SRs), and limited possession of power in decision making. PDs were involved primarily at the pre-contractual and institutional stages of the SRs, with very limited

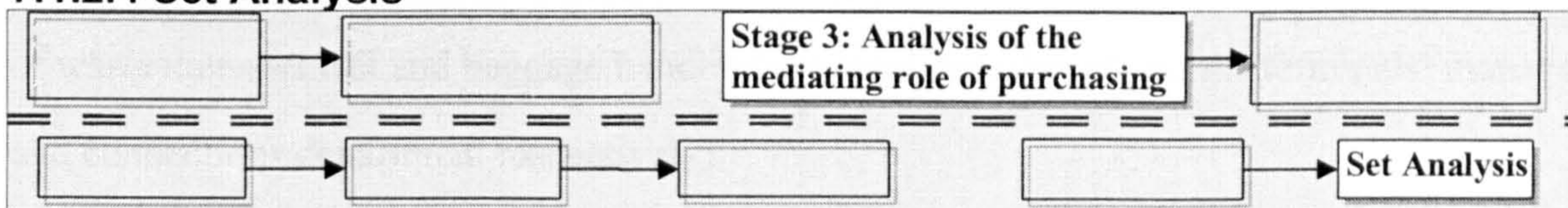
involvement in the everyday operations. Due to the highly specialised nature and technical expertise that the exchange of these products/services entails and their inherent criticality for the success of the operations of the organisations, the IT department of the financial organisation and the dedicated connections department of the airport operator possess higher level of power and have greater involvement in the management of the SRs than the PDs.

Based on the results of the analysis of data collected in all case studies and the observations that were made which support propositions P2i and P2ii, the following hypotheses can be raised about the impact of asset specificity and criticality of the products/services exchanged on the role of purchasing managers in the management of SRs that can be tested with statistical techniques.

Hypothesis 4. *The level of asset specificity of a product or service exchanged in a SR influences the role that purchasing managers play in the management of the SR in that the higher the level of asset specificity, the lower their level of involvement is in their management.*

Hypothesis 5. *The level of criticality of a product or service exchanged in a SR influences the role that purchasing managers play in the management of the SR in that the higher the level of criticality, the lower their level of involvement is in their management.*

7.1.2.4 Set Analysis



With the analysis of data at different levels it has been posited that the role of PDs varies significantly within and across different organisations depending on the level of asset specificity and criticality of products/services exchanged. Therefore the tautological conclusion that PDs do not have a uniform role in the management of SRs can be reached with certainty. As the analysis revealed, a homogenous behaviour therewithal would not have a beneficial use and would be functionally very difficult. For that reason the set analysis highlights the patterns of similarities and differences that have been identified in the previous

discussions, based on the characteristics of the products/services exchanged and on the organisation and infrastructure of their PDs. The analysis is structured around the propositions that were raised in chapter 4, which refer to the role of purchasing managers in SRs.

Trust

Calculative trust: In chapter 4 the following proposition was set forth in terms of the contribution of the PD to the development of calculative trust:

P3ai. Purchasing managers are actively involved in activities that contribute to the development of calculative trust between the parties involved in a SR

The within-case analysis of the way that purchasing managers conduct certain activities in SRs revealed that the purchasing managers are actively involved in activities to assess the reputation of their suppliers and in the establishment of contractual safeguards in all the cases that were analysed. For the SRs of the 1st and 2nd group in particular (especially the 1st) the level of their contribution to the development of calculative trust is remarkably high. The SRs of the 3rd and 4th groups on the other hand are characterised by significantly lower level of contribution to the development of calculative trust. These SRs involve exchanges of products/services with high asset specificity that require the technical expertise of interested parties and internal customers (in the case of the IT services, the IT department and in the case of waste management and baggage handling the legal department and the terminals' managers and connections department respectively).

Cognitive trust: In terms of the contribution of the PD to the development of cognitive trust the following proposition was set forth:

P3aii. Purchasing managers are involved in activities (and conduct them in a way) that contributes to the development of cognitive trust between the parties involved in a SR

The role of purchasing managers in terms of their performance and contribution to the development of cognitive trust (which is related to the closeness of the relationship between the participating actors) is comparatively similar to all the cases. This marks a well established

policy of both PDs in the two organisations to develop closer more collaborative SRs. It should be noted however that the impact of their contribution is not very positive (falling short of the predetermined targets) for all the cases, something that can be attributed to the complicated and some times discordant role of the PDs. On one hand they have the fundamental objective of reducing the supply costs for their organisations, which leads them to put a lot of effort into standardising the existing processes, reducing the supply base for certain products/services, and on the other hand they need to escalate their effort into developing the personal relationships they have with their trading partners. This makes their effort to understand their partner's needs and expectations, to foster full and open communication and provide unconditional help to their partners sometimes difficult.

Normative trust: In terms of the contribution of the PD to the development of normative trust the following proposition was set forth:

P3aiii. Purchasing managers engage in activities (and conduct them in a way) that contributes to the development of normative trust between the parties involved in a SR.

Similar to the contribution of purchasing managers to the development of cognitive trust, their contribution and performance in terms of the development of normative trust is consistent in all the SRs examined. Even though this contribution is very positive for all the cases, it is not very extensive, as many of the SRs examined are fairly new and thus difficult to assess the level of normative trust that exists. Given that the two organisations outsource a large variety of different products/services, the effort and ability of purchasing managers to understand the norms of every industry is somehow limited. Nevertheless, with the activities they conduct (mainly at the pre-contractual and institutional stages of the SRs), it can be said that they do work towards developing common norms in the SRs.

Trustworthiness: In terms of the contribution of the PD to the development of trustworthiness the following proposition was set forth:

P3aiv. Purchasing managers conduct their activities in such a way as to enhance their trustworthiness in the management of SRs

Contrary to cognitive and normative trust, the level of trustworthiness of the PDs varies across the cases that were studied. As the trustworthiness was defined as the ability to keep promises and inspire confidence, the trustworthiness of the PDs can be seen as a barometer of their overall role in the SRs. In all the scatter diagrams that illustrate the level of trustworthiness it can be clearly seen that although purchasing's contribution is very high, the SRs in which the PD is perceived to be more trustworthy are the one that involves the provision of travel and the one that involves the provision of baggage handling, i.e. two cases where the deliverables are very clear and easily measurable and there is not a confusion in terms of the delegation of the responsibilities of the parties involved. In the cases of IT services (where conflicts arise with the internal customers in terms of the level of authority) and stationery, the type of deliverables respectively, the trustworthiness of the PD is perceived to be lower.

Power

Authority: In terms of level of authority of the PD the following proposition was set forth:

P3bi. Purchasing managers have a high level of authority over decisions in SR management due to their organisational position.

The analysis of the SRs revealed that the level of authority of purchasing managers is very high in the first three groups of cases. Only in the cases that involve exchange of products/services with high levels of asset specificity and criticality (e.g. baggage handling, IT network infrastructure) their level of authority is somehow limited. As discussed in the previous sections, this authority is not always perceived as being very constructive to the management of the SRs by their trading partners. The managers of the IT department of the financial organisation for example expressed several times the opinion that the PD should not be involved in certain areas of the contract for the provision of IT services. Their perception is that the knowledge of purchasing managers is limited and their approach to the management somehow one-dimensional and inflexible.

Control Power: In terms of the contribution of the PD to the development of control power the following proposition was set forth:

P3bii. Purchasing managers wield a high level of control over decisions in SR management

Similar to the level of authority, the level of control that the PDs have varies along with the levels of asset specificity and criticality of the products/services exchanged. For the products/services with low asset specificity and criticality, the control that purchasing managers wield over decisions is very high, as the PD has a very central position in the network of information flows between the actors in the SR. In the cases though where the asset specificity and/or criticality is high, the level of control is fairly lower. An interesting observation is that the level of control that purchasing managers have is not perceived as being very positive in all the SRs.

Influence: In terms of the level of influence of the PD in decision making the following proposition was set forth:

P3biii. Purchasing managers wield a high level of influence over decisions in SR management

Influence is defined as a function of the number of 'ties' an actor has in the relationship and its position to disseminate information. In the cases where the PD possesses high level of authority, the level of influence of purchasing managers is obviously not very high as many of the decisions are taken by them. In cases where their authority is not high (as the IT services, print services), although the purchasing managers have a high level of centrality in the SRs, their influence in decision making is very low, mainly because of their lack of expertise related to particular technical issues of the exchange. The level of influence that the IT managers wield for example for the supply of network printers, or the level of influence of the legal department of the airport for the implementation of certain policies regarding the management of waste is significantly higher than that of purchasing managers.

Involvement

Complexity: In terms of the contribution of the PD to the complexity of the SRs the following proposition was set forth:

P3ci. Purchasing departments operate in a way that enhances the complexity of SRs.

The contribution of the PDs to the complexity of SRs is reflected in the organisational skills and rank of the purchasing managers that are involved in their management. It can be seen from the diagrams of the organisational structure of the two companies (Figures 6.2 and 6.4) that both PDs, even though they have been established as independent departments relatively recently, they are still sub units of the operations departments of the organisations. The organisational rank of the chief purchasing managers has risen over the last years, but not to the extent that they can report directly to executive managers.

The cases of IT services and print services of the financial organisation are the two SRs with the higher levels of complexity, as each contract involves the exchange of a multitude of technologically complex products/services. The complexity of the SRs for IT services in particular is greater, as apart from the PD and two suppliers (which are themselves very complex organisations) the interested parties include the IT department of the financial organisation and the ultimate users of the services. For that reason a specialised group of trained purchasing managers is responsible for the contract.

Scope Involvement: In terms of the contribution of the PD to the scope of the SRs the following proposition was set forth:

P3cii. Purchasing departments devote all their resources to managing SRs and contribute to the establishment of the scope of the SR

The analysis of data identified that the PDs studied in this thesis contribute to a great extent to the establishment of the scope of all the SRs. Exceptions are the case of baggage handling, in

which a separate department has been created to manage the operational stage of the SR⁶⁶, and the case of IT services in which their contribution is perceived as not being very constructive.

Both PDs were formed with the primary objective of reconstructing and standardising the fragmented procurement processes of the organisations. In this direction they employ a large number of purchasing managers. Their organisational structure is very elaborate, structured around certain business areas in the airport operator and around strategic objectives in the financial organisation (Figures 6.2 and 6.4). In terms of the technology (or capabilities) that they transfer to their trading partners however, they fall short as their role is to act as mediators or facilitators of the transfer rather than to enhance the knowledge or technology transfer amongst the trading partners. Their knowledge of technical details and peculiarities of the products/services exchanges is limited to the processes that facilitate their supply. For that purpose the contribution of the internal customers to the scope of the SR is higher in the case of the exchange of products/services with high levels of asset specificity and criticality.

Intensity of Interaction: In terms of the intensity of interaction of purchasing managers with their trading partners the following proposition was set forth:

P3ciii. *Purchasing managers exhibit high level of intensity of interaction with their trading partners.*

The head offices of the PDs are not located close to either the internal customers or suppliers of the SRs (this would be practically infeasible for all the cases). The purchasing managers however do not have an established working area and visit on a daily basis the sites of internal customers or suppliers. In that respect, they exchange and transfer information between the actors about certain issues of the SRs. Contrary to the dimensions of complexity and scope of the SR, the intensity of interaction of purchasing managers with their trading partners is higher

⁶⁶ Although the connections department is a separate department that does not report directly to the PD, its formation was decided and organised by the senior purchasing manager responsible for utilities in the organisation. It can be said therefore that although the PD does not dedicate any resources at the operational stage of the SR its contribution to the complexity of the SR has been very significant.

in the SRs of IT services and print services than for travel and stationery. On the other hand the level of the intensity of interaction of purchasing (SD) managers of the airport operator with their trading partners is obviously higher in the cases of cleaning services and waste management than the SR for baggage handling, in which the level of criticality is higher.

Commitment

Effort: In terms of the PDs' effort to develop the SRs the following proposition was set forth:

P3di. *Purchasing managers exhibit high level of effort with their actions to maintain the SR*

From the discussion of the role of PDs in the individual SRs it is observed that purchasing managers have the intention to provide unconditional help to all the suppliers and adapt their policies as the business environment changes, in accordance with the purchasing strategies of the two organisations to build strong collaborative SRs with certain suppliers. The very well structured SD programme for example of the airport operator with the frequent workshops that they organise to train managers from all the interested parties, demonstrates the level of effort being put by the PD to maintain and develop the SR. Similarly, even though the PD of the financial organisation does not have a planned SD programme, the purchasing managers are constantly liaising with their suppliers to solve particular problems and streamline the operations of the SR according to their strategy. Antagonistic behaviour on behalf of the purchasing managers has not been observed in their contacts with the suppliers' managers. To the contrary they appear to exhibit willingness to receive their ideas. This however has not always been identified in the dyadic relationships with the internal customers. On several occasions in the interviews with the internal customers (in particular for the SRs of IT services and stationery in the financial organisation) comments were made regarding the autocratic style that many purchasing managers adopt and lack of willingness to discuss their ideas.

Loyalty and Length of SRs: In terms of the level of loyalty that purchasing managers exhibit in the SRs and their contribution to the establishment of the length of the SRs the following propositions were set forth:

P3dii. *Purchasing managers are actively involved in activities that indicate loyalty to suppliers.*

P3diii. *Purchasing managers are actively involved in deciding and determining the length of a relationship with a supplier.*

The purchasing and supply strategies of the two organisations (presented in chapter 6) to consolidate their supply bases and form strategic partnerships with certain suppliers and the dedication of the PDs to implement them, provides evidence of the degree to which the PDs work towards the establishment of long term SRs with their trading partners. Purchasing managers have not exhibited opportunistic behaviour throughout the period of the data collection, and as expressed by their trading partners have always maintained their strategy to develop the BR with the suppliers. Finally, in terms of the establishment of the length of the SRs, the contribution of the PD has been pivotal for the majority of the cases. Table 7.2 summarises the role of purchasing in different SRs as it has been revealed through the analysis of the empirical research

	1st Group Low asset specificity & low criticality	2nd Group Low asset specificity & high criticality	3rd Group High asset specificity & relatively low criticality	4th Group High asset specificity & high criticality
Trust				
Calculative	High Contribution / High Performance Focus on contractual safeguards / reputation	High Contribution / High Performance Focus on contractual safeguards / reputation	Medium Contribution / High Performance Supporting role to departments with technical expertise	Low Contribution / High Performance Supporting role to departments with technical expertise
Cognitive	High Contribution / Medium Performance Focus on developing better SR with trading partners but falling short of targets due to conflicting objectives	High Contribution / High Performance Focus on developing better working relationship with trading partners but falling short of targets due to conflicting objectives	High Contribution / High Performance Focus on developing better working relationship with trading partners but falling short of targets due to conflicting objectives	High Contribution / High Performance Focus on developing better SR with trading partners but falling short of targets due to conflicting objectives
Normative	Medium Contribution/ High Performance Great understanding of market norms, great effort to understand trading partners' requirements	Medium Contribution / High Performance Little understanding of market norms, but great effort to understand trading partners' requirements	Medium Contribution/ Medium Performance Little understanding of market norms but evidence of effort to develop conducive working environment	Medium Contribution/ Medium Performance Little understanding of industrial norms but effort to develop conducive working environment
Trustworthiness	High Contribution / High Performance Great effort and success in gaining the confidence of partners in their actions	High Contribution / High Performance Great effort and relative success in gaining the confidence of partners	High Contribution / Medium Performance Great effort to gain partners' respect but failure to ameliorate internal dynamics	Low Contribution / Medium Performance Low effort to gain partners' confidence but high level of trustworthiness
Power				
Authority	High Level / Relatively Positive Impact Focus on standardisation of processes	High Level / Relatively Positive Impact Attempts to compromise objectives between PDs and internal departments	Medium Level / Negative Impact Great differences between PDs and internal departments	Medium Level / Neutral Impact Neutral stance of PD
Control	High Level / Relatively Positive Impact Concentration of info. in PD databases	Medium Level / Relatively Positive Impact Share of control with the internal departments	High Level / Negative Impact Share of control with internal departments. Creation of conflicts	Low Level / Neutral Impact Control of resources through proxy department
Influence	Very Low level Attempts of internal departments to wield influence on decisions taken by the PD	Medium level/Positive Impact Internal departments attempt to wield influence on decisions taken by PDs	Low Level / Negative Impact Lack of technical knowledge limits the positive contributions of the PDs	Medium Level / Neutral Impact Specialists wield great level of influence on decision making
Involvement				
Complexity	High Level / Positive Contribution Involvement at all levels and stages of SR	High Level / Very Positive Contribution Involvement at all levels and stages of SR	High Level / Medium Contribution Involvement at all levels. Conflicts with internal depts	Low Level / Positive Impact Only at the pre-contractual and institutional levels
Scope	High Level / Positive Contribution Large number of purchasing managers involved	High Level / Positive Contribution Elaborate structure around business areas	High Level / Medium to Negative Contribution Duplication of roles with internal departments	Low Level / Positive Contribution Involvement through specialised department
Intensity	High Level / Positive Contribution Every day involvement	High Level / Positive Contribution Everyday involvement	High Level / Positive Contribution Everyday involvement	High Level / Positive Contribution Involvement through specialised department
Commitment				
Length	High Level / Positive Contribution Devotion of resources that promote long term SRs	High Level / Positive Contribution Devotion of resources that promote long term SRs	High Level / Medium to Negative Contribution Devotion of resources that promote long term SRs	Low Level / Positive Contribution Devotion of resources that promote long term SRs
Loyalty	High Level / Positive Contribution Intention to develop a stable SR	High Level / Positive Contribution Intention to develop a stable SR	High Level / Positive Contribution Intention to develop stable SR	High Level / Positive Contribution Intention to develop a stable SR

Table 7.2 Role of purchasing in different SRs

7.1.3 Review and discussion of findings

The role of purchasing in the management of SRs has been conceptualised in terms of four variables: trust, power, involvement and commitment to the SRs. Initially the activities and certain factors that may influence the nature of a SR were theoretically associated with sub-dimensions of these four variables. Then an analysis into how purchasing managers conduct these activities and how they implement certain factors that can influence the nature of a SR (as well as how well they conduct/handle them), was conducted to obtain a complete view of their role in SRs. In order to identify the ‘actual’ role of purchasing managers, the links between the perceptions of purchasing managers’ trading partners and their own perceptions of their role, as well as the organisational context in which the SRs develop was also explored. The seven case studies indicated patterns of similarities and certain variations of the role of PDs in the management of the different SRs. Overall the PDs appear to have a high level of authoritative power in decision making (especially at the operational phase of SRs) and a positive contribution to the development of trust and commitment amongst the trading partners. Their influence and level of control over decisions especially at the operational phase of the SRs however is limited, mainly because of their low level of intensity of interaction with their trading partners at this stage, but also because of their lack of expertise and information sharing for certain SRs.

The thesis takes a stance that the role of purchasing in SRs cannot be studied in isolation. The business context of SRs within which purchasing managers operate as well as characteristics of the products/services that are exchanged are significant in shaping that role. The analysis of the empirical data indicates that purchasing’s role is different in (a) SRs that involve exchange of products/services with different levels of asset specificity and criticality, and (b) organisations with different organisational structure. A possible explanation for those differences taken from contingency theory is that the management approach has to fit the specific context within which SRs are embedded.

The size (which is an indication of the complexity of a PD) and the level of the available infrastructure furthermore emerged as salient factors that can influence the role that purchasing managers may have in SRs. A comparison between the two PDs in the financial organisation and the airport operator provided evidence that the more complex a PD is and the higher its level of infrastructure, the greater its ability may be to develop and communicate clear guidelines for certain activities. Figure 7.11 presents the key characteristic of the role of PDs, in the four distinctive groups of SRs that have been identified in this research.

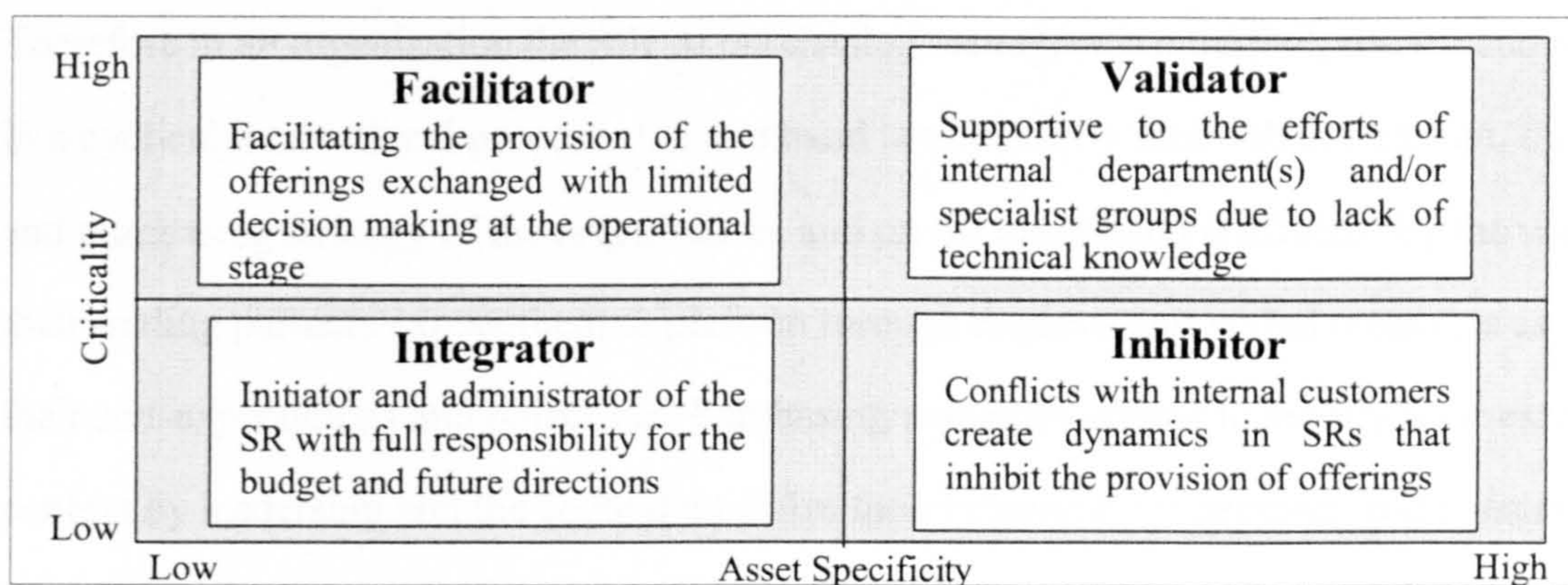


Figure 7.11 Profiles of the ‘actual’ role of purchasing in different SRs

Assistant perspectives of leadership, stakeholder thinking and social role theory can provide consistent means for studying the role that purchasing managers adopt in different types of SRs, by taking into account both the role defined by the purchasing strategy of the focal organisations and the differentiated roles of the purchasing managers emerging from the data with the aim to capture the essence of their managerial behaviour in SRs (i.e. their ‘actual’ role).

Role theorists such as Kahn et al. (1964) suggest that in a social context the behaviour and role of all individuals affects and at the same time is influenced by the expectations of others.

Transferred to a SR business environment, their argument is translated that all members of a SR may depend on purchasing managers and their work performance in some way. They may be rewarded by their work or they may require their work in order to perform their own job

and develop beliefs, attitudes, and expectations about what the purchasing managers should or should not do as part of their role. These expectations may include preferences for specific acts or personal characteristics of style. They also provide standards which the purchasing managers' performance is evaluated against. Communication concerning these expectations is sent to the purchasing managers which in order to bring conformity with the expectations of others may or may not be legitimate. They may be *'prescriptive, punitive or benevolent, subtle and indirect, or direct and blatant'* (Kahn et al., 1964) (p.15).

Therefore in an organisation the role of purchasing managers is modified, shaped and refined in a cyclical interactional process. On one hand is affected by their job description, the culture, and purchasing strategy of the organisation, and on the other hand is affected by the way that their trading partners expect them to perform through requests and verbal messages as well as their self-expectations and objectives. Purchasing managers appear to modify their external context by leadership and the context modifies their behaviour by demands and constraints (their lack of specialised knowledge for specific products/services). The importance of the organisational context that includes the culture, structure and infrastructure of the organisations is also highlighted. The airport operator's purchasing managers for example appear to have a more proactive role in SD processes than in the financial organisation.

7.2 Impact of the role of purchasing on SRs' performance (Q4)

This research question investigates the potential association between problematic and successful SRs and the role of PDs in these SRs (as described earlier in the chapter) by exploring the following proposition that was raised in chapter 4:

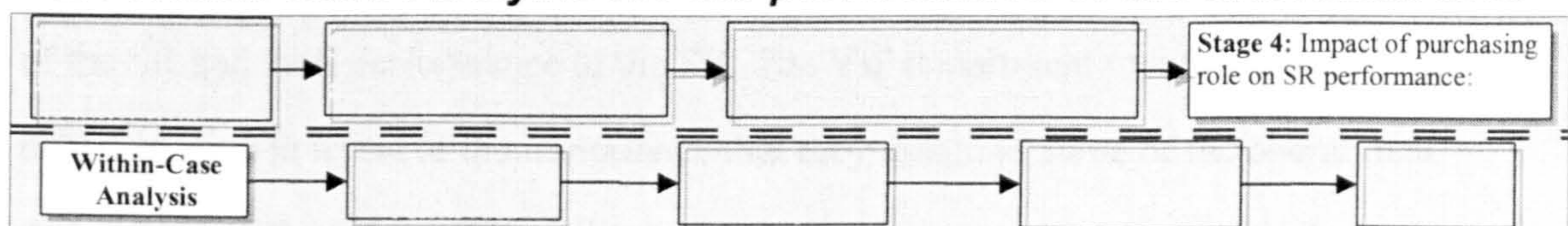
P5. *The role of purchasing in the management of a SR has a significant evident impact on the performance of that SR*

In order to answer how the role of PDs influences the performance of the SRs, data from the two structured surveys are primarily utilised. The process is complimented by analysis of business reports of the two focal organisations that reflect the operational and financial

performance of the SR, as well as comments made by the managers that are involved. The analysis refers to the inter-departmental level of the SRs and adopts deductive logic.

Initially within-case analysis is conducted to assess the performance of the individual SRs using the **RelPerf** framework that was developed in chapter 4. In this direction the relative disparities that exist between the involved departments, in terms of their perceptions of the nature of the SR, their own performance in the SR and their partners' performance in the SR are calculated. As discussed in chapter 4, the nature of the SRs can be determined by the individual managers' perceptions of the importance of certain activities (across the three dimensions of SRs) and of factors that are considered to characterise it (Table 4.4). The rationale is that the smaller the gaps between departments' perceptions, the better the performance of the SR. The performance of the individual SRs is presented using radar diagrams in order to illustrate the extent of the disparities that exist in the perceptions of the involved managers. In the visual representations of the performance of the SRs the calculated gaps are expressed as absolute percentages of the differences of medians of the scores of importance of the factors that may influence the nature of a SR and of the activities that purchasing managers conduct in the SR, and of the medians of the scores of the performance of the purchasing managers and the other involved parties in terms of these factors and activities. The calculated performance of the SRs with the RelPerf model is complimented by a reference to the operational and financial performance of the individual SRs (as observed in operational and financial reports provided by purchasing managers of the two organisations). This is followed by a cross-case analysis to examine the potential association between problematic and successful SRs and the role of PDs in these SRs.

7.2.1 Within Case Analysis for the performance of the individual SRs



7.2.1.1 Performance of the SR for the provision of travel services

The performance of the SR for the provision of travel is illustrated in the radar diagrams of

Figure 7.12, using data from the two structured surveys.

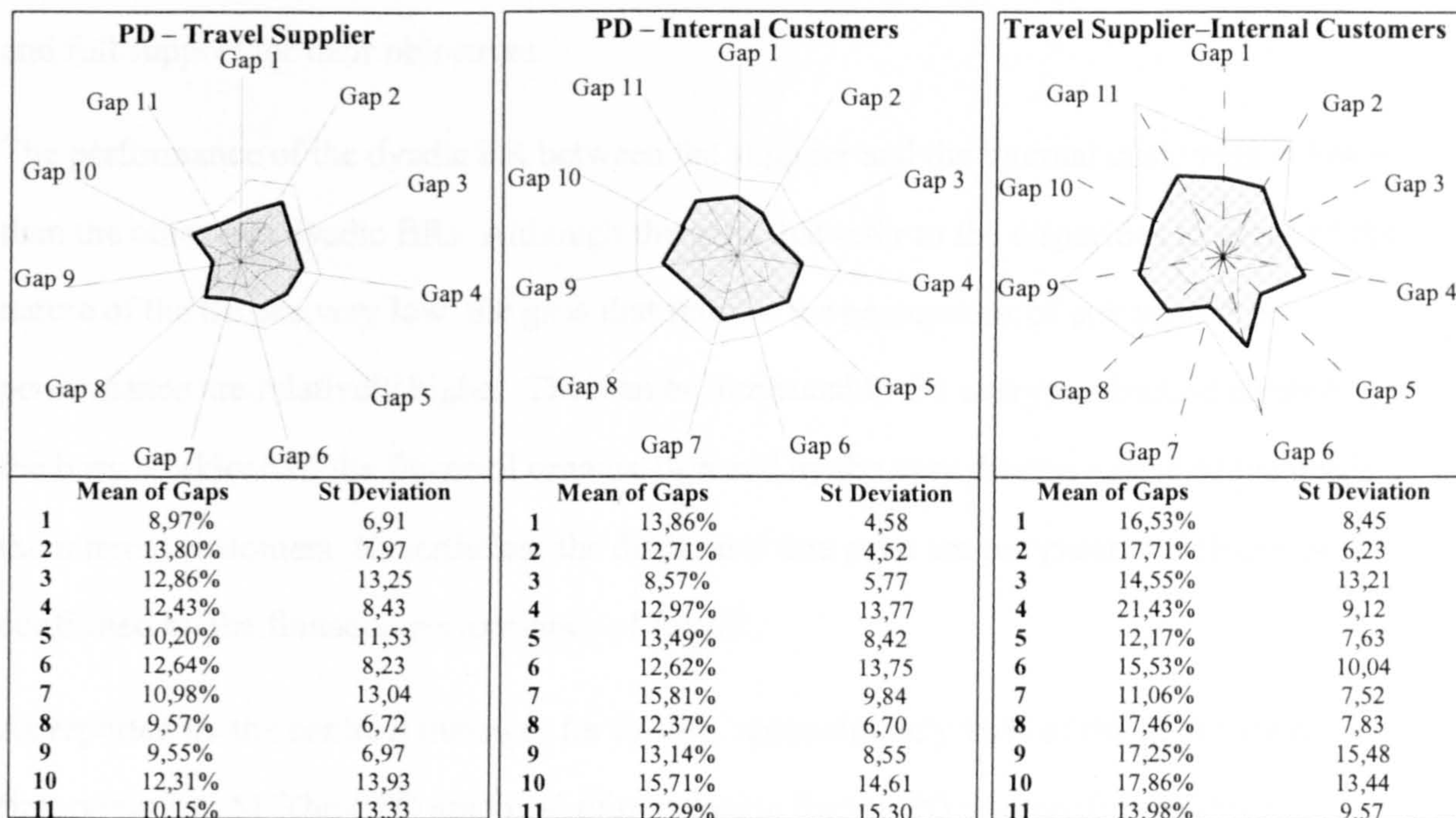


Figure 7.12 Performance of the SR for the provision of travel services

As it can be seen, the performance of the BR between the PD and the supplier's sales department is remarkably good with very low disparities in terms of their perceptions of the nature of the SR and their performance to the SR. There are very few misunderstandings and conflicts in the working relationship between the parties of these two departments, as the SR is built around a very clear contractual framework. Both parties express clear understanding of their trading partner's requirements and put a lot of effort to solve problems that arise in the every day operations of the BR.

The performance of the BR between the PD and the internal customers is equally very good with great level of congruence between the parties in terms of their perceptions of the nature of the SR and their performance to the SR. The VIP department representative expressed a different view in terms of the importance that they assign to some of the operational dimensions of the SR (e.g. flexibility in booking arrangements and control of certain

processes). As the purchasing strategy to standardise travel throughout the organisation has been authorised and approved by the senior executive managers of the organisation, there is great understanding on behalf of the VIP managers of the implementation tactics of the PD and full support for their objectives.

The performance of the dyadic BR between the supplier and the internal customers is lower than the other two dyadic BRs. Although the gaps that refer to the disparities in terms of the nature of the SR are very low, the gaps that refer to the perceptions of one another's performance are relatively higher. This can be attributed to the everyday friction created by the busy workload of the financial organisation and by the very diverse nature of the needs of the internal customers. Nevertheless the disparities that exist are not great, which can be confirmed by the financial performance of the SR.

As reported by the contract manager for the SR, approximately 95% of the SLAs are met (interview 1.6: 5). The CPO and head of purchasing for the PD also confirmed that the financial organisation has managed to save more than £1 million in the first financial year that the SR exists. As the PD has a very influential (but positive) role with great levels of authoritative power in the in the management of the SR, it can be said that the purchasing managers act as a facilitating mechanism for the provision of travel to the internal customers. Based on the gap analysis and the operational and financial performance of the SR, it can be said therefore that the SR has been very successful.

7.2.1.2 Performance of the SR for the provision of print services

The performance of the SR for the provision of print services is illustrated in the radar diagrams of Figure 7.13.

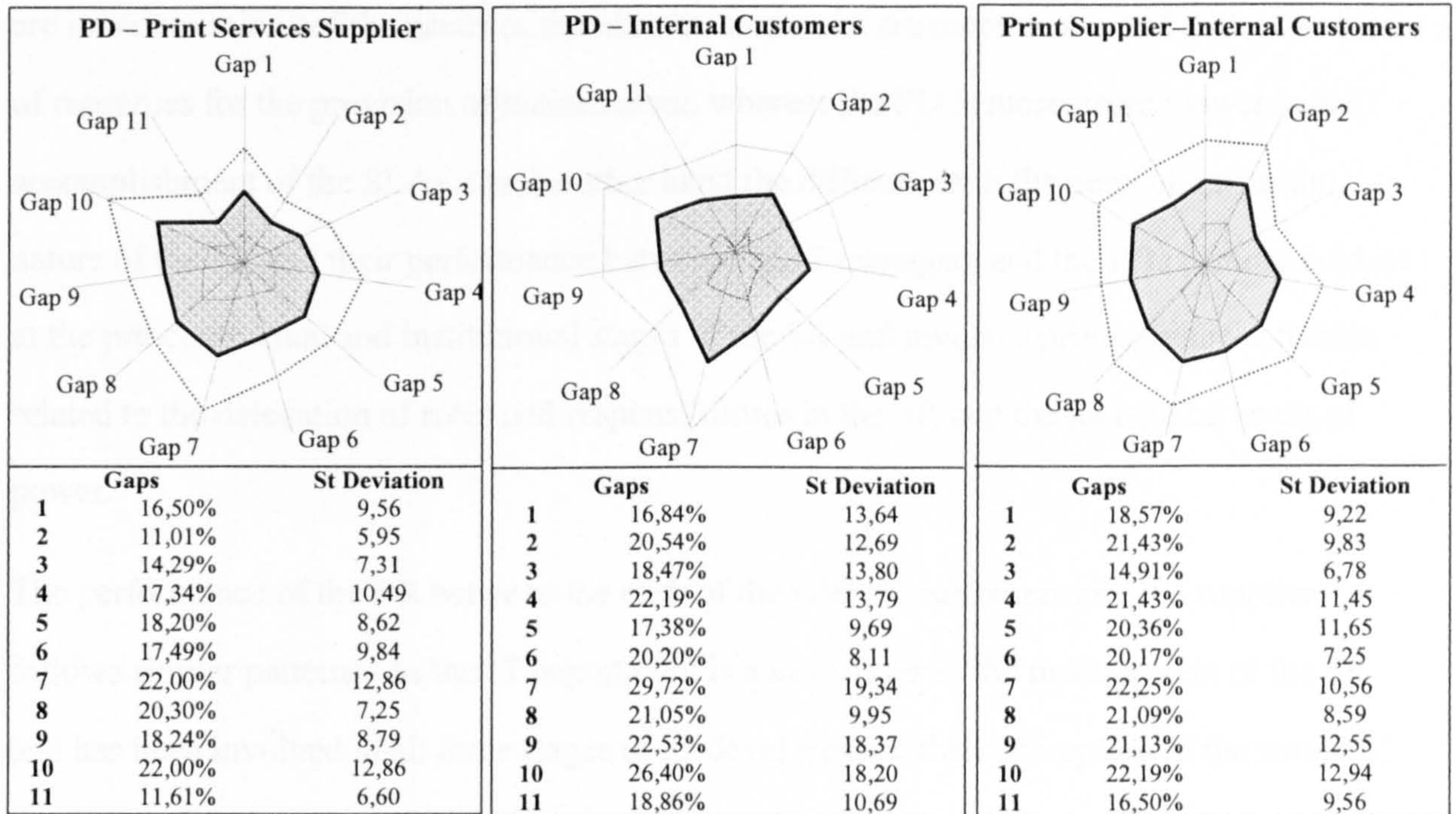


Figure 7.13 Performance of the SR for the provision of print services

The performance of the BR between the PD and the supplier of print services is characterised by relatively low disparities in terms of each party’s perceptions of the nature of the SR and their perceptions of their (and their trading partner’s) performance. The SR for print services is the oldest SR of those studied and as a result the differences in the perceptions between the two parties have diminished, especially after the reassessment of the SR and its incorporation into the general purchasing agenda of the financial organisation. Both parties commit a large number of their resources into maintaining the working relationship at the standards set at the institutional phase within an operational framework that is characterised by transparency and mutual respect.

The BR between the PD and the internal customers (the IT and facilities departments) is substantially different. As the facilities department is involved only at the operational stage of the SR for the provision of maintenance of desktop printers, disparities between their perception of the nature of the BR with the PD and their performance to the SR exist only in those activities and factors related to the operational stage of the SR. The facilities department

are more conscious of the needs of the ultimate users and are more concerned with allocation of resources for the provision of maintenance, whereas the PD is more geared towards the accomplishment of the SLAs. On the other hand the differences in the perceptions of the nature of the SR and their performance between the IT managers and the PDs is more evident at the pre-contractual and institutional stages of the SR and involves primarily the activities related to the delegation of roles and responsibilities in the SR and the associated levels of power.

The performance of the BR between the each of the internal customers and the supplier follows similar patterns. As the IT department is a key player in the management of the SR and has been involved in all three stages of its development, their perception of the nature of the SR is relatively congruent with that of the supplier. There are some notable differences in terms of the way they view each other's performance, but these can be attributed to a particular problem that arose recently when a lack of supply of desktop printers was observed.

The operational performance of the SR has improved dramatically over the last two years. The evidence provided by the senior purchasing manager for SD (interview 1.3: 5) indicates that 80% of the major SLAs have been accomplished for the last two years. The budget of the SR for the last year however has been exceeded by 10% due to overspending in the areas of quality assurance and SD.

7.2.1.3 Performance of the SR for the provision of stationery

The performance of the SR for the provision of stationery is illustrated in the radar diagrams of Figure 7.14.

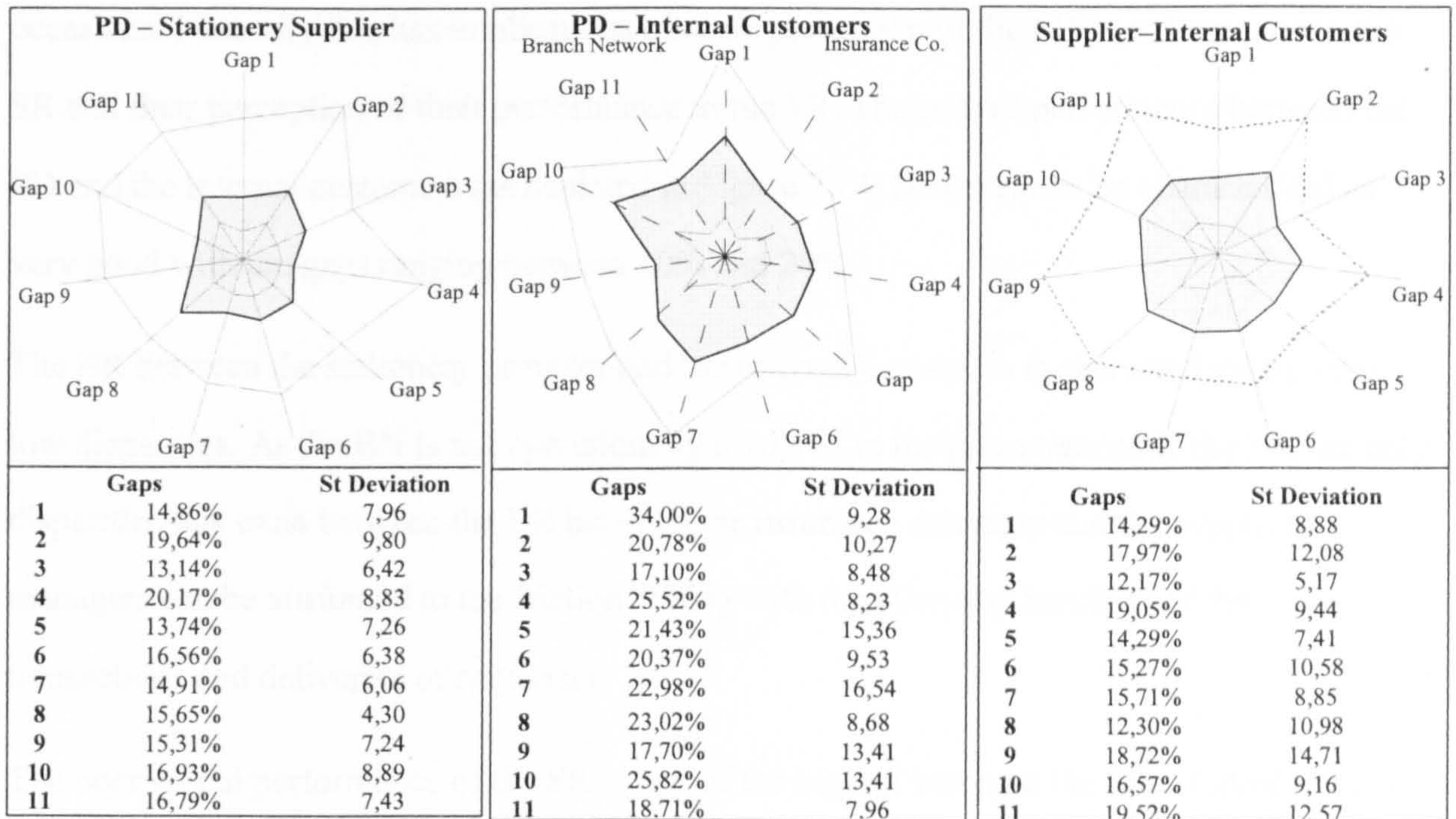


Figure 7.14 Performance of the SR for the provision of stationery

The BR between the PD and the sales & marketing department of the stationery provider is (along with the travel provision) one of the most successful BR of those studied in this thesis. There is great congruence of perceptions between the parties involved about the nature of the BR and each other's performance. As in the case of travel, this SR is based on a very clear contractual framework and both parties provide great effort in the implementation of the management of the SR.

Similarly to the SR for print services, the performance of the BRs that the PD has with the two internal customers is considerably different. As the branch network managers are not involved directly in the management of the SR and consider that the SR should be fully administered and controlled by the PD, the disparities in their perceptions are very low. On the other hand, the insurance company managers express reservations on the strategy of the PD to standardise all the stationery provided to the organisation and feel that the insurance company should maintain its independence and distinctive organisational culture. This is contrary to the purchasing strategy of the entire organisation and as a result friction arises on several

occasions. Naturally this has implications on their perception of the PD's performance to the SR and their perception of their performance to the SR. The overall performance between the PD and the internal customers (as depicted in Figure 7.14) however can be characterised as very good with the gaps ranging between 10% and 20%.

The BR between the stationery provider and the internal customers is characterised by very low disparities. As the BN is not operationally involved in the management of the SR, the only disparities that exist between the BR between the insurance company and the suppliers' managers can be attributed to the friction arising with the everyday handling of the transactions and deliveries of stationery.

The operational performance of the SR is one of the highest amongst the SRs studied in this thesis with approximately 95% of the SLAs being accomplished (interview 1.3: 5). The branch network manager as well as the procurement manager of the insurance company confirmed that there are 'black holes' in the budget of the SR, mainly due to the difficulty in administering the provision for the entire network of branches and due to the insistence of the insurance company to procure certain items independently.

7.2.1.4 Performance of the SR for the provision of IT services

The performance of the SR for the provision of IT services is illustrated in the radar diagrams of Figure 7.15.

The three partnering companies are all large corporations with global businesses and independent agendas, and each has great purchasing and selling power. As a result each organisation attempts to impose its will on the other two, and this creates tension in the management of the SR. The senior account manager from the IT infrastructure provider said: *"The BR between [the financial organisation] and [the hardware provider] is not entirely that of a true partnership. I think there's a good deal of mistrust in what goes on"* (1.23: 4). He later commented on the BRs with the financial organisation: *"I think there's a feeling that the*

financial organisation will cut everybody’s throat. They are not an easy company to do business with” (1.23: 5). In such a business environment, in addition to coordinating and administering the contracts for the provision of the bundle of IT services, the purchasing managers in the financial organisation must act as a balancing mechanism between the conflicting interests of its suppliers. The contribution of the IT department however in many activities is greater than that of the PD and as such it can also create internal dynamics in the financial organisation.

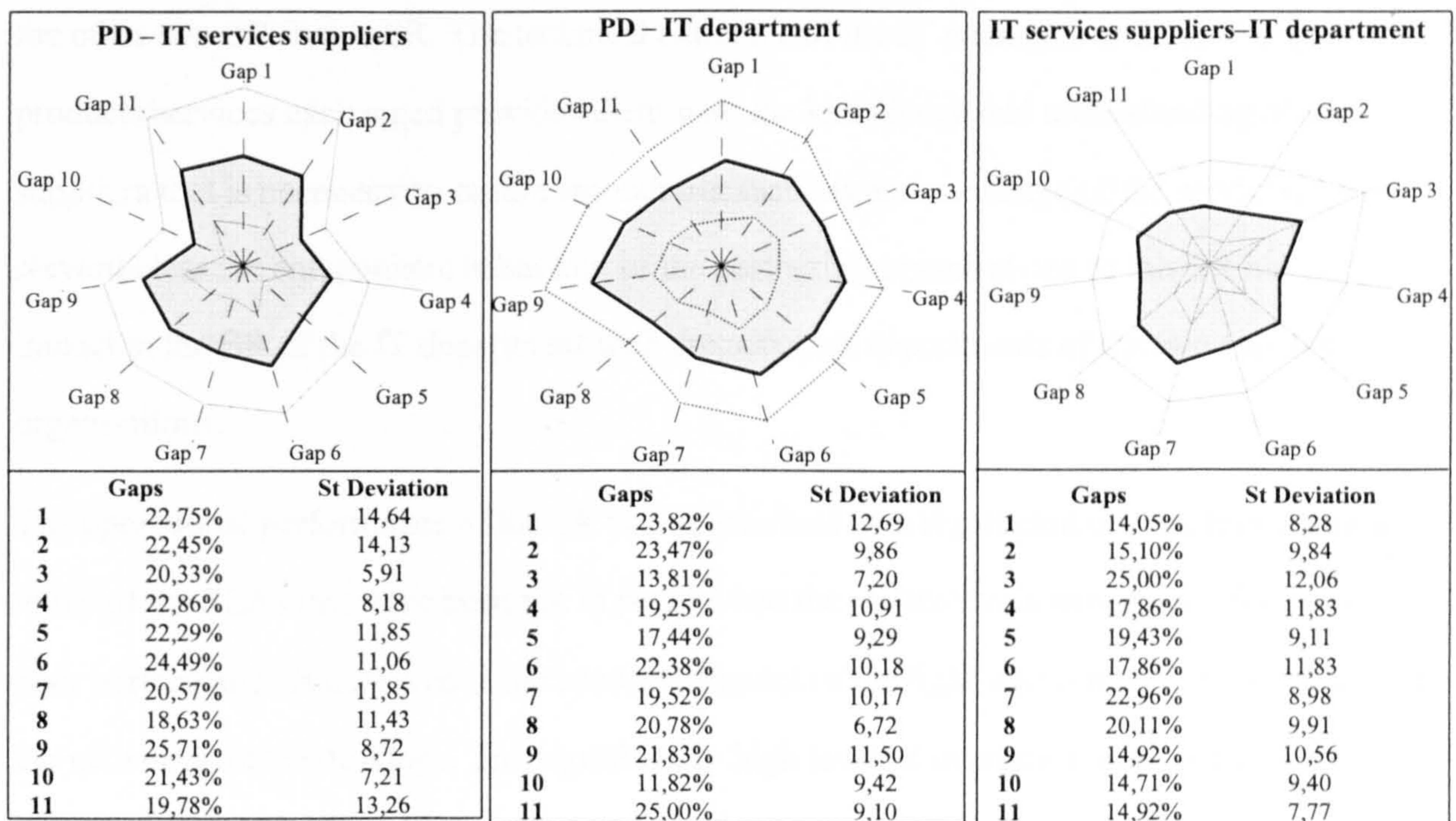


Figure 7.15 Performance of the SR for the provision of IT services

The BR between the PD and the IT department of the organisation is one of the most troubled internal BRs in the financial organisation. There is great confusion in terms of the delegation of roles and responsibilities in several areas (just as in the case of print services) and different approach in terms of their perception of the nature of the SR. As a result the differences observed in terms of their perceptions of each other’s roles and performance in the SR, are the greatest of all the dyadic BRs that have been studied. The general manager for corporate accounts with the hardware provider reinforced this during his interview: “One of the

difficulties we are faced with is that there isn't a single view in [the financial organisation]. The chief executive might express satisfaction with us, but then on one side the PD wants to get the best price and IT the best solution. We don't want to be involved in the tension between IT department and PD. This creates tension between [the financial organisation] and us. There is good will on our part and lots of misunderstandings can be solved if we have a clear organisational framework to work on" (1.20: 3).

The BR between the IT department and the suppliers is characterised by lower disparities than the other two BR in this SR. The technical expertise of the IT managers and familiarity of the products/services exchanged provides them with the knowledge and understanding of the suppliers that is necessary to ensure smooth transactions and exchange of the services. Nevertheless the antagonistic behaviour of the partnering organisations in this SR has an impact in the BR of the IT department with the accounts departments of the two supplier organisations.

The operational performance of the SR is characterised by a significant underachievement in terms of the SLAs that have been put in place when the contract was reassessed. The area that poor performance is observed is the accomplishment of the tight lead times for maintenance of the network and the desktops. The significantly high level of overheads associated with the maintenance of the desktops and the IT network on behalf of the suppliers, results in major discrepancies in terms of the individual companies' appreciation of the total costs of the SR and according to the CPO this has led to *"...a relatively poor financial performance of the SR for the last 5 years" (1.1: 5).*

7.2.1.5 Performance of the SR for the provision of baggage handling

The performance of the SR for the provision of baggage handling is illustrated in the radar diagrams of Figure 7.16.

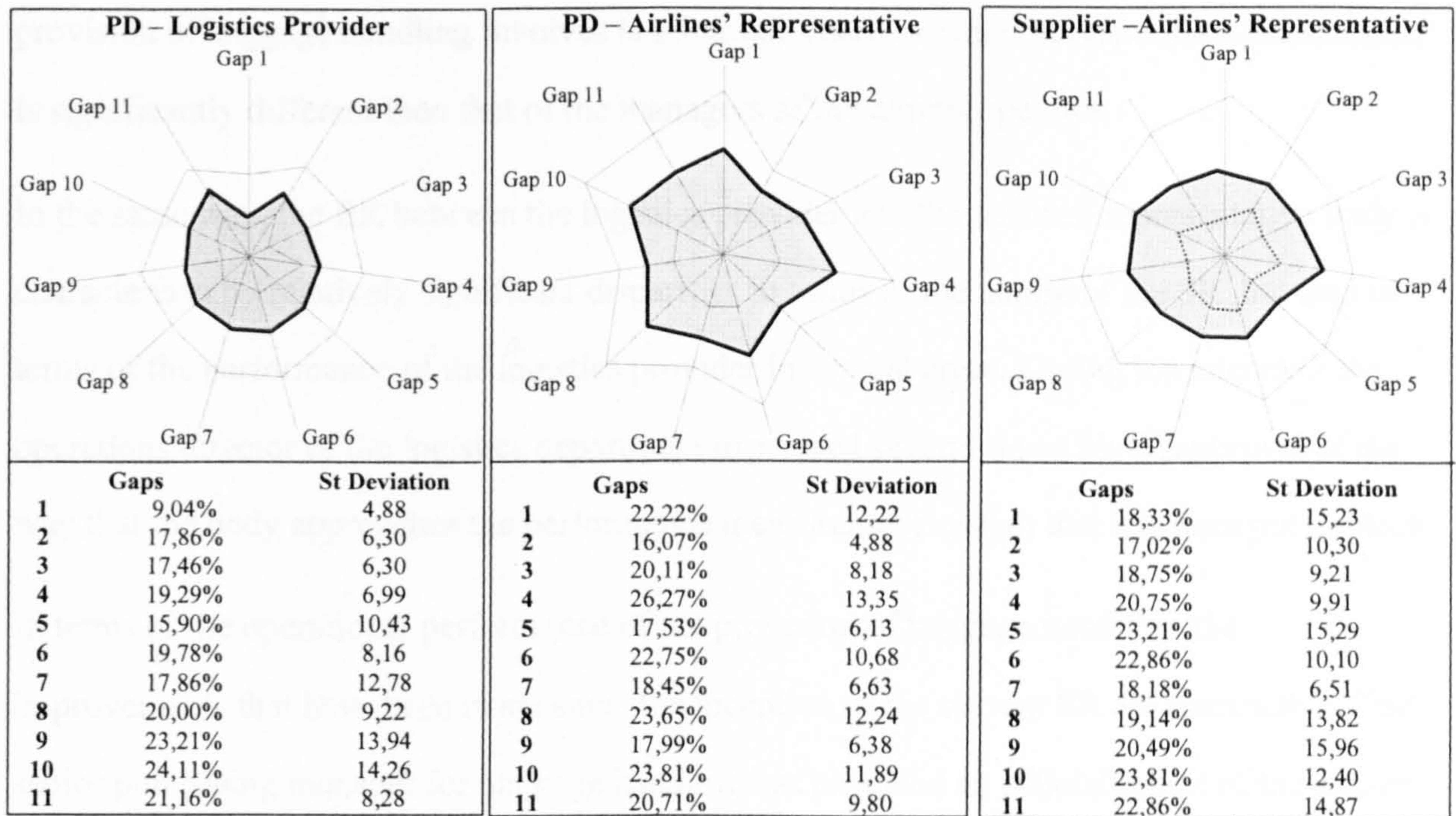


Figure 7.16 Performance of the SR for the provision of baggage handling

Although the PD is not directly involved in the every management of the SR for the provision of baggage handling, the BR that the purchasing (SD) managers have with their counterparts of the logistics provider is characterised by very low disparities in terms of their perceptions of the nature of the BR and each other's performance. The provision of baggage handling has been improved dramatically since the operation was taken over by the current logistics provider, and one of the reasons for the success is the congruence in the approach the two parties have in the management of the provision of the service. The relatively low disparities that exist can be attributed to the very high standards that both parties have put, and to disagreements that arise in terms of operational directions and procedures that should be taken. The BR that the PD has with the representative body of the airlines is characterised by relative congruence in terms of each other's performance, but with very different perceptions in terms of the nature of the SR. As the airlines' representative body does not have a legal status and economic structure and its existence is geared only towards satisfying and balancing the requests of the airlines, their knowledge of the operational and strategic issues that the

provision of baggage handling involves is minimal. Therefore their perception on these issues is significantly different than that of the managers of the airport operator.

In the same way, the BR between the logistics provider and the airlines' representative body is characterised by relatively significant disparities in terms of the nature of the SR, but also in terms of the performance of the logistics provider in several areas. During his interview the operations director of the logistics department expressed several times his disapproval of the way that the body approaches the performance measurement system that has been put in place.

In terms of the operational performance of the provision of baggage handling, the improvements that have been made since the inception of the current SR are remarkable. The senior purchasing manager for baggage handling has provided an official report of the airport operator which indicates that a 40% improvement in bag misconnects and a 98.4% connection target success have been achieved, with no increase in financial costs (2.5: 4).

7.2.1.6 Performance of the SR for the provision of cleaning services

The performance of the SR for the provision of cleaning services is illustrated in the radar diagrams of Figure 7.17.

The PD department (mainly through the SD programme) has succeeded in maintaining a very good working relationship with the suppliers. As both parties meet regularly at the training workshops, and as the performance measurement system in terms of the SLAs is very transparent, their perceptions of the nature of the SR and each other's performance have converged over the years. A couple of managers from both suppliers expressed a negative opinion in terms of the necessity to conduct a rigid SD programme, but as these opinions do not convey their organisations' formal position they do not have a great impact on the performance of the SR.

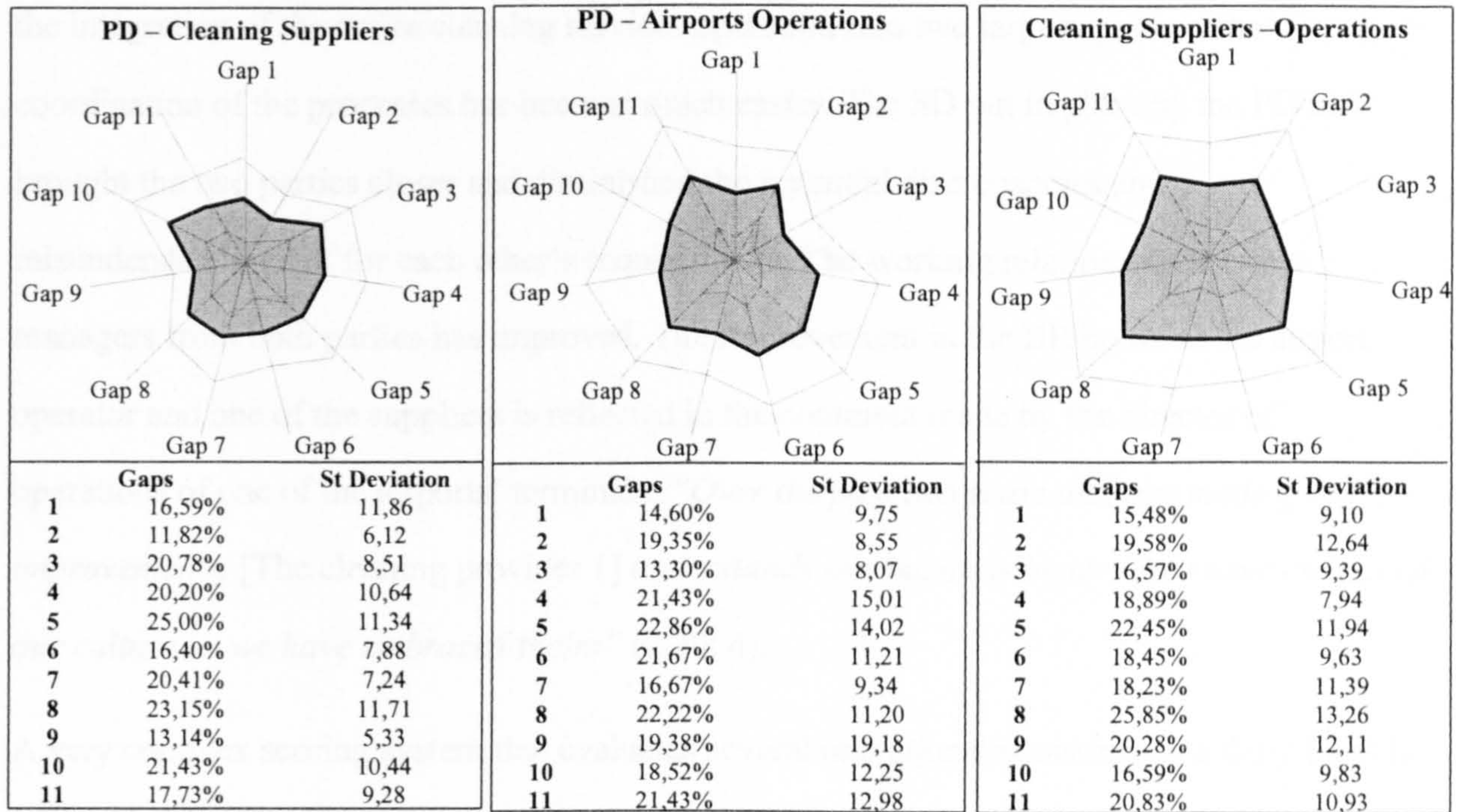


Figure 7.17 Performance of the SR for the provision of cleaning services

The BR between the PD and the operations department of the two airports that have been included in the study is characterised by very low disparities in terms of each party’s perceptions of the nature of the BR and performance to the BR in the activities related to the pre-contractual and institutional stages of the SR, but in terms of decisions and activities at the operational stage, there are several differences in the way the different departments approach problem that arise. The operations departments, even though they express satisfaction with the SD programme and the effort that the purchasing managers put in developing the BR with the suppliers, they feel that they should be more independent in terms of decisions related to performance measurement processes and workshop dates in order to accommodate their very complex operations’ programmes.

The BR between the suppliers and the operations departments of the two airports has been improved with the introduction of the SD programme. As the cleaning services were provided by several companies, the management of the entire SR was fragmented. The airports operations departments had to adopt different stance to the management of these SRs, but with

the integration of the entire cleaning services operation into two large suppliers, the coordination of the processes has become much easier. The SD put in place by the PD has brought the two parties closer and diminished the potential discrepancies and misunderstandings of for each other's requirements. The working relationship between managers from both parties has improved. The improvement in the BR between the airport operator and one of the suppliers is reflected in the comment made by the director of operations of one of the airports' terminals: *"Over the past two years we have made great improvements. [The cleaning provider 1] understands our business better; they have embraced our culture as we have embraced theirs"* (2.20: 4).

A very complex scoring system that evaluates several operational measures on a daily basis is utilised by the SD group to assess the operational performance for the provision of service. The operational performance of the provision of cleaning services in the entire organisation for the last four quarters (provided by the head of the SD group) indicates that the score that has been achieved approximates in most of the dimensions 75% of the targets set by the airport operator senior managers. The relatively low operational performance has been attributed by the director of the SD group to the substantially high levels of security that had to be put in place at the aftermath of the worldwide crisis of the air travel, and not so much to operational inefficiencies of the cleaning suppliers. The increase in security has had an impact on the financial performance of the SR as well, as capital investment had to be made to face the challenges provided by the new security measures for potential terrorist threats.

7.2.1.7 Performance of the SR for the provision of waste management

The performance of the SR for the provision of travel is illustrated in the radar diagrams of Figure 7.18.

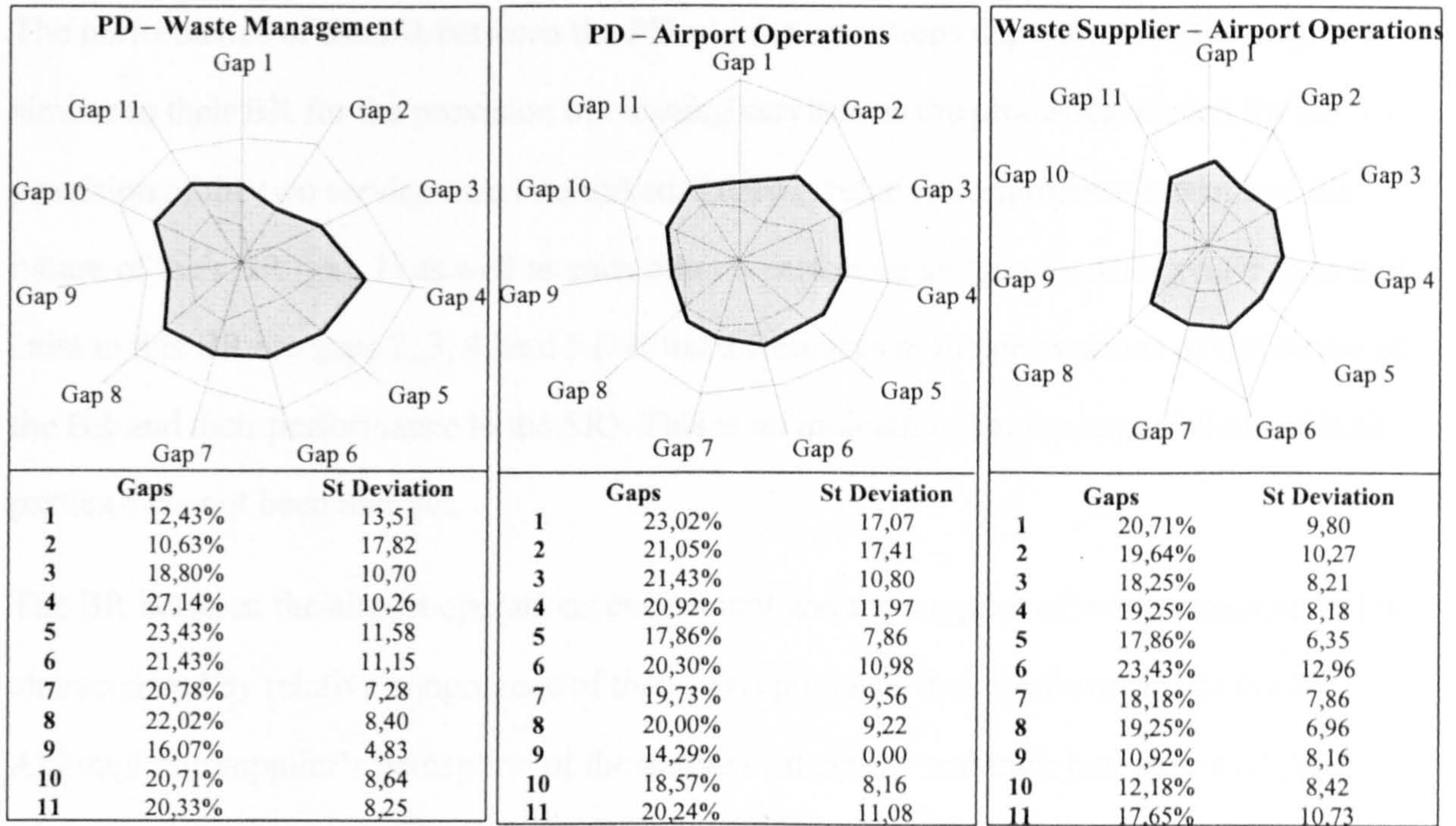


Figure 7.18 Performance of the SR for the provision of waste management

As the management of waste is governed by strict national and international environmental laws there is clear understanding of the requirements for the management of waste from both parties in the BR of the PD and the operations department of the waste management company. As a result the disparities regarding the nature of the SR are minimal. The structured framework that the airport organisation has utilised for the development and management of certain SRs, and the SD programme in which the waste management supplier takes part, has brought the two parties closer and diminished the disparities of their perceptions of the performance of the supplier. The supplier’s perceptions of the performance of the PD however are considerably different to those of the purchasing managers. Although their role in the SR is not undermined and is considered valuable, the supplier’s managers feel that the SD managers have adopted a supervisory rather than a facilitating role. In view of the fact that the purchasing managers need to consult the legal department of the organisation in order to take a decision on several occasions, the supplier’s managers perceive that their performance in certain areas is significantly lower than what the purchasing managers perceive for their performance.

The performance of the BR between the PD and the operations department of the airport is similar to their BR for the provision of cleaning services as the processes needed for the provision of the two services are interlinked. There is relative congruence in terms of the nature of their BR (gap 1) as well as each other's performance (gap 8). The greater gaps that exist in this BR are gaps 2, 3, 4, and 5 (i.e. the differences in the perceptions of the nature of the BR and their performance to the SR). This is an indication that the expectations of both parties have not been met yet.

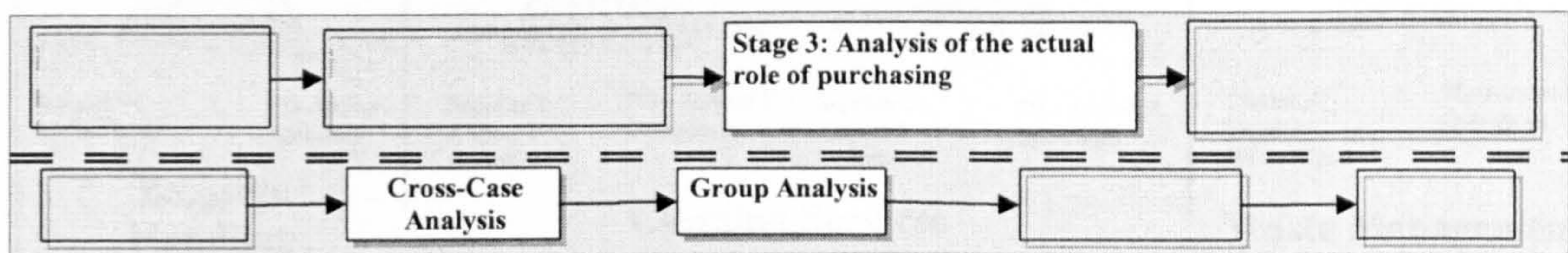
The BR between the airport operations department and the supplier of waste management is characterised by relative congruence of their perceptions of their performance to the SR. Although the supplier's perception of the nature of their BR and their perception of their performance to the SR is relatively similar, the airport operations managers' perceptions of the nature of the SR and their perception of their performance is characterised by great disparities indicating thus that the expectations are not met from the BR.

The approach that the cleaning services managers have taken in their BRs with the managers from the airport operator is similar to the one that involves only the provision of cleaning services. As this has been discussed in the previous section, only the BR between the cleaning services and the supplier for waste management is discussed in this section. This BR does not have a great impact on the overall performance of the SR, as both suppliers work towards achieving the objectives of the airport operator. Their BR is defined around the operational framework designed by the airport operator and limited only to the provision of the management of waste. In that respect there is great congruence of perceptions of the nature of the BR and their perceptions of each other's performance to the BR.

There are many operational problems in the implementation of waste management, primarily because of the very strict rules and regulations that have to be met. The PD in collaboration with the SD group has managed to put in practice a very successful SD programme that

utilises a very clear framework for the assessment of the performance of the service provision, which indicates that the SLAs are met at cumulative degree of 70%⁶⁷. As the management of waste is considered a very critical service from the airport operator, the expenses made by the PD in order to meet the SLAs and to adopt the rules and regulations most of times exceed the predetermined budget. As a result the financial performance of the SR is not considered to be very good with 15% of overspending (source: interview with the procurement group director, 2.2: 5).

7.2.2 Cross Case and Group Analysis for the performance of the individual SRs



In order to identify whether the role of purchasing managers has an evident, significant impact of the performance of the SRs, distinctive clusters of SRs should emerge in terms of the performance of the individual SRs and the role of the PDs in these SRs. Figure 7.19 provides a comparison of the performance of all the SRs. To facilitate the representation of the performance of the dyadic BRs within a SR, the mean of the gaps for each BR (that have been calculated in the previous section) is utilised.

The comparison of the performance of all the SRs reveals that in their majority they are characterised by relatively low disparities amongst the participating parties, with the exception of the SRs for the provision of IT services and to a lesser extent the provision of print services and waste management. The most successful SRs (in terms of the disparities that exist amongst the trading partners as well as the operational and financial results) are observed in the cases of travel, stationery, baggage handling, and cleaning services.

⁶⁷ **Source:** The purchasing and SD management team of the airport operator.

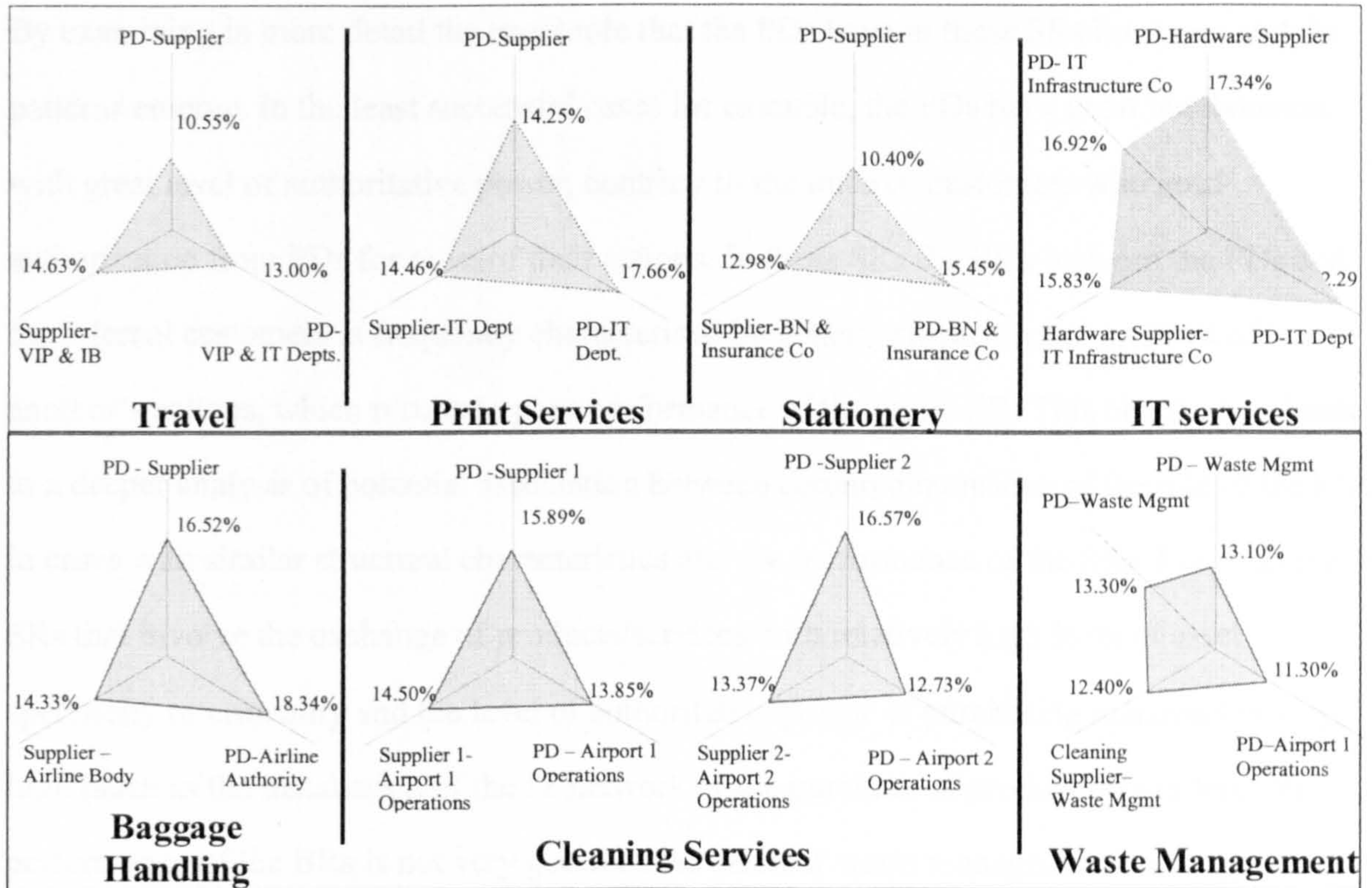


Figure 7.19 Cross case analysis of the performance of SRs

An initial observation of the performance of the SRs reveals an analogy of the performance of the PDs with their counterparts and the performance of the entire SR. In the most successful cases the performance of the dyadic BRs that the PDs have with their counterparts is very good (small gaps). Similarly the least successful SRs (print services, IT, waste management) are characterised by relatively lower performance of the BRs between PDs and their counterparts (especially with the internal customers). Although this provides evidence that the PD may condition the success of a SR, acting as a facilitating or an inhibiting party between the suppliers and the internal customers, it does not provide evidence of a significant, evident impact of the actual role of purchasing managers on the performance of the SRs. The performance of the SR for the provision of travel for example (in which the PD has a very positive role with great level of contribution to its management) is tantamount to the performance of the baggage handling provision (in which the role of the PD is limited to the pre-contractual and institutional stages of the SR).

By examining in more detail the exact role that the PDs have in these SRs however, certain patterns emerge. In the least successful cases for example, the PDs have great involvement with great level of authoritative power, contrary to the internal customers who need authorisation from PDs for most of their actions. In these SRs the BRs between the PDs and the internal customers is frequently characterised by general suspicion and mistrust of one another's actions, which results to poor performance of the entire SR. This observation leads to a deeper analysis of potential association between certain dimensions of the role of the PDs in cases with similar structural characteristics and the performance of the SRs. For example, in SRs that involve the exchange of products/services with relatively high level of asset specificity or criticality and the level of authoritative power of purchasing managers is very high (such as the installation of the IT network or the purchase of production printers), the performance of the BRs is not very good. In the cases of waste management and baggage handling on the other hand, where the authoritative power of the PD is lower than the IT services, the performance of the SR is higher.

One of the interesting findings of this thesis arises from the comparison of the performance of the dyadic BRs of the PD with its trading partners in SRs. It is evident that there is relative congruence in the perceptions of suppliers, purchasing managers and internal customers of the nature of the relationships with the exception of the understanding of the importance of contractual safeguards, volume of transactions, size of turnover and financial incentives. The highest gaps (whenever noticed) exist in the BRs of the PDs with the internal customers and the BRs of suppliers and internal departments. This can be attributed to the lack of frequent communication and misunderstandings between PD and internal customers them and the authoritative power of PD to take decisions at the business level.

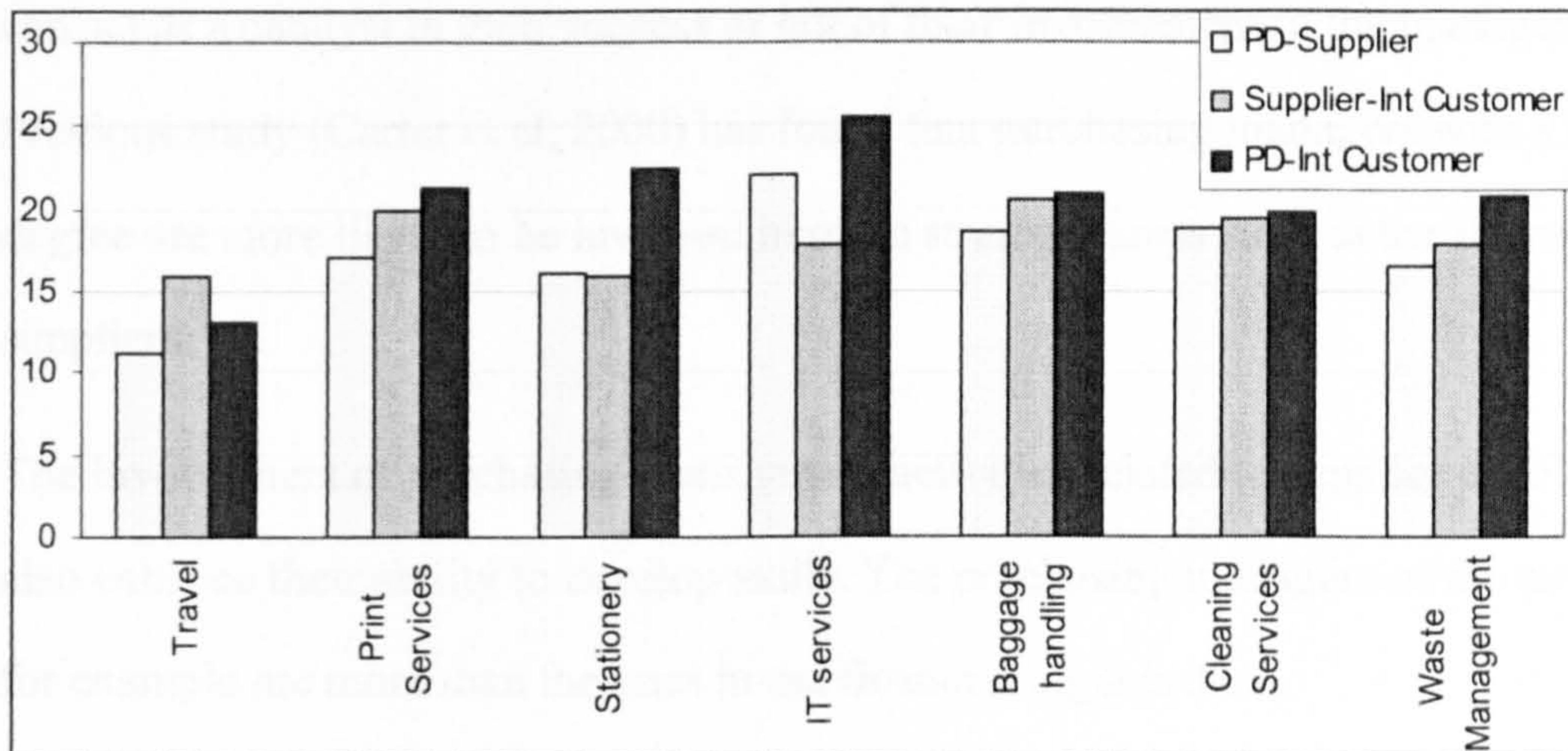


Figure 7.20 Comparison of gaps of dyadic BRs of the trading partners

7.2.3 Review and discussion of findings

The results of the analysis show a direct link between the role of purchasing managers and the performance of the SRs. Purchasing managers act as integrators of the SRs and facilitators of the delivery of the purchased products/services to the internal customers only for products/services with low level of asset specificity, and as a result these SRs are characterised by relative congruence of the trading partners' perceptions. On the other hand for products/services with high level of asset specificity and criticality their inhibiting role has a detrimental effect to the performance of the SRs, as they are characterised by suspicion, low levels of trust and in the long run low operational performance.

Arguably one of the most crucial challenges of purchasing today is the development of the attributes of purchasing professionals which will enable them to mitigate the negative impact that their role may have on SRs. Previous experience in other functions of their organisation may enhance not only their technical expertise, but enable them to contribute more positively to the management of SRs. Technical expertise is probably one of the characteristics that is missing from purchasing managers. The ability to speak a specialised language not only increases the understanding of a particular area, but increases the understanding of the trading partners' requirements and negotiation skills. The level of their education also is a factor that

can act as a catalyst in their success or not of their involvement in the management of SRs. Previous study (Carter et al, 2000) has found that purchasing managers with a university degree are more likely to be involved in more strategic areas such as the interaction with suppliers.

The involvement of purchasing managers in activities related to supplier development may also enhance their ability to develop skills. The purchasing managers of the airport operator for example are more than the ones in the financial organisation.

7.3 Chapter summary

This chapter presented and discussed the findings of the research process for answering research questions 3 and 4 of the study that explore the role of purchasing in the management of SRs and the impact that this role has on their performance.

Initially the potential role that the activities conducted by purchasing managers may grant to them (in terms of trust, power, involvement and commitment) was identified using theoretical reasoning. Although some activities provide concrete evidence for some of the dimensions of the role of purchasing managers in the SRs (such as the level of authoritative power), most of the activities needed to be investigated more thoroughly in order to identify the actual role that purchasing managers conduct in the management of the SRs they are involved in. It was revealed that the broad gamut of activities that purchasing managers conduct may potentially grant them a pivotal role and multifaceted role in the management of SRs.

In order to identify their 'actual' role, within-case analysis was conducted, considering their level of contribution to the identified activities, the way they interface with their trading partners as well as their perceived performance. The analysis of the data collected revealed that the role of purchasing managers in SRs is highly context and product/service specific, with diverse characteristics in terms of their contribution to the development of trust, the level of power they possess, the level of involvement in the SRs and their contribution to the

development of commitment to the SRs. Four distinctive groups of SRs emerged in terms of the actual role that PD have in their management.

The first group involves the exchange of products/services with low level of asset specificity and criticality (travel, stationery). In this group the PD has a supervisory and authoritative role, focusing on the standardisation of the procurement and delivery process. The second group involves the exchange of products/services of high criticality and low asset specificity (cleaning services, maintenance of print services) and is characterised by high levels of involvement and contributions to the development of trust and commitment, but lower levels of power in decision making as this power is shared with the internal customers. The third group involves the exchange of products/services with high levels of asset specificity and lower level of criticality (IT services, waste management). The role of the PD in these the SRs is characterised by high levels of power and involvement in their management and low levels in terms of their contribution to the development of trust and commitment. The distinctive feature of the role of the PD in the SR of this group is that it is not considered to be very constructive by its trading partners. Finally the fourth group involves SRs for the exchange of products/services with high levels of asset specificity and criticality (IT network installation, baggage handling). The contribution of the PD to the management of the SRs is limited to the pre-contractual and institutional stages of the SR and is characterised by low levels of power, and involvement but relatively high levels of contribution to the development of trust and commitment.

In terms of the impact of the role of the PD on the performance of the SRs, the analysis of the data using the RelPerf instrument revealed the PDs may act as mediators of the exchange of products/services, facilitating the suppliers to deliver their products, communicating with them and at the same time enabling the internal customers to focus on their core operations, rather than managing a SR with a third party. At the same time however the PDs may act as

inhibitors of this exchange in the cases of the exchange of products / services with high level of asset specificity and criticality. Their involvement may create another obstacle in the communication network between the suppliers and users of the products/services.

Chapter 8 - Conclusions, Implications and Recommendations

"Nothing endures but change"
Heraclitus (540 BC – 480 BC)

This thesis has investigated the activities conducted by purchasing managers in SRs, the actual role that purchasing (managers and departments) have for their management, and the impact that this role has on their performance. In this final chapter the implications its findings may have for purchasing professionals and on future investigations for management research are discussed. Potential recommendations for purchasing management practice are also presented.

- Firstly, a summary of the rationale and the theoretical and empirical findings of the thesis are presented.
- The contributions to purchasing theory and the practical application of the findings are presented in the second section (especially the contributions of the integrated framework of activities that purchasing managers conduct in SRs and the analytical framework for evaluating the performance of SRs).
- A reflection of the role of purchasing in SRs is provided in the third section.
- The fourth section presents the inherent limitations of the study, in the fifth section recommendations for further research are presented and the thesis finally concludes with an epilogue.

8.1 Summary of research rationale and findings

8.1.1 Research rationale

This thesis explored the 'actual' mediating role that purchasing has in the management of SRs and the impact that this role has on their performance. To a great degree, the objectives and design of the research have been inspired and influenced by prior research (predominately by

Professors Lamming, Harland, Helper and researchers from the IMP group. Through an extensive review of various literatures related to purchasing and SCM, a 'thesis' was adopted that prior works to the 'actual' role of purchasing in the management of SRs are limited in their scope and potential application in wider contexts in that:

- In all previous studies there seems to be an inexplicit account of purchasing' contribution to the management of SRs
- The majority of studies focus their attention on a focal organisation rather than examining the SRs as a dynamic interfaces of multiple parties⁶⁸
- They mainly base their experiences in the manufacturing sector (usually the automotive industry)
- There is an implicit perception that the purchasing managers by virtue of their organisational position are in effect supply chain managers.

This research was designed to overcome these shortcomings and aims at beginning a research stream directed towards reassessing the role of purchasing in organisations in general, and its role in serving the internal customers in particular. Given that there is an increasing trend of 'servitisation' of economies and a surprising absence of research studies in service organisations in the field of SCM, it investigated the role of purchasing in two large service organisations in the UK.

In order to realise its main objectives the research was faced with three conceptual challenges:

- A framework that conceptualises the nature of SRs needed to be adopted or developed
- The concept of the *role* of purchasing needed to be defined in such a way, for it to be operationally feasible to assess with particular research methods

⁶⁸ Although studies that emanate from the IMP group do that.

- An instrument whereby the performance of a SR can be assessed needed to be developed or adopted.

To overcome these challenges, the research generated insights from several bodies of literature and theories, and synthesised them into a framework that conceptualises SRs as complex institutions of interactions between individuals, groups and entire organisations that evolve through a developmental process and incorporate several structural and infrastructural variables. This view of SRs reflects a shift from the perspective found in economic theories, which examine SRs only at the organisational level. It was further contended that a triadic (and even a quaternary) view of SRs which includes the BRs that purchasing managers and departments have with internal customers as well as supplier managers is more appropriate for the purposes of this study. The underlying principle of this conceptualisation is that SRs are perceived as evolving processes of collaboration, rather than abstract entities created by collaborating parties or any form of governance structure.

The role of purchasing managers in the management of SRs was conceptualised and assessed in terms of four variables: their contribution to the development of *trust* between the trading partners, the level of *power* they possess in decision making, their *involvement* to the SRs, and their contribution to the development of *commitment* to the SRs. Finally, in order to assess the performance of SRs, an instrument was developed that considers several gaps between the involved managers' perceptions of the nature of their department's BR with their trading partners' department and their perceived performance to these BRs (the RelPerf model).

On these premises an analytical process that involved the exploration of four main research questions was employed:

- First the various activities that purchasing managers conduct (or are involved in) for the management of SRs were explored and identified. The main objective of this question was the development of an integrated framework of specific activities that purchasing managers

conduct or involved in for the management of SRs. This framework can provide a conjunctive element between the various activities, thereby addressing one of the shortcomings of prior studies that present a rather anecdotal view of purchasing involvement in SRs and can help PDs to implement, audit and ultimately improve their involvement in SRs. The identification of the various activities conducted by purchasing managers was considered an indispensable part of the research, as it provided the basis to examine the conjecture that purchasing managers are in effect supply chain managers and facilitated the identification of purchasing managers' 'actual' role in the management of the SRs by investigating how they conduct the activities they are involved in.

- Given that the activities that were identified may not have the same level of difficulty and importance, the second research question involved firstly the identification of their level of significance in different SRs. Then the impact of the level of asset specificity and criticality of the products/services exchanged and the impact of the level of organisation and infrastructure of the PDs on the necessity and ability of purchasing managers to conduct certain activities was investigated. In this way it evidence was provided to identify and analyse the situations under which these activities need and can actually be performed in various SRs. By answering these issues, insights about particular activities that purchasing managers should focus their attention on under certain conditions can be drawn.
- Having established the activities that purchasing managers conduct (or are involved in) and the activities (areas) they focus their attention on, as well as their ability to conduct them, this research question identified first the intended role of purchasing managers in the management of different SRs, by analysing the potential role that the activities they are involved in may grant to them. By considering the level of contribution of purchasing managers in certain activities, the way they conduct them and their performance in the separate cases, the research then identified how (and how well) the purchasing managers conduct these activities in each

of the SRs, and how well they handle or implement certain factors that can potentially influence their nature. With this analytical process that utilised qualitative and quantitative methods the ‘actual’ role of purchasing managers was revealed.

- Finally, the impact of the identified ‘actual’ role of purchasing managers on the performance of SRs was investigated by exploring the association between problematic and successful SRs and the role of purchasing departments in these relationships in terms of the various management areas and specific activities purchasing managers carry out.

The purpose of this thesis is not to produce generalizable results into predictions about a population; it is rather an approach to grounded theory development that is refined through empirical observation and testing of the results. A critical realistic epistemology was adopted, employing both induction and deduction to understand underlying processes that describe the phenomena under investigation, rather than fitting data to theory or vice versa (abductive logic). The research methodology therefore was primarily qualitative, without excluding quantification of data. An ideographic, multiple-embedded case study design was selected, involving the study of seven SRs that involve the exchange of products and services with different characteristics. This is a formal case-study approach that was conducted using primarily semi-structured interviewing but also two surveys with structured questionnaires that involved matching pattern of statements of multiple respondents, observations of the BRs in action and operationalisation of the research with different units of analysis.

The empirical research was conducted in two large (focal) service organisations in the UK, and studied seven structurally similar SRs that are however diverse in size, orientation and mode of operation, involving the exchange of products / services with different characteristics in terms of volume / variety of transactions, their level of asset specificity and criticality to the purchasing organisation.

8.1.2 Summary of research findings

Research question 1. How do purchasing managers contribute to the management of SRs?

Fifty five principal activities that purchasing managers conduct (or contribute to) were identified and classified into an integrated framework of purchasing involvement in the management of SRs: the three stages of the development of SRs (pre-contractual, institutional, and operational) and the four managerial areas that constitute purchasing involvement in organisations (product management, process management, contract management and SD).

Product/service management entails all the activities that contribute to the actual design and determination of specifications of the product/service exchanged. It encompasses decisions on the choice of the most appropriate product/service for the organisation and technical norms and standards. Process management involves all the activities aimed at planning and managing the actual exchange of the product/service between the partners within the frame decided in the contract and product specifications. Contract management includes those activities that are conducted in order to define a contract. These activities can be seen as *strategic* in SRs, as they reflect the organisation's purchasing strategy and must be aligned with its corporate and business strategies. The product/service and process management areas on the other hand are supportive areas to contract management and by default operational. Finally, supplier development entails all the activities aimed at improving the performance of suppliers. This includes reducing costs, increasing quality levels, improving communication and ensuring timely delivery of products/services. It can also include activities aimed at helping the supplier organisation improve its financial position and operations, or ensuring that excellent suppliers are recognised and rewarded.

This framework can provide a useful tool for the explanation of the similarities and differences, as well as the difficulties of various SRs. For products/services with low level of asset specificity and criticality, it was revealed that the contribution of purchasing managers is very high in activities of all the management areas and development phases of the SRs. The focus

of these SRs is on the standardisation of processes and activities and structured contracts based on competitive bidding are designed so that maximum savings can be achieved. For SRs that involve exchange of products/services with low level of asset specificity and high level of criticality, the contribution of purchasing managers is more evident at the institutional stage of SRs, and although the focus is on standardisation of processes/activities, the contracts are more flexible giving greater flexibility to the purchasing managers, and greater effort is being put to the development of SD programmes. For products/services with high level of asset specificity and low level of criticality, the contribution of purchasing managers is more evident at the institutional stage and for activities that fall under the SD area. Finally for SRs of products/services with high levels of asset specificity and criticality, the contribution of purchasing managers is only evident at the pre-contractual and institutional stages mainly for activities related to contract management. At the operational stage their role is rather consulting and supportive to the role of the interested departments.

There seems also to be a clear distinction in terms of the activities that are conducted by purchasing managers with different organisational rank. CPOs are involved mainly at the pre-contractual and institutional phases of the SR in activities that fall under the contract management area. Senior managers are involved mainly at the pre-contractual and operational phases in most of the activities that fall under the SD area and have an advisory and supervisory (but not decision making) in activities that fall under the contract management area. Junior purchasing managers on the other hand are involved only at the operational phase of SRs in activities that fall mainly under the product and process management areas.

Research question 2. *How do contextual factors of the products/services exchanged influence the implementation of the activities conducted by purchasing managers and how does their significance of vary across different SRs?*

The objective of this question has been to analyse the extent to which certain activities from the framework need to be carried out in different SRs, and to explore potential differences

amongst the two focal organisations that influence the ability of purchasing managers to conduct these activities⁶⁹.

Although constituent activities of all four managerial areas can be found in most of the cases, activities that fall with the contract management area (such as the negotiation of the terms of contract, the delegation of roles and responsibilities, the establishment of contractual safeguards and monitoring of KPIs) seem to be the most significant (and/or problematic), and thus the one that PDs focus their attention, followed by activities in the SD area. Process and product management activities on the contrary are not perceived as being central to the management of SRs. This reflects the findings in the purchasing and SCM literature that speak of the evolving strategic role of purchasing in organisations. A possible explanation for the apparent dominance of contract management activities, may be however due to the fact that the majority of the purchasing managers that were interviewed could have added an additional bias, by being predisposed to emphasise the more strategic issues of purchasing involvement such as contract management, as opposed to the more operational and tactical activities of product and process management.

In terms of the impact of asset specificity and criticality on the necessity and ability to conduct certain activities, evidence was provided and hypotheses were raised that the necessity to conduct certain activities (especially for contract management and SD) increases when products/services with high levels of asset specificity and criticality are exchanged. At the same time, the involvement of purchasing managers in these activities is lower for these products/services. Similarly, evidence was provided and hypotheses were raised (based on the analysis conducted) that the ability and level of involvement of purchasing managers to

⁶⁹ It should be noticed that the insights generated in this thesis are limited to the extent that only two factors that can potentially affect the nature of a SR are considered. Other factors such as the volume of transactions or the variety of the products/services exchanged may possibly be influential (Figure 4.6).

conduct certain activities increases when the level of organisation and infrastructure of the PD is high. It was concluded that these hypotheses can be tested with statistical research methods.

Research question 3. *What is the role of purchasing managers (and consequently purchasing departments) in SRs?*

The seven case studies indicated patterns of similarities and certain variations of the role of PDs in the management of the different SRs. Overall the PDs appear to have a high level of authoritative power in decision making (especially at the operational phase of SRs) and a positive contribution to the development of trust and commitment amongst the trading partners. Their influence and level of control over decisions especially at the operational phase of the SRs however is limited, mainly because of their low level of intensity of interaction with their trading partners at this stage, but also because of their lack of expertise and information sharing for certain SRs.

The analysis of data collected also indicated that the role of purchasing managers is highly context specific in terms of the type of products/services that are exchanged and the infrastructural characteristics of the PDs in the two focal organisations. In SRs that involve the exchange of products/services with low level of criticality and asset specificity the PDs control the majority of critical resources and have a supervisory and authoritative role focusing on standardisation of the procurement process. In SRs that involve the exchange of products / services with high level of criticality and asset specificity on the other hand, the anecdotal conviction that purchasing managers are supply chain managers is highly contrasted by the limited role that the PD has at the operational phase of the SR. Despite their minimal role at the operational phase of a SR however, the level of authoritative power of purchasing managers is very high due to their organisational position. As the internal customers may have different operational objectives than the PD, this may create internal dynamics in the purchasing organisation. On many occasions the will and preferences of internal customers tends to be neglected in the name of standardisation of the procurement process, despite the

fact that there is an inherent need to incorporate the capabilities and preferences of the internal customers to the management of the SR.

The size (as an indication of the complexity of the PD) and the level of the available infrastructure furthermore emerged as salient factors that can influence the role that purchasing managers may have in SRs. A comparison between the two PDs in the financial organisation and the airport operator provided evidence that the more complex a PD is and the greater its level of infrastructure, the greater its ability may be to develop and communicate clear guidelines for certain activities.

Four distinctive profiles of the ‘actual’ role that purchasing managers have in SRs were developed that are applicable in SRs with different levels of asset specificity and criticality, which are summarised in Figure 8.1 (also presented as Figure 7.11)

Criticality	High	<p>Facilitator</p> <p>Facilitating the provision of the offerings exchanged with limited decision making in the operational stage.</p>	<p>Validator</p> <p>Supportive to the efforts of internal department(s) and/or specialist groups due to lack of technical knowledge</p>
	Low	<p>Integrator</p> <p>Initiator and administrator of the SR with full responsibility for the budget and future directions</p>	<p>Inhibitor</p> <p>Conflicts with internal customers create dynamics in SRs that inhibit the provision of offerings</p>
		Low	High
		Asset Specificity	

Figure 8.1 Actual role of purchasing managers in SRs

Research question 4. *How does the role of purchasing in SRs affect their performance?*

In order to determine whether the role of purchasing has an impact on the performance of SRs, the performance of individual SRs was assessed initially using the ReLPerf framework that was presented in chapter 4. Then analysis was conducted to examine any potential association between problematic and successful SRs and the role of PDs in the individual SRs.

The analysis of data collected indicated that there is a direct link between the ‘actual’ role of purchasing and the performance of the SRs. The SRs that involve products/services with low

level of asset specificity and criticality are the most successful. In these cases purchasing has a central role which is perceived to be highly positive. On the other hand the SRs for products/services with high asset specificity and criticality, where purchasing has a more complicated role, under-perform creating many problems within the buying organisation.

This finding confirms the enhanced role that the purchasing function has in organisations (positive or negative) and validates the findings of the first three research questions of this study. It can be said therefore that it is an imperative for organisations today to invest in the training and development of purchasing professionals in order to develop those skills required that will enable them to mitigate the potential negative effects that their role might have on the exchange of products/services and their smooth delivery to the internal customers.

It is acknowledged that in order to accomplish a generalizable and valid conclusion in terms of the impact of the role of purchasing to the management of SRs, a different methodology such as a survey that will involve a large number of representative SRs (in terms of the level of asset specificity and criticality, or different adjusting variables) is probably more appropriate. This thesis generates preliminary findings in terms of this impact that can be used as a springboard to address this issue more thoroughly.

8.2 Contributions of the research to theory and praxis

The contributions of the research presented in this thesis are related to theoretical insights pertaining to the academic fields of SCM and purchasing, empirical findings pertaining to the purchasing practice, as well as methodological / operational issues pertaining to the analytical frameworks and methods that were developed and utilised to achieve these findings⁷⁰. These contributions are discussed in this section in terms of the associated fields that the research touches upon.

⁷⁰ Obviously the distinction between the methodological contributions are related to the academic contributions and are closely related to the managerial implications that these findings may have to purchasing professionals.

8.2.1 Contributions to SCM

Apart from the contributions to the theory and praxis of purchasing, some potentially useful insights for the problem domain of SCM phenomena were generated (as the research falls within the academic discipline of SCM). It was exposed that academic and practitioner research has been conducted within a number of diverse disciplines (spanning from Operations and Strategic Management to Human Resources Management and Organisational Behaviour). The majority of studies have drawn on different theoretical antecedents, but have been characterised as anecdotal, lacking academic rigour and methodological discipline (Croom and Giannakis, 2000). Reflecting the views of a large number of academics worldwide, and echoing Steve New's call for the need for the development of theoretical constructs regarding SCM phenomena in order to make it more understandable and applicable to academics and practitioners (New, 1994), it has been proposed that the problem domain of a SCM discipline may be framed around three underlying objectives of SCM praxis: the *synthesis* of the businesses and resources networks, the *synergy* between the actors of a supply network, and the *synchronisation* of the activities and operations for the supply and delivery of products/services to end customers. This framework may act as the springboard for a more holistic (paradigmatic) research that can offer the opportunity for a more integrative research agenda by employing themes that could have typically be outside the traditional logistics and purchasing management agenda.

One area of research that could benefit from an integrative approach is the study of SRs. A number of studies from the IMP group (Ford 2002; Gadde & Hakansson 2001) and network theorists (Jones, Hesterly, et al. 1997) provide strong evidence of the necessity to conduct interdisciplinary research in this field. The seminal works by professors Lamming, Helper and Harland illustrated the shift in strategic importance of SRs to purchasing; their works however are limited to the extent that their study of SRs does not take into account the underlying processes and activities conducted for the management of SRs, as well as the institutional

framework and the organisational and business setting that these SRs evolve. Another area of research is the application of these theories/models in contexts other than large manufacturing organisations that seem to dominate the empirical context of the majority of studies. Given the increasing servitisation of economies, the study of SRs in service organisations that involve the exchange of products as well as services appears an attractive locus for research in this field.

8.2.2 Supplier Relationships

Theoretical / conceptual contributions to the nature and management of SRs

In terms of the conceptual establishment of the SRs, this is one of the first studies in the purchasing and SCM literature to apply constructs of such diverse literatures such as inter-organisational theory, SCM, network theory and organisational behaviour, and develops a holistic framework of conceptualising the nature of BRs in organisations. The research is distinctive in the field of SCM, in that it takes the perspective that SRs are complex institutions of interactions between individuals, groups and entire organisations. This reflects a shift from the view found in most of the studies that are inspired by economic theories, which conceptualise SRs as being composed only by organisations. The research is also unique in that it considers the nature of SRs as a developmental process evolving over three different phases (pre-contractual, institutional and operational). The distinction of the three phases of the genesis, formation and everyday management of SRs, facilitates a holistic understanding of the nature of SRs, by breaking them down into three fundamental facets of governance and interaction processes, and addressing issues with respect to the coordination problems that arise when activities are distributed among several actors.

In light of the view that SRs are seen as developing amongst individuals, groups and entire organisations, this is one of the few studies in the purchasing management literature that examined SRs at the triadic (and quaternary) level. By adopting this view, the research addresses one of the major shortcomings of the body of research on purchasing, by

considering the BRs that purchasing managers and departments have with internal customers as well as the suppliers' departments and managers.

Managerial implications regarding the management of SRs

By conceptualising SRs as developing in three different phases and at three different levels (personal, departmental and organisational), this thesis espouses a network approach to the management of SRs. At the personal level, purchasing managers are considered to represent the interests of the internal customers at various departments in the organisation. Similarly at the departmental level PDs represent the interests of various business units in the organisation. At the organisational level they represent the commercial relationship between a supplier organisation and a customer organisation.

The research also underlines that simultaneous inter and intra-organisational managerial approaches from all the parties that are involved in the exchange of products/services within a SR are needed. As the SRs for the procurement of IT services, print services and baggage handling evidenced, apart from the suppliers, capabilities or ideas of the internal customers are also essential to the effective management of the SRs.

8.2.3 Contributions to purchasing theory and practice

Along with the contributions to SCM and SRs, the main contribution of this research is to the existing body of knowledge of the purchasing literature. This research generated insights on purchasing theory by analysing its developmental stages over the last 50 years and the recent restructuring of the role of PDs in the management of SRs.

The trend for the reduction of the supply base of organisations and the implementation of SCM practices (which has been considered a source of potential competitive advantage for organisations) brought forth new roles and responsibilities for purchasing managers.

Procurement managers are considered as being instrumental in implementing the process of selecting the optimal supply base and coordinating the interface between suppliers and internal customers in terms of facilitating the procurement process. For PDs however (as the research

evidenced) this is a laborious and delicate process, as they need to abandon old practices, develop new capabilities, enhance their knowledge in several products/services and adopt new methods to adapt to new realities.

This research has shed light to the internal organisation challenges within buying firms in the light of managing several SRs. Figure 8.2 summarises some of the implications to PDs.

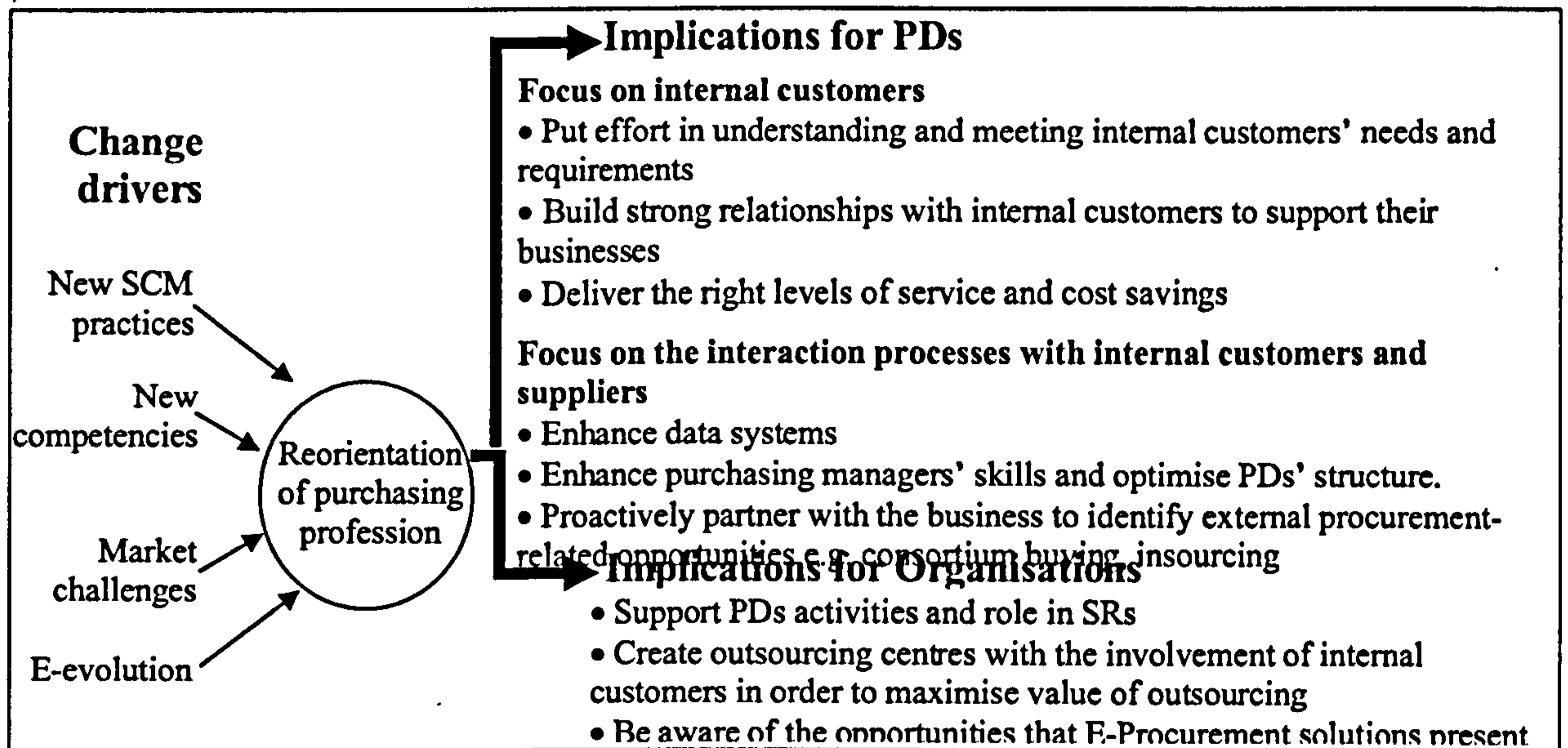


Figure 8.2 The reorientation of the purchasing profession for the management of SRs

One of the main contributions to purchasing practice is that it provides a detailed account of the activities that constitute purchasing managers' involvement in the management of SRs and the 'actual' role they have in the management of different types of SRs.

The classification of the activities in terms of the four management processes / areas of product management, process management, contract management, and SD performs a dual role. From an academic point of view, it pinpoints and signifies the historical development of the purchasing function as discussed in chapter 2. Specifically the areas of product and process management refer to the traditional administrative role of purchasing managers in the procurement process, whereas contract management and SD reflect the strategic, policy oriented role that purchasing was granted over the last 20 years.

From a managerial / operational point of view, this classification provides a clear demarcation of what purchasing contribution to the management of SRs encompasses and may be a useful point for the identification of activities that have not always been considered in a systematic framework as such. The framework can be used as a benchmark tool in organisations to assess and validate the contribution of PDs to the management of SRs, as each of the management areas has a different scope and time horizon clear directions for managing their SRs.

The finding that purchasing managers may act as facilitating or inhibiting parties in SRs confirms the ongoing calls for more professionalisation of purchasing. This indeed is not a surprising finding; in fact is a natural consequence of the increased importance that the purchasing function was given over the last 20 years. The empowerment of purchasing managers in decision making and coordination of the procurement processes coupled with the increasing trend for more collaborative SRs, calls for more educated purchasing professionals that can understand the peculiarities of the products/services that are procured.

The fundamental objective of purchasing remains the standardisation of the type of products/services that are purchased as well as the procurement process in order to minimise the transaction costs. However as this research evidenced, the strategic role that PDs have acquired may grant to them an inhibiting rather than a facilitating role to the management of SRs with an obvious, negative impact on the performance of these SRs. It should be noticed however that this inhibiting role is evidenced only in SRs for the exchange of products /services with high level of asset specificity and criticality. To the contrary, for the exchange of products /services with low level of asset specificity and criticality, purchasing managers have a very important facilitating role with positive contributions to the performance of SRs.

8.2.4 Performance Measurement

The contribution of the research to the performance measurement literature is related to the fact that many research studies focus their analysis of the nature and performance of SRs from

the point of view of the vendor rather than the supplier. The research proposed a framework that takes a different perspective by taking into account the perspective of the supplier as well as the internal customers. Including the interested parties' perspectives on the nature and performance of the SR, a more holistic view into the possible problems (as well as causes of these problems) can be achieved. Despite the potential usefulness in assessing the performance of SRs, the RelPerf model has certain limitations.

8.2.4.1 Limitations of the RelPerf model

As discussed in chapter 4, the soft dimensions of the management of SRs are widely regarded as critical in relationship management. As the crux of SRs are the harmonisation of the strategic intents of the partnering organisations, the perceptions of both parties of the nature and performance of their BR can provide a powerful source for determining the condition of the SR, utilising soft as well as hard measures. From the experience of assessing the performance of the SRs over a period of 14 months however, a number of questions and issues regarding the administration and implementation of the tool have emerged.

Research participants: A fundamental issue on the composition and importance of perceptions of the individuals that participated in the surveys and interviews has emerged. Despite the fact that the managers that participated in the study are the most appropriate to evaluate the BRs (because of their organisational position), directors or managers of departments other than the PDs were not interviewed. It is acknowledged that these managers may yield significant influence on the perceptions of the nature and performance of the BRs and as such the calculated performance may not be absolutely accurate. Furthermore, the perceptions of the participant managers are considered to bear the same 'weight' on the nature of the SR, irrespective of their organisational rank. A more detailed process for the calculation of gaps that takes into account these concerns would yield more accurate results.

Scientific objectivity and diagnostics: The main weakness of the reliability of the model is the fact that for the assessment of the disparities between the trading partners it utilises the

perceptions of the participating managers. The perception of an individual however is not considered as a hard (objective) measure for the assessment of SR performance. For that reason there is no 'scientific' accuracy of the results of the analysis. Under different conditions for example the perceptions of the participating managers could have been different (either better or worse than reported). In that respect doubts are raised on the value of the model as a diagnostic and prescriptive tool. For example the measures of the gaps in managers' perceptions are provided only as a guide for the general reliability of the results. Further research is needed on how to interpret the results for a particular gap in a BR. It is for this reason that no on-the ground actions should be taken based solely on the gap analysis.

Ground-based surveys should be conducted prior to taking a specific management decision.

An additional weakness arises from the employment of unweighted measures of the factors that may influence a SR and of the activities that purchasing managers conduct for the calculation of the 11 gaps of the model, as it fails to gauge the priorities of each SR across the four management areas of product & process management, contract management and SD. The extent of the gaps calculated with this method should only be considered as a rough approximation and therefore can be misleading of the actual extent of gaps.

Retrospection: The RelPerf instrument also does not represent a substitute for customer relevant operational standards and requires supplementation by other performance measures (as the financial and operational performance). A more significant delimitation of the instrument is the fact that it tends to be retrospective. The cyclical process of development, collection, analysis and report back of one year's duration is further exacerbated by the complicated and sometimes contentious nature of the questions. As the organisations operate in a very competitive and turbulent environment they require real-time and sometimes proactive information regarding their BRs. Incorporation of questions along the lines (if we did thiswould you consider"?) would be useful.

8.3 Application of the results and recommendations for purchasing practitioners

In this section the practical implications of the research are discussed. The primary focus is on the framework of activities conducted by purchasing managers and the BRs' performance instrument, as well as the conditioning and facilitating factors concerning these activities and the role of purchasing. Suggestions and guidelines for the applications of the frameworks are given and specific recommendations are discussed.

8.3.1 Applications of frameworks

The framework of the activities that purchasing managers conduct (or contribute to) can be used as a benchmarking instrument by purchasing managers in particular and entire organisations in general for three purposes: to coordinate, review and improve their involvement in the management of SRs in order to improve their business performance.

Coordination:

The framework can assist purchasing managers by providing clear guidelines of their contribution to the management of SRs. For organisations that they decide to develop closer more collaborative SRs, or aim for a more structured consideration of the management of existing SRs, the framework can be a primary reference list of activities that are related to the management of SRs and need to be considered. Its objective is to provide general guidelines in terms of certain areas that need to be considered. It is neither exhaustive, nor normative and does not give prescriptions on how to conduct these activities. This would be certainly misleading due to the highly specific and chaotic behaviour of SRs. Nevertheless, its generic character makes it an appropriate starting point for many different SRs. By incorporating the dimensions of time and resource capacity however, the necessity and ability to conduct the activities included in the framework can be compared to any potential strategic plans the organisation may have.

The framework however does not provide an indication of the time priority of the activities. The precise moment when the various activities are conducted depends on the way the overall development process of SRs is organised. Organisations may apply simultaneous engineering practices in which case many of the activities may overlap, especially for activities at the pre-contractual and institutional phases.

Improvement:

The second purpose of the framework is to facilitate and direct improvements in situations where purchasing involvement in the management of a SR is either unstructured or badly managed, which can prompt senior management to decide on a more structured long term approach. As it provides a comprehensive list of activities along several management dimensions and time horizons, it may be a very useful tool to pinpoint activities or areas that are not considered in a systematic way by purchasing professionals.

Reviewing:

The third purpose involves reviewing of existing established SRs. The framework can be used as a checklist of activities which can be compared to benchmarks based on pre-set targets, future goals or other departments' or organisations' performance against these activities. The reviewing process may be either conducted by an independent consultancy, or internally by the PD itself. A recommendation would be to combine qualitative and quantitative measures against these activities by conducting interviews with the purchasing managers with the use of a questionnaire which can be disseminated to interested managers.

The business context that the auditing takes place however should be taken into account. The research has shown that the type of product/service that is exchanged as well infrastructural characteristics of the PDs are of paramount importance in determining whether a specific score should be considered as sufficient.

8.4 Limitations of the study

Apart from the contributions to theory and practice, the conceptual, methodological and research analysis choices made by the researcher, may create a number of limitations in interpreting the results.

The primary delimitation of the thesis (as discussed in the introduction of the thesis) emanates from the difficulty to generalise the research findings to contexts different than those studied and the inherent subjectivity that the case study as a research design entails. The triangulation of data with different research methods and combination of qualitative and quantitative techniques may provide the basis for a better approximation of the perceived reality of the nature and management of SRs. Nevertheless a certain degree of bias is acknowledged in the perceptions of managers of their BRs they are involved in, making it thus difficult to generalise arbitrarily the findings.

The scope of the research may be also limited by the selection of the four constructs that were used to specify the nature of SRs (and assess the role of purchasing in these SRs). The objective of the selection of these particular constructs has been to strike a balance between comprehensiveness (i.e. capturing the totality of the essence of the nature of SRs) and at the same time be parsimonious in terms of the number of constructs selected. Other constructs that may be potentially important (such as the social aspect of the closeness of a BR) are not explicitly included. The selection of the conditioning and facilitating factors to the nature of SRs (i.e. the degree of asset specificity and criticality, and the level of organisation and infrastructure of PDs) may also provide another limitation of the research outcomes. It was acknowledged in chapters 2 and 3 that the nature of a SR may be conditioned and facilitated by a large number of factors, making it practically impossible to predict and control. The selection of asset specificity and criticality however, was not arbitrary. It was derived from their importance in the TCA, agency theory, and the interaction model of the IMP group that

the research is based on. Other factors though may have an impact of the need and ability to perform certain activities, which are not incorporated in this research.

In terms of the limitations generated by the analytical process that was utilised concerns the composition of the framework of activities of purchasing involvement itself. As discussed earlier the framework cannot (and should not) be seen as a prescriptive tool on how to manage SRs, but rather as an illustration of a list of activities that may help purchasing managers in their task to manage SRs. Although the data collected from the seven case studies provide a rich pool of information in describing how purchasing managers in different companies conduct certain activities, the framework is rather descriptive. It does not provide information about the advantages (or disadvantages) of the approach that different companies may take in conducting these activities. Instead the research focuses primarily on whether or not certain activities are conducted, and the reasons (as well as the implications) of conducting them.

A final limitation derives from the fact that although the importance (necessity) of certain activities was assessed, their effect on the performance of SRs has not been considered. A potential way of assessing this effect would be to conduct a longitudinal study in a particular company.

8.5 Future research

Based on the results of the study a range of recommendations for future research can be made.

8.5.1 Structural equation modelling for the nature of SRs

- The first recommendation stems from the methodological shortcomings that emanate from the choice of the research methodology. As the research has been exploratory and inductive, based primarily on qualitative data, a survey research could be conducted that will involve a large number of SRs selected from a population, to produce generalizable results with the use of statistical techniques.

Initially a structural equation model of the nature of BRs can be developed with the use of multivariate data analysis, which can be based on the factors that conceptually constitute the nature of BRs (Figure 4.4). Given that in the current research the four constructs that were selected to constitute the role of an actor in a SR are considered independently and coefficients of importance are not assigned to them, hierarchical clustering and factor analyses could be conducted to assess the independent effect of each of these constructs on the nature of SRs, and correlation analyses can determine the impact of one construct on the development and behaviour of the others.

8.5.2 Longitudinal research for the role of purchasing in SRs

As SRs are very dynamic institutions it would be also very useful to conduct longitudinal research to investigate whether (or how) the role of purchasing managers changes with time and what stimulates this change. An interesting piece of research would also be to carry out longitudinal investigation of the ‘actual’ impact of the role of purchasing on the performance of the SRs they are involved in as this research provides a rather static view of that impact. By carrying inter and intra-organisational surveys over the three different developmental stages of the SRs, the long-term effects of purchasing involvement could be assessed and potential problems created by purchasing involvement could be mitigated. A potentially relevant objective that is not investigated in this research could also be to develop measures of assessing these effects.

8.5.3 Optimisation of activities

A third recommendation pertains to the way that the identified activities can be executed in the most effective way. Different approaches to the same activities may be compared in terms of their effectiveness or efficiency or even their feasibility (either within the same company over time, or different but similar companies), to develop best practice models that can be used by purchasing professionals as guidelines to manage the SRs optimally.

8.5.4 Impact of other variables on the nature and management of SRs

Future research may also consider other potentially salient conditioning and facilitating variables, and investigate their impact on the management of similar case studies. The volume /variety dimensions of products/services or the financial investment for the SR are some of the variables that their impact is worthy of investigating⁷¹. The impact of these variables may be also related to the way that the activities in the framework may be executed.

8.5.5 Impact of certain facilitating factors on the management of SRs

Further research can be also conducted in terms of the impact of the facilitating factors. In particular the investigation of the optimal mix of particular skills and knowledge of purchasing professionals in the management of different SRs and how the employment process of purchasing managers and training (in order to develop new capabilities such as the use of e-procurement tools) can enhance the performance of SRs and improve internal customers' satisfaction may be studied further with the use of portfolio models.

8.5.6 Impact of SRs on business performance

Finally future research can be conducted to assess the impact of strategically managed SRs on the business performance of organisations. This research has produced the following preliminary results of the impact of effective SRs on several dimensions of business performance⁷².

Performance Dimension	Mean	St. Deviation
Service quality	5,49	0,95
Innovation	5,14	1,09
Resource utilisation	4,95	1,03
Ability to adopt changes	5,19	0,83
Financial performance	4,65	1,39
Competitiveness	4,3	1,36

Table 8.1 Impact of effective SR management on business performance

Previous research has also pinpointed direct positive links between successful BRs and business performance (Carr and Pearson, 1999; Kumar, 1999) conduct research that will

⁷¹ These variable are touched upon in this research, but not investigated thoroughly

⁷² On a scale of 1= no impact to 7=extremely high impact

produce prescriptive models of the selection of the most appropriate managerial style for different types of SRs. This research produced results for the impact of type of product/service on the management style of organisation but has not generated normative contingency models.

8.6 Epilogue

This study has identified and put in an integrated framework a broad range activities purchasing managers contribute to the management of SRs, generated insights about the ‘actual’ mediating role of purchasing in the management of different types of SRs in a relatively under-researched context, and provided tentative results about the impact that this role has on SRs’ performance. It has exposed a number of novel, additive and confirmatory findings that advance knowledge of the purchasing practice. These findings indicate a strong support for improvisational working practices towards the transformation of purchasing departments to service oriented departments that serve the internal customers of their organisations, facilitate the procurement process and mitigate potential differences between the trading partners. By achieving the research objectives, this thesis (hopefully) has contributed to the associated fields of purchasing and SCM and ultimately to the *professionalisation* of the purchasing profession.

The research environment of Warwick Business School has been instrumental in developing an epistemologically robust methodology with an interdisciplinary approach to the phenomena under investigation. The researcher’s more distant, integrative perspective of understanding business phenomena, combined with the more problem solving and pragmatic approach of the Business School has laid the foundations to combine the reflective approach of the researcher with the more proactive and approach of the business school.

The research process has been highly iterative. Its intention has not been to raise hypotheses and confirm or reject them as in the positivistic tradition, but rather to adopt a critical realistic perspective, searching for insights in the rich data that was unearthed from the case studies.

Consequently, there are many findings that are new, and often surprising, that have emerged as the research progressed and as the targeted organisations moved towards a more ‘mature’ stance towards the implementation of the data collection process.

Leading organisations collaborated systematically and provided a fertile locus to generate useful insights about the research objectives. The significance of the theoretical contributions that have been achieved may be evaluated by the degree to which the insights generated can be incorporated and hopefully improve the business practices in these (and similar) organisations. Given that this may be a very ambitious aim, the conviction of the researcher is that the very involvement of leading active managers from all the participating organisations in the research process may have a beneficial impact on all companies, as it may enhance their awareness of state-of-the-art business theories and practices that have been implemented successfully in other organisations and shed light to specific problems and tactical issues.

To end with, this thesis has been presented as if it has been designed and conducted in a linear function. To the contrary it has been a labyrinthine experience altogether. Over the entire period of the research project, the focus and research questions have been modified, the theoretical and conceptual foundations were developed during a meandering intellectual process that broaden the horizons of the researcher’s view of how organisations operate in today’s messy world, and the scope of the empirical research has changed as new aspects emerged.

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APPENDICES

Appendix A – Organisational charts of the PDs

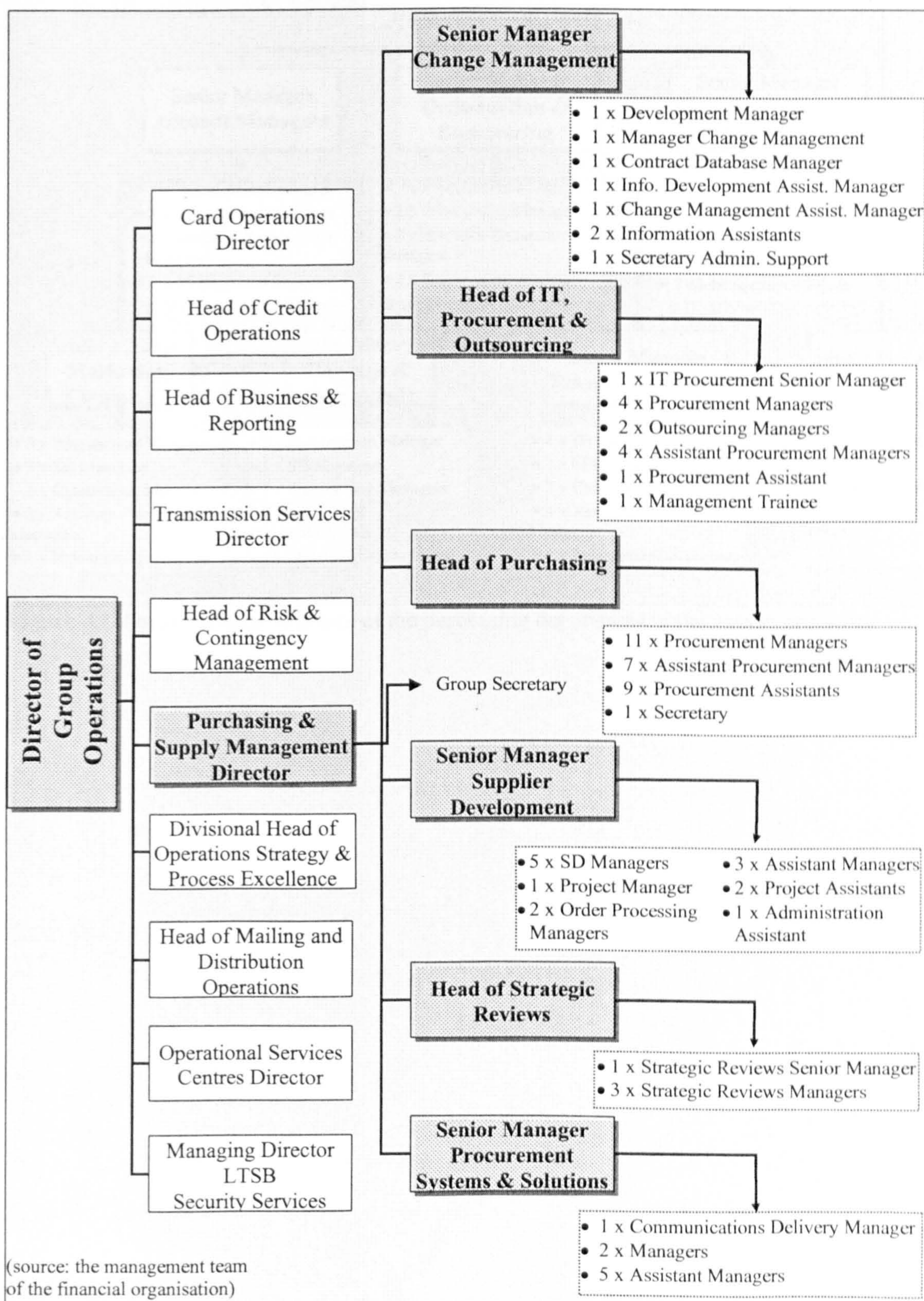


Figure A.1 Organisational chart of the operations department and PD at the financial organisation

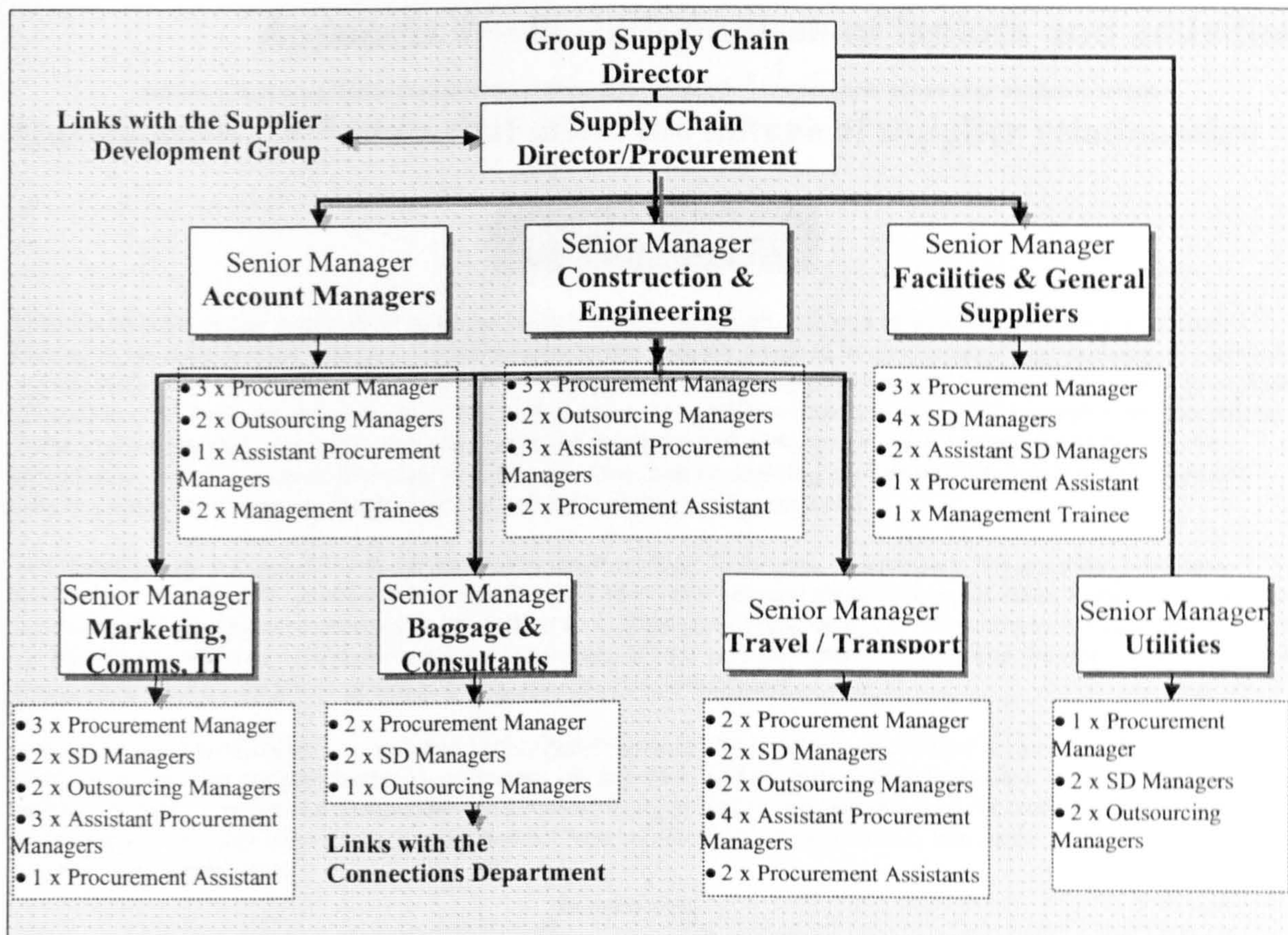


Figure A2. Organisational structure of the purchasing department in the airport operator

Appendix B – Questionnaires of factors and activities

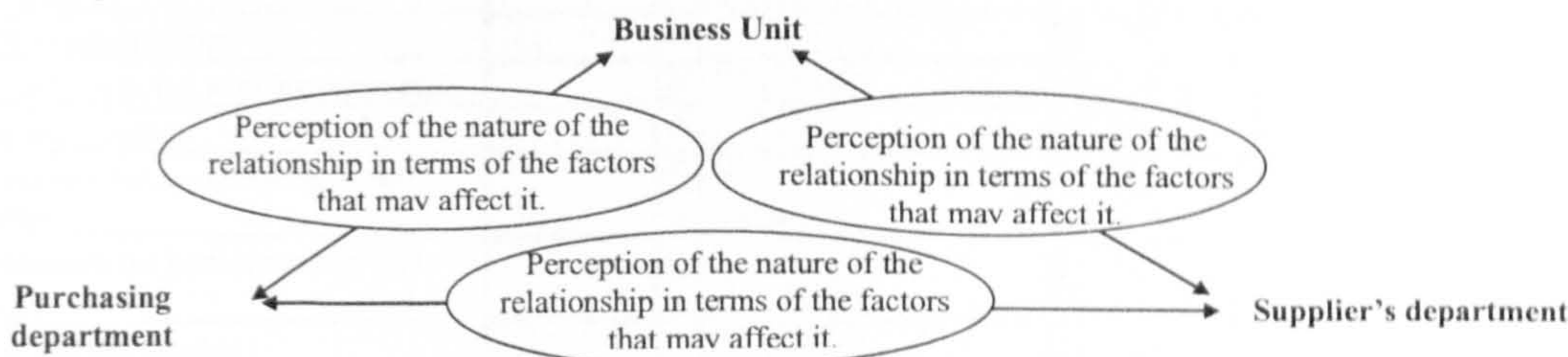
Questionnaire of factors that affect the nature of supplier relationships



This document is highly confidential and anonymity is a strict condition. It is part of an academic doctoral research looking at the relationships between companies/departments that are involved in service or product exchanges in service organisations. Thus the names of the respondents and the participating organisations will be made public only by explicit agreement with them and any commercially sensitive information will be treated as such. The research's product will be in the form of reports to the participant companies and the individual participants and a doctoral thesis that will be submitted to the University of Warwick. In the event of the thesis containing confidential information, disclosure will only be made with evidence of authorised consent from all the parties concerned.

The questionnaire is designed so that it won't take you more than 25 minutes to complete. The questions have been randomly arranged in the questionnaire so that they will not create bias and all have an equal value. Please answer all the questions and email this document as an attachment to m.giannakis@warwick.ac.uk. Alternatively if you prefer to send it by mail please send it to the address at the top of the page. If you have any questions regarding the clarity of the questions please do contact me by phone or email. Thank you for your co-operation.

Please consider the relationships described in the figure below for the provision of the service / product that you are involved in, between **the purchasing department, the supplier, and an internal business unit**, referred to here as trading partners. In answering the questions that follow please provide **your perception** of the relationship that your department as an entity has with its partners and not your relationship with individuals from other organisations/departments.



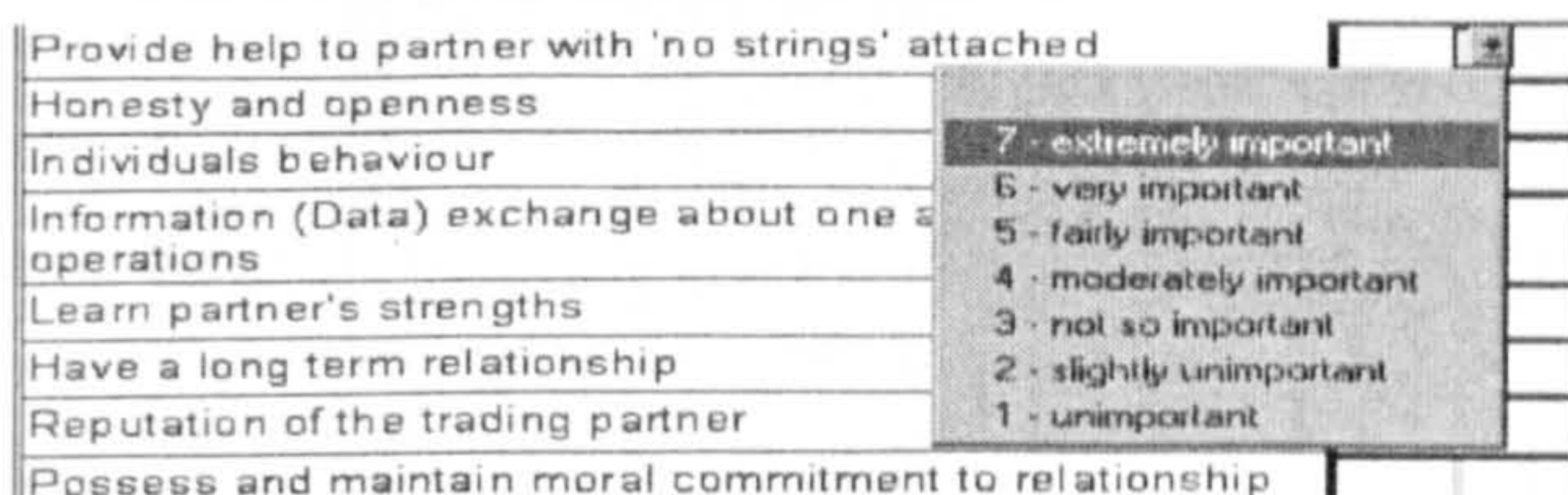
Instructions on how to answer the questions and how your responses will be interpreted

To fill in the questionnaire please read the tables as follows. For each factor (row) read column A first and match it against each factor. In the example that follows the question for the 1st factor will be:

How important to our business relationship with the 1st Partner is to have confidence in one another's actions?

Factors affecting the nature of a business relationship	How important to our relationship with each of the trading partners is each factor listed?		Rate your business unit's performance of the actual relationship with each of the trading partner		How difficult is it to effectively implement / manage/handle each factor within the relationships	
	1st Partner	2nd Partner	1st Partner	2nd Partner	1st Partner	2nd Partner
Have confidence in one another's actions						
Have contractual safeguards						

If you click on the grey boxes in the tables' cells, a drop-down menu will appear with 7 different preferences for your answer (Figure 2 on the left). You will have to choose one of the 7 preferences. If you answer (as in the figure) 7- **extremely important** this would indicate that in YOUR view to 'provide help to partner with no strings attached' is of extreme importance.



Repeat the same steps for the relationship with 2nd Partner and then the rest of the dimensions until the end of the document. Then save it and email it as an attachment to m.giannakis@warwick.ac.uk

PART I - Information about Yourself and your Organisation

According to your opinion, how critical is the waste management service to the success of your business? **Please describe briefly the criticality of the service**

and rate accordingly on a scale of 1= completely uncritical to 7=extremely critical to your business success

What is your Role in your Organisation?

What is your involvement in the relationship with your trading partners?(**you may choose more than one option**)

1st Partner Managing Relationship <input type="checkbox"/>	2nd Partner Managing Relationship <input type="checkbox"/>
Negotiating Contract <input type="checkbox"/> Frequent Communication <input type="checkbox"/>	Negotiating Contract <input type="checkbox"/> Frequent Communication <input type="checkbox"/>
Partial Involvement <input type="checkbox"/> Other (Please Specify):	Partial Involvement <input type="checkbox"/> Other (Please Specify):

PART II - Factors Influencing your Relationship with your Trading Partners

On a scale of 1= **totally unimportant** to 7=**extremely important** please rate the following factors in terms of *How important is each factor to the business relationship each of your trading partners?*

B) On a scale of 1= **very poor performance** to 7=**excellent performance** please indicate

How do you rate your company's performance of the actual relationship with your trading partners against these factors?

C) On a scale of 1=**extremely easy** to implement, 7=**extremely difficult** to implement please rate

How difficult is to implement each factor in forming a successful relationship?

FACTORS AFFECTING RELATIONSHIP MANAGEMENT	How important to our relationship with each of the trading partners is each factor listed?		Rate your business unit's performance of the actual relationship with each of the trading partner		How difficult is it to effectively implement / manage/handle each factor within the relationships	
	1st Partner	2nd Partner	1st Partner	2nd Partner	1st Partner	2nd Partner
Have confidence in one another's actions						
Have contractual safeguards						
Cost transparency						
Full & open communication						
Avoiding conflicts in the working partnership						
Early input into projects						
Ability to express the requirements to the trading partner						
Ability to measure the performance of the trading partner						
Formality of the relationship						
Ability to manage cultural variations						
Loyalty						
Provide help to partner with 'no strings' attached						
Honesty and openness						
Individuals behaviour (e.g. attitude)						
Information (Data) exchange						
Learn partner's strengths						
Have a long term relationship						
Reputation of the trading partner						
Operate in an ethical way						
Ability to express 'soft' issues(e.g. motivation)						
Partner's position in the market						
Have a short term relationship						
Technology transfer						
Industry norms						
Willing to receive partner's ideas						
Willingness to adapt as environment changes						
Words supported by actions and promises are kept						
Working in the same location with						
Ability to identify business drivers of trading partner						
Volume of transactions						
Size of turnover						
Financial Incentives and remedies						
Cost of managing the relationship						

Investment in the relationship				
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Part III - Impact of Relationship Management on Performance Measures

On a scale of 1= no impact to 7=extremely high impact please state your perception of the impact of relationship management with each of your trading partners on their actual performance in terms of the performance measures listed

What is the Impact of relationship management to your business unit and to each of the trading partner's Service Performance?

Service Performance Measures of your business unit	Impact of Rel. Mgmt	Service Performance Measures of 1 st partner	Impact of Rel. Mgmt	Service Performance Measures of 2 nd partner	Impact of Rel. Mgmt
Ability of the your business unit service process to adopt to changes		Ability of the 1st Partner service process to adopt to changes		Ability of the 2nd Partner service process to adopt to changes	
Service quality of your business unit		Service quality of 1st Partner		Service quality of 2nd Partner	
How efficiently are your business unit's resources utilised in the delivery of service		How efficiently are 1st Partner's resources utilised in the delivery of service		How efficiently are 2nd Partner's resources utilised in the delivery of service	
Ability of your business unit to innovate		Ability of 1st Partner to innovate		Ability of 2nd Partner to innovate	
Your business unit's Financial performance		1st Partner Financial performance		2nd Partner's Financial performance	
Competitiveness of your business unit		Competitiveness of 1st Partner		Competitiveness of 2nd Partner	

Thank you for completing the Questionnaire!

Please save the document and email it as an attachment to m.giannakis@warwick.ac.uk

How to rate the factors

Importance

Rating	Behaviour Anchor
7 – extremely important	This factor is indispensable in shaping the nature of the relationship and there is an imperative to consider it in and manage it / implement it with the greatest care and attention
6 – very important	This factor is very important in shaping the nature of the relationship and can have a major impact on its performance. Great attention should be given to manage / implement it effectively, albeit within the bounds of budgetary constraints.
5 – fairly important	This factor has an apparent influence to the nature of the relationship and effective implementation / handling can make a positive impact on its performance.
4 – moderately important	This factor influences the nature of the relationship in most cases but does not require urgent implementation / handling.
3 – not so important	This factor has the potential to influence the nature of the relationship, but should not be the main focus of organisations in managing / implementing it
2 – slightly unimportant	This factor does not have an apparent relevance to the nature of the relationship, but can potentially influence it in certain conditions.
1 – totally unimportant	This factor is completely irrelevant to the nature of the relationship and can be easily ignored in its management

Performance

Rating	Behaviour Anchor
7 – excellent performance	The performance of purchasing department in conducting / executing this activity is excellent and there is no scope for improvement.
6 – very good performance	The purchasing department does remarkably well in achieving the desirable performance targets but we / they should continue our/their efforts to achieve our / their best.
5 – fairly good performance	The purchasing department meets its general targets but there is still scope for improvement.
4 – moderately good performance	The purchasing department has effectively achieved some of the performance targets, but there are many areas that need improvement.
3 – not so good performance	The purchasing department although it puts effort in this activity its performance is not efficient and there is plenty of scope for improvement.
2 – poor performance	The purchasing department cannot meet the requirements of this activity and there is a need to put a lot more effort and resources to fulfil its obligations.
1 – very poor performance	The purchasing department fails to meet any of the targets set for this activity. Urgent action is needed!

Difficulty

Rating	Behaviour Anchor
7 – extremely difficult	It is almost impossible to manage / implement this activity satisfactorily.
6 – very difficult	This activity requires maximum attention, great effort, special managerial expertise and technical knowledge to be managed / implemented effectively.
5 – fairly difficult	This activity is quite difficult to manage / implement but with care and use of the existing managerial skills and resources satisfactory results can be achieved.
4 – moderately difficult	This activity can be managed / implemented successfully with the existing resources, it needs some particular skills but there are some conditions that can make it more difficult
3 – fairly easy	This activity can be managed / implemented successfully with the existing resources, does not require great effort or special resources or skills, but there are some issues that need to be handled with care
2 – very easy	This activity does not require great or special skills and can be managed / implemented with ease.

1 – extremely easy	This activity does not require much effort or skills to be managed / implemented
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Questionnaire of the activities that purchasing managers conduct in supplier relationships

This document is highly confidential and anonymity is a strict condition. It is part of an academic doctoral research looking at the relationships between companies/departments that are involved in service or product exchanges in service organisations. Thus the names of the respondents and the participating organisations will be made public only by explicit agreement with them and any commercially sensitive information will be treated as such. The research's product will be in the form of reports to the participant companies and the individual participants and a doctoral thesis that will be submitted to the University of Warwick. In the event of the thesis containing confidential information, disclosure will only be made with evidence of authorised consent from all the parties concerned.

Please consider the list of activities that are conducted by purchasing managers in supplier relationships as they were identified in the qualitative research and rate them in terms of importance, the actual performance and the difficulty in managing/implementing them. In answering the questions that follow please provide *your perception* of these attributes.

The questionnaire is designed so that it won't take you more than 30 minutes to complete. The activities have been arranged in four management areas (contract management, supplier development, product management and process management) and all have an equal value. Please answer all the questions and email this document as an attachment to m.giannakis@warwick.ac.uk. Alternatively if you prefer to send it by mail please send it to the address at the top of the page. If you have any questions regarding the clarity of the questions please do contact me by phone or email. Thank you for your co-operation.

Instructions on how to answer the questions online

To fill in the questionnaire please read the tables as follows.

For each activities (row) read column A first and match it against each activity. In the example that follows the question for the 1st activity will be:

How important it is to identify critical processes

ACTIVITIES CONDUCTED BY PURCHASING MANAGERS	How important to is this activity in the supplier relationship?	Rate your performance of the actual relationship	How difficult is it to effectively implement / manage this activity?
Identify critical processes / products for development			
Evaluate market / industry norms, forces			
Evaluate strategic choices of the firm			

If you click on the grey boxes in the tables' cells, a drop-down menu will appear with 7 different preferences for your answer (Figure below). You will have to choose one of the 7 preferences. If you answer (as in the figure) **7-extremely important** this would indicate that in YOUR view to 'Identify critical processes / products for development' is of extreme importance.

Provide help to partner with 'no strings' attached	
Honesty and openness	
Individuals behaviour	7 - extremely important
Information (Data) exchange about one's operations	6 - very important
Learn partner's strengths	5 - fairly important
Have a long term relationship	4 - moderately important
Reputation of the trading partner	3 - not so important
Possess and maintain moral commitment to relationship	2 - slightly unimportant
	1 - unimportant

Repeat the same steps all the activities in the four management areas of and then the rest of the dimensions until the end of the document. Then save it and email it as an attachment to m.giannakis@warwick.ac.uk

PART I - Information about Yourself

What is your Role in your Organisation?

According to your opinion, how critical is your role in the business relationship? **Please describe briefly the criticality of the service and rate it accordingly on a scale of 1= completely uncritical to 7=extremely critical to your organisations' success**

How would you describe your involvement in the relationships with your trading partners? (you may choose more than one option)

Managing Relationship Negotiating Contract Frequent Communication Partial Involvement Other (Please Specify):

PART II – Activities Conducted in the relationship

On a scale of 1= totally unimportant activity to 7=extremely important activity please rate the following activities in terms of *How important is each activity to the business relationship?*

B) On a scale of 1= very poor performance to 7=excellent performance please indicate

How do you rate the purchasing department's performance against these activities?

C) On a scale of 1=extremely easy to implement, 7=extremely difficult to implement please rate

How difficult is to implement each activity in forming a successful relationship?

Pre-contractual			Institutional			Operational		
Rate the activities that purchasing managers contribute to supplier relationships in terms of their importance, purchasing department's performance and difficulty to implement / manage	Importance	Performance	Difficulty	Rate the activities that purchasing managers contribute to supplier relationships in terms of their importance, purchasing department's performance and difficulty to implement / manage	Importance	Performance	Difficulty	
Contract Management								
Determinants of Relationships								
Evaluate market / industry norms, forces				Select the legal form of the relationship (partnership, alliance)				Monitor & Control
Evaluate strategic choices of the firm				Select the contract type				Ensure clear contract deliverables for:
Evaluate organisational culture				Select the length of the relationship				Product or Service
Evaluate requirements of customers				Establish contractual safeguards (i.e. exclusivity clauses, penalties)				Product specifications
Explore external market and supplier information				Delegate roles and responsibilities with suppliers and internal customers				Key Performance Indicators
Capture and transfer internal learning for (shared services, outsourcing, etc)				Provide suppliers with financial, or franchising incentives				Authorise all appropriate spending for
Supplier selection								
Identify appropriate strategic and tactical issues				Adapt relationship specific agreements				Mandated levels of spend
Develop and maintain supplier database				Non-contractual agreements				Outsourcing
Prepare requests for quotations				Spirit of fellowship agreements				Screen supplier's actions
Identify potential suppliers				Provide unconditional help to suppliers				Benchmark supplier performance vs. external market & contract criteria
Tendering				Devote managerial expertise, etc.				Monitor procurement from other suppliers
Evaluate supplier (reputation, capabilities, cost)				Ensure supplier regularly updated				
Evaluate business cost, supplier risk, exit strategy								
Supplier approval (screening)								
Negotiate terms of contract								
Supplier certification								

Pre-contractual			Institutional			Operational		
Rate the activities that purchasing managers contribute to supplier relationships in terms of their importance, purchasing department's performance and difficulty to implement / manage	Importance	Performance	Difficulty	Rate the activities that purchasing managers contribute to supplier relationships in terms of their importance, purchasing department's performance and difficulty to implement / manage	Importance	Performance	Difficulty	
Supplier Development	Identify critical processes / products for development			Identify critical suppliers for development				
	Form cross-functional supplier development team			Provide resources and effort to implement supplier development programme				
				Propose workshops				
				Establish rewards				
	Collect information on new goods / services being developed, or already available in supplier markets			Establish goods / services technical specifications				
	Evaluate goods / services in terms of value to organisation, applicability in organisation's operations, lead-time, quality, and costs			Establish goods / services design variations				
	Promote standardisation & simplification of parts			Establish goods / services deliverables				
	Procurement process mapping			Delegate flow of resources (information, financial, material, knowledge)				
	Examine potential supplier's processes to identify areas of expertise and areas that need improvement			Establish shared operations with partners				
Product Management	Select preferred process type for exchange of product or service			Establish processes and means of delivery				
Process Management								

Thank you for completing the Questionnaire!

Please save the document as **BASDHeathrowcleaning.doc** and email it as an attachment to m.giannakis@warwick.ac.uk

If you would like to be notified of the results of this research please tick this box

How to rate the activities

Importance

Rating	Behaviour Anchor
7 – extremely important	This activity is indispensable in shaping the nature of the relationship and there is an imperative to consider it in and manage it / implement it with the greatest care and attention
6 – very important	This activity is very important in shaping the nature of the relationship and can have a major impact on its performance. Great attention should be given to manage / implement it effectively, albeit within the bounds of budgetary constraints.
5 – fairly important	This activity has an apparent influence to the nature of the relationship and effective implementation / handling can make a positive impact on its performance.
4 – moderately important	This activity influences the nature of the relationship in most cases but does not require urgent implementation / handling.
3 – not so important	This activity has the potential to influence the nature of the relationship, but should not be the main focus of organisations in managing / implementing it
2 – slightly unimportant	This activity does not have an apparent relevance to the nature of the relationship, but can potentially influence it in certain conditions.
1 – totally unimportant	This activity is completely irrelevant to the nature of the relationship and can be easily ignored

Performance

Rating	Behaviour Anchor
7 – excellent performance	The performance of purchasing department in conducting / executing this activity is excellent and there is no scope for improvement.
6 – very good performance	The purchasing department does remarkably well in achieving the desirable performance targets but we / they should continue our/their efforts to achieve our / their best.
5 – fairly good performance	The purchasing department meets its general targets but there is still scope for improvement.
4 – moderately good performance	The purchasing department has effectively achieved some of the performance targets, but there are many areas that need improvement.
3 – not so good performance	The purchasing department although it puts effort in this activity its performance is not efficient and there is plenty of scope for improvement.
2 – poor performance	The purchasing department cannot meet the requirements of this activity and there is a need to put a lot more effort and resources to fulfil its obligations.
1 – very poor performance	The purchasing department fails to meet any of the targets set for this activity. Urgent action is needed!

Difficulty

Rating	Behaviour Anchor
7 – extremely difficult	It is almost impossible to manage / implement this activity satisfactorily.
6 – very difficult	This activity requires maximum attention, great effort, special managerial expertise and technical knowledge to be managed / implemented effectively.
5 – fairly difficult	This activity is quite difficult to manage / implement but with care and use of the existing managerial skills and resources satisfactory results can be achieved.
4 – moderately difficult	This activity can be managed / implemented successfully with the existing resources, it needs some particular skills but there are some conditions that can make it more difficult
3 – fairly easy	This activity can be managed / implemented successfully with the existing resources, does not require great effort or special resources or skills, but there are some issues that need to be handled with care
2 – very easy	This activity does not require great or special skills and can be managed / implemented with ease.
1 – extremely easy	This activity does not require much effort or skills to be managed / implemented

Appendix C – Consent form for interview and interview questions**Consent Form**

If you agree to be interviewed for the research looking at the role of purchasing in supplier relationships in please sign below.

Name:

Date: / /

Furthermore, to better record the interview, I would like to tape record the discussion although this is not obligatory. The tapes will not be stored with any identifying data and will not be disclosed to anyone else involved in the research.

If you agree me taping the conversation please sign below.

Name:

Date: / /

I am a doctoral researcher at the University of Warwick. This research will provide the setting for my doctoral thesis. My contact information is:

Mihalis Giannakis
Doctoral Researcher at Warwick University

Correspondence Address:

2 Percy Street
Coventry CV1 3BY
UK

Email: m.giannakis@warwick.ac.uk

Tel: 02476 524266

Mobile: 07779 233683

Interview Questions

Date:

Location:

Interviewee:

Thank you for participating in this research on supplier relationships in service organisations. The interview will take about 30 minutes. I want to assure you that anything we will discuss today will be entirely confidential. While I may quote from this interview in my thesis, I will not disclose your name to anyone and the other parties will not be aware of your answers. The interview is voluntary and I am grateful that you are spending some of your time, so if at any point you feel that you want to stop it please tell me to do so. To better record the interview, I would like to tape the conversation though this is not mandatory. The tapes will be stored and will not be available to anyone else. If you would like a copy of our conversation please get in touch with me and I will send you one.

The underlying reason for conducting this research is that more and more organisations rely on each other to accomplish their goals. The role that purchasing managers have however in the management of SRs has not been thoroughly investigated. So I am interested in talking about the business relationships you have with your trading partners, how they evolved over time, how you work together on a daily basis, what is it that purchasing managers do and how is your relationship with them as well as your other trading partners.

1. I would like to start by asking about you and your organisation / department. What does your department do what is its structure, what is your role in your department and how long have you been working here?
2. Can you please describe the contract with your trading partner? Please describe briefly the history. Who were the people involved in signing the contract what do you think initiated it, why do you think you won the bid for the contract, etc.
3. Can you please describe the relationships with your trading partner? How often do you talk to them (how frequent are your interactions), how many people work on this contract, who does what, etc? *If trust is mentioned here please elaborate on what trust means and how it matters*
4. Why did you choose your trading partner?
5. What do you expect your organisation will get out of the contract with your trading partner?
6. Can you please tell me if you have contracts with other important customers/suppliers? If yes can you please briefly describe that relationship? Is it different than the relationship you have with your trading partner?
7. If you work most of the time with one person from your trading partner can you describe the relationship with them? What makes the relationship work, how does it influence your perception of your organisation's relationship with them?
8. Can you identify a person from the 1st partner that you get along the best? What makes the relationship work so well? Also can you identify a person from your 1st trading partner that you have difficulties working with? How does this affect your work and your perception of the relationship between your organisations?
9. Can you identify a person from the 2nd partner that you get along the best? What makes the relationship work so well? Also can you identify a person from the 2nd partner that you have difficulties working with? How does this affect your work and your perception of the relationship between your organisations?
10. Can you recall an incident where there was a conflict with your partners? How did you resolve it?
11. What do you expect from your trading partners?
12. Do you have any measurement for your performance?
13. How do you measure this quality?
14. What is your perception of your customers performance?
15. Is there anything in your relationships with your trading partners that you feel needs improvement?
16. Is there anything that this research is missing? Is there anything that you would like to add?

Thank you for your time. I will report my findings in my thesis and will send your organisation an individual report. Again I would like to reassure you that anything we discussed here and what will be answered in the questionnaire is highly confidential and will not be disclosed to other members of your organisation, customers or suppliers. The final report will not contain any references to individual answers i.e. there will not be any reference to the answers regarding people's perceptions of honesty and openness being very important or individuals from supplier behave in an unethical way or so.

Comments:

Reference to trust (calculative, cognitive, normative, trustworthiness) or confidence:

Reference to power (authority, influence, domination):

Reference to involvement (complexity, intensity of interaction, scope):

Reference to commitment (loyalty, length of relationship)

APPENDIX D – Analysis of Activities that purchasing managers are involved in

Pre-contractual			Institutional			Operational		
Activities	Abbrev	Role	Activities	Abbrev	Role	Activities	Abbrev	Role
Product Management	collinfo	CP, EC	✓ Establish goods / services technical specifications	techspec	AP, CI	✓ Receive products / services	reprocse	II
	evalprod	CP	✓ Establish goods / services design variations	desivari	AP, CI	✓ Product Data Management (data creation, transfer, use)	prdamgmt	II
	standsim	IP	✓ Establish goods / services deliverables	delivera	AP, CI	✓ Suggest alternative products and technologies that can result in a higher quality of the final product	altprtec	IP
Process Management	procemap	CP, CI	✓ Delegate flow of resources (information., financial, material, knowledge)	delfres	AP, BET	✓ Ordering	ordering	II
	supproce	CI	✓ Establish shared operations with partners	sharoper	SI, EC	✓ Routinisation of activities (maintenance)	routacti	II
	selproce	AP, CI	✓ Establish processes and means of delivery	meandeli	AP	✓ Measure effectiveness of processes	meproeff	II
Contract Management	indnorms	CI, NT, SI	Contractual Agreements	legaform	IP	Monitor & Control	prodeliv	CLT, CP
	strchoic	CI, NT, SI	✓ Select the legal form of the relationship (partnership, alliance)	lengrela	IP, LGC	✓ Ensure clear contract deliverables	prospec	CP
	orgcultu	CI, NT, SI	✓ Select the contract type	contrsaf	CLT, AP	• Product or Service	kpis	CLT, CP
	requcust	CI, NT, SI	✓ Select the length of the relationship			• Product specifications		
	extmarke	CI	✓ Establish the extent to which partners are bound to the agreement (contractual safeguards)			• Key Performance Indicators		
	intelear	EC	✓ Delegate roles and responsibilities with suppliers and internal customers	delegate	AP	✓ Authorise all appropriate spending for	mandspen	AP
	strissue	IP	✓ Provide suppliers with financial, or franchising incentives	finincen	CP, AP	• Mandated levels of spend	outsospe	AP
	supdatab	CP	✓ Adapt relationship specific agreements	adagreem	AP, EC	✓ Screen supplier's actions	supactio	SI, CLT
	requotat	CI	Non-contractual agreements			✓ Benchmark supplier performance vs. external market & contract criteria	benchper	CLT
	potsuppl	IP	✓ Spirit of fellowship agreements			✓ Monitor procurement from other suppliers	monipro	CP, CI
	tenderin	AP	✓ Provide unconditional help to suppliers					
	reputati	CLT	✓ Devote managerial expertise					
	suprisk	CLT	✓ Ensure supplier regularly updated					
	screenin	AP						
	negcontr	AP						
certific	AP							
Supplier Development	critproc	CI, EC, LC	✓ Identify critical suppliers for SD	crisupde	LC, NT, EC	✓ Initiate communication with suppliers	commsupp	LC, CT, II
	fsdteam	LC, EC, SI	✓ Provide resources and effort to implement SD programme	reseffsd	LC, NT, EC	✓ Arrange meetings with partners	meetings	LC, II
			✓ Organise workshops	workshop	LC, EC, CT	✓ Involve supplier in internal operations	invosupl	SI, LC, EC

Trust: Calculative (CLT), Cognitive (CT), Normative (NT), Trustworthiness (TRW) **Power:** Authority (AP), Control (CP), Influence (IP) **Involvement:** Scope (SI), Composition (CI), Intensity of interaction (II) **Commitment:** Loyalty (LC), Effort (EC), Length of SR (LGC)

Within - case analysis of activities*

	Within - case analysis of activities*																		
	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
Travel Services	Produ	Collinfo	CP, EC	M	5.67	5.63	4.33	Techspec	AP, CI	H	6.00	5.90	5.17	Recprose	II		4.17		2.83
		Evalprod	CP	H	4.17	6.07	3.50	Desivari	AP, CI	H	5.00	5.30	4.67	Prdamgmt	II	M	6.17	5.43	6.50
		Standsim	IP	H	6.00	6.40	4.00	Delivera	AP, CI	H	6.00	6.13	4.83	Altprtec	IP	M	5.00	5.20	4.50
	Process	Procemap	CP, CI	H	4.17	5.90	3.33	Delfres	AP, BET	H	6.00	5.90	4.33	Ordering	II		5.50		4.33
		Supproce	CI	H	5.33	5.67	5.33	Sharoper	SI, EC	H	4.83	5.57	4.17	Routacti	II		5.17		5.50
		Selproce	AP, CI	H	5.67	5.83	3.83	Meandeli	AP	H	5.50	6.03	2.83	Meproeff	II	H	5.50	5.40	4.83
	Contract	Indnorms	CI, NT, SI		4.83		4.83	Legaform	IP	H	5.50	5.93	4.83	Ensure					
		Strchoic	CI, NT, SI	H	4.83	6.03	3.33	Selcontr	IP,	H	6.17	6.27	4.83	contract					
		Orgcultu	CI, NT, SI		5.00		4.53	Lengrela	AP, LGC		5.50		4.00	deliverables					
		Reqcust	CI, NT, SI	H	5.67	5.80	3.83	Contrsaf	CLT, AP	H	6.50	6.20	6.67	•Prodeliv	CLT, CP	M	5.33	5.80	4.83
		Extmarke	CI	H	5.17	6.23	6.33	Delegate	AP	H	6.33	5.40	6.67	•Prospect	CP	M	4.50	5.43	3.00
		Intelear	EC		4.50		4.00	Finincen	CP, AP		5.83		5.50	•Kpis	CLT, CP	H	5.83	6.30	5.67
		Strissue	IP		6.00		3.83	Adagreem	AP, EC	H	5.50	5.53	4.50	Authorise					
		Supdatab	CP		5.83		5.03	Fellagre	CT, EC		4.33		5.33	spending:					
		Requotat	CI	H	6.50	6.13	4.67	Helpsupl	CT, EC		5.83	6.03	3.33	• Mandspen	AP		3.67		4.17
		Potsuppl	IP	H	6.33	6.17	4.67	Manexper	SI, EC, CP	H	3.50	5.00	4.00	• Outospe	AP		5.50		3.17
		Tenderin	AP	H	5.50	6.30	4.67	Supupdat	AP, SI, CP	H	4.17	5.63	5.50	Supactio	SI, CLT	H	5.83	5.43	5.50
		Reputati	CLT	H	6.20	5.87	5.50							Benchper	CLT	H	5.83	5.80	3.83
		Suprisk	CLT	H	5.67	5.93	5.50							Moniproc	CP, CI		5.67		4.50
		Screenin	AP	H	6.33	5.80	6.03												
		Negcontr	AP	H	6.83	6.33	5.83												
	Certific	AP	H	5.83	5.93	6.17													
	SD	Critproc	CI, EC, LC	M	6.33	6.20	4.33	Crisupde	LC, NT, EC		5.83		5.17	Commsupp	LC, CT, II	H	4.83	4.90	3.33
		Cfsdteam	LC, EC, SI		6.50		3.83	Reseffsd	LC, NT, EC	M	4.50	5.47	3.67	Meetings	LC, II	H	6.17	5.60	4.50
								Workshop	LC, EC, CT		4.33		5.00	Invosupl	SI, LC, EC		5.17		5.67
								Rewards	LC, AP, SI		3.83		5.00	Evsupdev	EC, AP		5.67		5.33

	Within - case analysis of activities*																		
	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
Print Services	Produ	Collinfo	CP, EC	L	4.80		3.30	Techspec	AP, CI	L	5.50	4.70	3.50	Recprose	II		3.90		2.70
		Evalprod	CP	L	5.10	5.10	5.30	Desivari	AP, CI	L	4.30	4.70	4.40	Prdamgmt	II	L	5.80	4.90	6.20
		Standsim	IP	H	5.60	6.20	3.70	Delivera	AP, CI	L	5.80	5.00	4.30	Altprtec	IP		5.30		3.90
	Process	Procemap	CP, CI	M	5.20	5.10	3.60	Delfres	AP, BET	L	4.80	4.90	3.70	Ordering	II		4.90		4.80
		Supproce	CI	M	5.50	5.30	4.70	Sharoper	SI, EC	H	5.00	5.30	4.40	Routacti	II	M	5.70	5.00	4.10
		Selproce	AP, CI	H	4.80	4.80	4.30	Meandeli	AP	L	5.30	5.50	2.90	Meproeff	II	H	4.70	5.30	4.90
	Contract	Indnorms	CI, NT, SI	M	4.80	5.20	5.80	Legaform	IP	H	5.90	5.80	5.10	Ensure					
		Strchoic	CI, NT, SI	L	4.80	5.10	4.00	Selcontr	IP,	M	5.50	6.20	4.20	contract					
		Orgcultu	CI, NT, SI		3.90		4.40	Lengrela	AP, LGC		5.60		4.50	deliverables					
		Reqcust	CI, NT, SI	L	5.50	5.60	4.40	Contrsaf	CLT, AP	H	6.20	5.60	5.50	• Prodeliv	CLT, CP	L	5.30	5.20	4.60
		Extmarke	CI	M	4.80	6.00	6.30	Delegate	AP	M	6.10	5.50	6.20	• Prospect	CP	M	3.90	5.80	3.20
		Intelear	EC		3.80		4.20	Finincen	CP, AP		5.60		5.40	• Kpis	CLT, CP	H	6.70	5.90	6.60
		Strissue	IP		4.50		3.80	Adagreem	AP, EC	M	4.90	5.70	4.50	Authorise					
		Supdatab	CP		5.60		3.20	Fellagre	CT, EC		4.40		5.10	spending:					
		Requotat	CI	H	6.00	6.00	5.00	Helpsupl	CT, EC	M	3.70	5.70	3.80	• Mandspen	AP	H	4.60	5.90	4.10
		Potsuppl	IP	M	5.60	5.70	5.60	Manexper	SI, EC, CP		4.30		4.80	• Outospe	AP	H	5.00	6.10	3.40
		Tenderin	AP	H	6.10	6.00	5.20	Supupdat	AP, SI, CP	H	4.00	5.70	5.90	Supactio	SI, CLT	H	5.00	5.10	5.70
		Reputati	CLT	M	5.60	4.80	6.00							Benchper	CLT	H	5.60	4.80	3.80
		Suprisk	CLT	H	5.50	5.50	5.30							Moniproc	CP, CI		4.90		5.40
		Screenin	AP	M	5.70	6.00	6.10												
		Negcontr	AP	H	6.40	5.70	6.20												
	Certific	AP	M	6.00	5.80	5.90													
	SD	Critproc	CI, EC, LC	H	6.10	5.10	4.70	Crisupde	LC, NT, EC	H	5.80	5.20	5.30	Commsupp	LC, CT, II	H	5.90	5.30	3.50
		Cfsdteam	LC, EC, SI	L	5.70	5.80	4.40	Reseffsd	LC, NT, EC		3.80		4.30	Meetings	LC, II	M	5.80	4.90	4.10
								Workshop	LC, EC, CT		4.50		6.20	Invosupl	SI, LC, EC	L	5.50	5.20	4.90
								Rewards	LC, AP, SI	H	3.80	4.90	4.90	Evsupdev	EC, AP		5.60		5.10

* C=Contribution, I=Importance, P=Performance, D= Difficulty. The activities in grey fonts are the ones that purchasing managers have no contribution in the individual SRs. They were rated however by the participants to the study, to identify whether there is a need for purchasing managers to be involved in them.

	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
	Stationery	Produce	Collinfo	CP, EC		4.58		4.17	Techspec	AP, CI	H	5.25	6.25	3.75	Recprose	II		5.25	
Evalprod			CP	H	5.33	5.77	4.83	Desivari	AP, CI	M	5.25	6.45	4.42	Prdamgmt	II	M	5.42	5.77	4.58
Standsim			IP	H	5.83	6.55	3.75	Delivera	AP, CI	M	5.83	5.80	5.00	Altprtec	IP	M	5.67	5.32	3.33
Process		Procemap	CP, CI	H	4.67	5.67	3.50	Delfres	AP, BET	H	5.58	6.20	5.00	Ordering	II		5.58		5.00
		Supproce	CI	M	4.33	5.55	4.75	Sharoper	SI, EC	L	5.42	5.92	4.92	Routacti	II	H	5.42	5.52	4.92
		Selproce	AP, CI	H	5.42	5.47	3.67	Meandeli	AP	M	5.08	5.82	5.50	Meproeff	II	H	5.08	4.58	5.5
Contract		Indnorms	CI, NT, SI		4.83		5.33	Legaform	IP	H	5.58	5.55	5.25	Ensure contract					
		Strchoic	CI, NT, SI	H	4.83	6.15	4.83	Selcontr	IP,	H	5.08	6.08	5.25	deliverables					
		Orgcultu	CI, NT, SI	M	4.17	5.60	4.17	Lengrela	AP, LGC	H	5.58	6.35	4.92	• Prodeliv	CLT, CP	H	5.50	6.00	3.92
		Reqcust	CI, NT, SI	H	5.33	4.85	4.75	Contrsaf	CLT, AP	H	5.75	6.35	6.33	• Prospects	CP	H	5.08	5.95	4.17
		Extmarke	CI	H	4.75	5.93	5.67	Delegate	AP	H	6.17	5.96	5.50	• Kpis	CLT, CP	H	6.25	6.23	5.75
		Intelear	EC	L	4.25		5.33	Finincen	CP, AP	M	5.42	4.80	5.58	Authorise					
		Strissue	IP		5.08		5.33	Adagreem	AP, EC	M	5.42	5.90	4.92	spending:					
		Supdatab	CP		5.67		4.25	Fellagre	CT, EC		3.92		4.58	• Mandspen	AP	H	5.17	5.10	4.83
		Requotat	CI	H	5.92	6.37	5.42	Helpsupl	CT, EC	M	4.67	5.96	4.83	• Outospe	AP	H	4.83	5.80	3.92
		Potsuppl	IP	H	6.40	5.97	5.17	Manexper	SI, EC, CP	M	4.42	6.00	4.50	Supactio	SI, CLT	H	5.50	6.22	5.33
		Tenderin	AP	H	6.05	6.03	4.08	Supupdat	AP, SI, CP	H	4.08	5.90	6.00	Benchper	CLT	M	6.00	5.63	4.50
		Reputati	CLT	H	5.92	5.67	5.67							Moniproc	CP, CI	M	5.92	4.92	4.33
		Suprisk	CLT	H	5.25	5.82	5.58												
		Screenin	AP	H	6.50	6.21	5.75												
		Negcontr	AP	H	6.50	6.34	6.58												
Certific		AP	H	6.33	5.77	5.83													
SD		Critproc	CI, EC, LC	H	5.33	4.77	4.75	Crisupde	LC, NT, EC	H	5.67	5.72	5.58	Commsupp	LC, CT, II	L	6.42	5.76	3.50
		Cfsdteam	LC, EC, SI		5.50		5.67	Resefisd	LC, NT, EC		4.75		4.42	Meetings	LC, II	M	5.17	5.67	3.83
								Workshop	LC, EC, CT		5.75		4.83	Invosupl	SI, LC, EC		5.67		5.50
								Rewards	LC, AP, SI	M	5.17	5.55	5.08	Evsupdev	EC, AP		5.92		5.58

	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
	IT Services	Produce	Collinfo	CP, EC		5.83		4.50	Techspec	AP, CI	L	5.50	4.50	4.83	Recprose	II		2.83	
Evalprod			CP	M	5.50	5.32	4.67	Desivari	AP, CI	L	4.50	4.43	4.50	Prdamgmt	II	M	6.17	5.60	5.17
Standsim			IP	H	5.83	5.97	4.83	Delivera	AP, CI	M	6.33	4.56	5.33	Altprtec	IP		5.50		4.50
Process		Procemap	CP, CI	L	3.83	5.43	3.33	Delfres	AP, BET	M	5.00	5.23	2.83	Ordering	II		5.50		5.50
		Supproce	CI	M	5.50	5.98	4.17	Sharoper	SI, EC	M	4.50	4.53	5.17	Routacti	II		6.50		4.00
		Selproce	AP, CI	M	5.17	5.00	4.17	Meandeli	AP	L	4.83	4.50	3.33	Meproeff	II	H	4.83	4.87	5.67
Contract		Indnorms	CI, NT, SI	H	4.67	5.43	4.67	Legaform	IP	H	6.67	5.87	4.83	Ensure contract					
		Strchoic	CI, NT, SI	M	5.17	5.43	3.33	Selcontr	IP,	M	4.50	5.63	4.50	contract					
		Orgcultu	CI, NT, SI		4.67		5.00	Lengrela	AP, LGC		5.67		5.00	deliverables					
		Reqcust	CI, NT, SI	M	5.67	4.97	5.17	Contrsaf	CLT, AP	M	5.83	6.33	6.17	• Prodeliv	CLT, CP	M	5.67	4.67	3.33
		Extmarke	CI	L	4.83	5.37	5.33	Delegate	AP	L	6.17	5.33	5.67	• Prospects	CP	L	5.50	5.67	3.50
		Intelear	EC		4.33		4.50	Finincen	CP, AP		5.83		5.33	• Kpis	CLT, CP	H	6.67	6.00	6.50
		Strissue	IP	M	5.00	4.87	4.33	Adagreem	AP, EC	H	5.17	5.43	4.00	Authorise					
		Supdatab	CP		4.50		4.33	Fellagre	CT, EC	M	4.00	5.50	6.00	spending:					
		Requotat	CI	H	5.33	5.43	6.33	Helpsupl	CT, EC	M	4.17	4.33	3.50	• Mandspen	AP	H	5.00	4.73	4.17
		Potsuppl	IP	L	6.33	5.30	6.67	Manexper	SI, EC, CP		4.50		4.67	• Outospe	AP	H	5.17	4.80	3.83
		Tenderin	AP	H	6.50	5.43	5.83	Supupdat	AP, SI, CP		4.17		6.00	Supactio	SI, CLT	H	5.17	5.37	5.33
		Reputati	CLT	M	5.33	5.03	5.83							Benchper	CLT	H	6.00	5.63	4.83
		Suprisk	CLT	M	5.50	5.87	5.67							Moniproc	CP, CI		5.50		4.50
		Screenin	AP	M	6.33	5.87	4.83												
		Negcontr	AP	M	6.50	6.20	5.67												
Certific		AP	M	5.83	5.63	6.67													
SD		Critproc	CI, EC, LC	L	5.67	5.33	5.33	Crisupde	LC, NT, EC	M	5.33	5.23	5.17	Commsupp	LC, CT, II	M	6.17	4.53	3.33
		Cfsdteam	LC, EC, SI		5.17		5.33	Resefisd	LC, NT, EC		5.67		4.17	Meetings	LC, II	H	5.50	4.80	4.17
								Workshop	LC, EC, CT		6.00		4.50	Invosupl	SI, LC, EC		5.50		5.50
								Rewards	LC, AP, SI	H	5.17	4.89	4.67	Evsupdev	EC, AP		5.50		5.50

	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
	Baggage Handling	Product	Collinfo	CP, EC		5.80		4.00	Techspec	AP, CI	M	6.00	5.50	5.40	Recprose	II	-	-	-
Evalprod			CP	H	5.00	6.00	3.80	Desivari	AP, CI	M	3.20	5.20	4.60	Prdamgmt	II	L	5.60	5.60	5.60
Standstim			IP	H	6.00	5.90	4.80	Delivera	AP, CI	M	5.60	4.60	3.60	Altprtec	IP		4.60		3.80
Process		Procemap	CP, CI	H	4.20	5.60	3.00	Delfres	AP, BET		5.40		4.60	Ordering	II	-	-	-	-
		Supproce	CI	M	5.60	6.00	4.20	Sharoper	SI, EC		5.60		4.20	Routacti	II		5.00		4.80
		Selproce	AP, CI	L	5.20	5.90	4.00	Meandeli	AP	M	6.00	5.40	4.40	Meproeff	II		5.20		5.60
Contract		Indnorms	CI, NT, SI	H	5.40	5.80	6.80	Legaform	IP	M	6.80	6.00	4.60	Ensure					
		Strchoic	CI, NT, SI	H	5.40	5.30	4.20	Selcontr	IP	H	6.40	5.60	4.80	contract					
		Orgcultu	CI, NT, SI		4.00		5.20	Lengrela	AP, LGC	H	6.40	5.90	4.00	deliverables					
		Reqcust	CI, NT, SI	M	5.00	6.10	4.20	Contrsaf	CLT, AP	H	6.40	6.20	6.00	• Prodeliv	CLT, CP		5.60		5.00
		Extmarke	CI		4.60		6.20	Delegate	AP	L	6.40	5.90	6.40	• Prospects	CP		4.00		2.40
		Intelear	EC		3.40		3.80	Fininco	CP, AP		6.00		5.80	• Kpis	CLT, CP	L	6.60	5.00	5.80
		Strissue	IP	M	4.80	5.40	4.00	Adagreem	AP, EC	H	4.40	5.60	4.00	Authorise					
		Supdatab	CP		5.40		4.80	Fellagre	CT, EC	M	4.20	5.60	4.40	spending:					
		Requotat	CI	H	6.60	5.50	4.20	Helpsupl	CT, EC	H	3.80	6.00	3.80	• Mandspen	AP	L	6.40	5.30	4.60
		Potsuppl	IP	M	6.00	5.30	4.60	Manexper	SI, EC, CP		4.80		4.40	• Outospe	AP	L	5.80	5.70	4.20
	Tenderin	AP	H	7.00	5.40	4.40	Supupdat	AP, SI, CP		5.40		5.20	Supactio	SI, CLT		6.20		6.20	
	Reputati	CLT	M	6.40	5.60	5.60							Benchper	CLT		5.60		4.20	
	Suprisk	CLT	H	6.20	6.20	5.40							Moniproce	CP, CI		5.80		4.00	
	Screenin	AP	M	6.00	5.80	6.40													
	Negcontr	AP	H	6.40	6.30	6.60													
	Certific	AP	H	6.00	6.30	5.40													
SD	Critproc	CI, EC, LC	H	6.60	5.20	5.20	Crisupde	LC, NT, EC	M	6.00	5.20	4.80	Commsupp	LC, CT, II	M	5.40	4.20	3.60	
	Cfsdteam	LC, EC, SI		5.40		4.60	Reseffsd	LC, NT, EC		4.00		4.00	Meetings	LC, II	M	4.60	4.70	4.20	
							Workshop	LC, EC, CT		5.60		4.20	Invosupl	SI, LC, EC		6.00		5.80	
							Rewards	LC, AP, SI	M	5.20	4.70	5.00	Evsupdev	EC, AP	H	5.80	6.00	4.80	

	Pre-contractual					Institutional					Operational								
	Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D	
	Cleaning Services	Product	Collinfo	CP, EC		5.73		3.73	Techspec	AP, CI	H	5.73	6.00	5.53	Recprose	II	-	-	-
Evalprod			CP	H	5.73	6.10	3.47	Desivari	AP, CI	M	4.00	5.20	4.80	Prdamgmt	II	H	5.93	5.80	5.53
Standstim			IP	H	6.07	6.43	3.07	Delivera	AP, CI	H	6.07	5.10	4.07	Altprtec	IP		5.47		4.40
Process		Procemap	CP, CI	M	4.87	5.80	3.67	Delfres	AP, BET	M	4.73	5.33	4.67	Ordering	II	-	-	-	-
		Supproce	CI	H	5.67	5.85	4.53	Sharoper	SI, EC	M	5.47	5.75	4.07	Routacti	II	M	4.73	6.03	5.13
		Selproce	AP, CI	M	4.93	5.77	4.13	Meandeli	AP	H	5.20	5.03	4.13	Meproeff	II	L	5.27	5.87	4.93
Contract		Indnorms	CI, NT, SI		5.00		4.87	Legaform	IP	H	6.13	6.23	4.67	Ensure					
		Strchoic	CI, NT, SI	H	5.07	5.47	3.73	Selcontr	IP,	H	6.00	6.00	4.87	contract					
		Orgcultu	CI, NT, SI		5.13		4.20	Lengrela	AP, LGC		6.07		4.40	deliverables					
		Reqcust	CI, NT, SI	H	5.83	5.13	4.33	Contrsaf	CLT, AP	H	6.33	6.47	6.00	• Prodeliv	CLT, CP	M	5.53	5.00	4.53
		Extmarke	CI	M	5.40	5.75	5.20	Delegate	AP	H	6.13	5.60	6.40	• Prospects	CP	M	4.13	5.23	3.00
		Intelear	EC	M	4.27		4.27	Fininco	CP, AP		6.07		5.40	• Kpis	CLT, CP	M	6.47	5.67	6.33
		Strissue	IP		5.73		4.40	Adagreem	AP, EC	H	5.40	5.33	4.33	Authorise					
		Supdatab	CP		5.00		5.13	Fellagre	CT, EC		5.20		4.87	spending:					
		Requotat	CI	H	6.73	6.40	4.40	Helpsupl	CT, EC	H	4.80	5.73	3.80	• Mandspen	AP	H	5.47	6.03	4.13
		Potsuppl	IP	H	5.80	5.77	5.87	Manexper	SI, EC, CP	H	5.13	5.57	4.47	• Outospe	AP	H	5.20	5.77	3.73
	Tenderin	AP	H	6.67	6.57	5.13	Supupdat	AP, SI, CP		4.60		5.20	Supactio	SI, CLT	H	4.80	5.80	5.87	
	Reputati	CLT	H	6.73	6.40	5.60							Benchper	CLT	H	6.33	5.27	3.73	
	Suprisk	CLT	H	5.20	5.77	5.47							Moniproce	CP, CI	L	5.80	5.47	4.27	
	Screenin	AP	H	6.40	6.20	6.00													
	Negcontr	AP	H	6.40	6.40	6.40													
	Certific	AP	H	6.33	6.03	6.07													
SD	Critproc	CI, EC, LC	M	6.07	5.77	4.53	Crisupde	LC, NT, EC	H	5.73	5.30	4.60	Commsupp	LC, CT, II	M	5.80	5.50	3.60	
	Cfsdteam	LC, EC, SI	H	5.40	6.47	4.87	Reseffsd	LC, NT, EC	H	3.93	6.23	4.27	Meetings	LC, II	H	5.87	6.10	4.33	
							Workshop	LC, EC, CT	H	5.27	6.50	5.00	Invosupl	SI, LC, EC	H	5.53	6.00	5.73	
							Rewards	LC, AP, SI	H	4.27	5.27	4.93	Evsupdev	EC, AP	H	5.53	5.67	5.07	

		Pre-contractual				Institutional				Operational									
		Activity		C	I	P	D	Activity		C	I	P	D	Activity		C	I	P	D
Waste Management	Product	Collinfo	CP, EC	H	6.67		3.33	Techspec	AP, CI	L	5.67	4.77	5.67	Recprose	II	-	-	-	-
		Evalprod	CP	H	5.00	5.60	3.33	Desivari	AP, CI	L	3.67	5.47	3.33	Prdamgmt	II	H	6.67	5.23	5.33
		Standstim	IP	H	5.67	6.43	4.00	Delivera	AP, CI	L	5.00	5.70	4.00	Altprtec	IP	L	6.00	4.70	3.00
	Process	Procemap	CP, CI	H	4.67	5.50	3.33	Delfres	AP, BET	L	6.00	5.33	4.00	Ordering	II	-	-	-	-
		Supproce	CI	H	4.67	5.80	5.33	Sharoper	SI, EC	M	6.00	5.46	6.00	Routacti	II		5.67		5.67
		Selproce	AP, CI	M	5.33	5.43	4.33	Meandeli	AP	H	6.00	5.60	4.00	Meproeff	II	H	5.33	5.60	4.33
	Contract	Indnorms	CI, NT, SI	H	5.00	5.43	6.33	Legaform	IP	H	6.67	5.97	5.33	Ensure					
		Strehoic	CI, NT, SI		4.67		3.67	Selcontr	IP,	H	5.67	5.50	5.00	contract					
		Orgcultu	CI, NT, SI	M	4.33	4.50	4.33	Lengrela	AP, LGC	H	6.67	6.03	5.00	deliverables					
		Regeust	CI, NT, SI		5.67		5.00	Contrsaf	CLT, AP	H	6.33	6.30	6.00	• Prodeliv	CLT, CP	L	6.33	5.67	4.67
		Extmarke	CI	M	4.00	5.10	4.67	Delegate	AP	M	6.67	5.47	6.00	• Prospecs	CP	M	4.33	5.40	2.33
		Intelear	EC		4.00		4.33	Finincen	CP, AP		6.00		6.33	• Kpis	CLT, CP	M	6.67	6.00	5.33
		Strissue	IP	H	5.33	5.90	5.00	Adagreem	AP, EC		5.33		4.67	Authorise					
		Supdatab	CP		5.00		4.33	Fellagre	CT, EC		5.33		4.67	spending:					
		Requotat	CI	H	6.67	6.03	3.33	Helpsupl	CT, EC	H	4.67	5.47	3.67	• Mandspen	AP	H	6.00	6.10	4.33
		Potsuppl	IP	H	6.33	5.47	6.33	Manexper	SI, EC, CP	M	5.67	6.23	4.33	• Outospe	AP	H	5.00	6.23	4.67
		Tenderin	AP	H	6.00	5.67	5.00	Supupdat	AP, SI, CP	M	5.67	5.70	5.33	Supactio	SI, CLT	M	5.00	5.67	6.00
		Reputati	CLT	H	6.33	5.73	6.33							Benchper	CLT	H	5.67	5.43	3.67
		Suprisk	CLT	H	5.00	5.70	5.67							Maniproc	CP, CI		5.33		4.33
		Screenin	AP	H	6.33	6.37	4.67												
		Negcontr	AP	H	5.67	5.80	6.33												
		Certific	AP	H	6.74	6.13	5.33												
		SD	Critproc	CI, EC, LC	M	6.33	6.33	5.00	Crisupde	LC, NT, EC	H	6.00	6.43	3.67	Commsupp	LC, CT, II	M	5.67	6.37
	Cfsdteam		LC, EC, SI	H	5.33	6.20	4.67	Reseffsd	LC, NT, EC	H	4.33	6.23	4.33	Meetings	LC, II	H	5.67	5.80	3.33
								Workshop	LC, EC, CT	H	5.33	6.33	5.00	Invosupl	SI, LC, EC	M	6.00	5.47	4.67
								Rewards	LC, AP, SI	H	5.67	5.10	6.55	Evsupdev	EC, AP	H	5.67	6.33	5.33

Appendix E – Analysis of factors that influence the nature of a SR

	Pre-contractual			Institutional			Operational		
	Factors	Abbreviation	Role	Factors	Abbreviation	Role	Factors	Abbreviation	Role
Product Mgmt	<ul style="list-style-type: none"> ✓ Volume of transactions ✓ Size of turnover 	Volumtra Sizeturn	CI SI	<ul style="list-style-type: none"> ✓ Characteristics of product / service exchanged 	Characte	All variables	<ul style="list-style-type: none"> ✓ Ability to express 'soft' issues of product/service 	Softissu	SI
Process Management	<ul style="list-style-type: none"> ✓ Ability to manage cultural variations 	Cultural	NT	<ul style="list-style-type: none"> ✓ Ability to measure the performance of partner ✓ Formality of the relationship 	Measperf Formalit	CP, CI NT	<ul style="list-style-type: none"> ✓ Working in the same location with the partner ✓ Knowledge/Technology transfer ✓ Information (data) exchange ✓ Avoiding conflicts in the working partnership 	Sameioca Techtran Infoexch Conflict	CT, II SI II, CT CT
Contract Management	<ul style="list-style-type: none"> ✓ Industry norms ✓ Reputation of the trading partner ✓ Ability to identify business drivers of partner ✓ Investment in the relationship 	Indusnor Reputati Busdrive Investre	NT CLT CI, NT EC, SI	<ul style="list-style-type: none"> ✓ Contractual safeguards ✓ Cost transparency ✓ Length of relationship 	Contrsaf Costtran Lengrela	CLT, AP CT SI, LGC	<ul style="list-style-type: none"> ✓ Loyalty ✓ Financial performance incentives & remedies 	Loyalty Finincen	LC CLT
Supplier Development	<ul style="list-style-type: none"> ✓ Partner's position in the market ✓ Ability to express requirements to the partner 	Position Undrequi	CP CI, CT	<ul style="list-style-type: none"> ✓ Unconditional help to suppliers ✓ Early input in projects ✓ Willing to receive partner's ideas 	Nostring Earlyinp Partidea	EC, CT CI, II EC, CT	<ul style="list-style-type: none"> ✓ Willingness to adapt as environment changes 	Adapt	CT, EC
Overall interaction									
	<ul style="list-style-type: none"> ✓ Full & open communication 	Communic	II, CT, NT	<ul style="list-style-type: none"> ✓ Honesty and openness 	Honopene	CT, NT	<ul style="list-style-type: none"> ✓ Behave in an ethical manner 	Ethical	CT, NT
	<ul style="list-style-type: none"> ✓ Individuals behaviour (e.g. attitude) 	Behaviour	CT, NT	<ul style="list-style-type: none"> ✓ Words supported by actions & promises are kept 	Keepromi	TRW	<ul style="list-style-type: none"> ✓ Have confidence in one partner's actions 	Confiden	TRW

Travel

Pre-contractual			Institutional			Operational		
Factors	Role	I P D	Factors	Role	I P D	Factors	Role	I P D
Volumtra	CI	3.42 5.00 2.60	Characte	All	5.92 5.42 6.08	Softissu	SI	5.17 5.00 3.00
Sizeturn	SI	3.17 4.75 3.00						
Cultural	NT	3.42 5.13 3.40	Measperf Formalit	CP,CI NT	5.50 5.42 4.00 3.33 4.83 3.00	SameLoca Techtran Infoexch Conflict	CT,II SI II,CT CT	1.50 3.83 2.67 4.00 4.80 3.00 5.00 5.17 3.67 4.83 4.92 3.50
Indusnor	NT	4.25 5.50 2.33	Contrasaf	CLT,AP	3.67 5.25 3.80	Loyalty	LC	5.83 5.75 3.67
Reputati	CLT	5.33 5.67 3.50	Costtran	CT	3.67 4.75 3.00	Finincen	CLT	3.00 4.75 2.60
Busdrive	CI,NT	4.67 4.5 3.00	Lengrela	SI,LGC	5.33 5.00 3.67			
Investre	EC, SI	4.33 5.33						
Position	CP	4.75 5.17 3.17	Nostring	EC, CT	4.50 5.17 3.00	Adapt	CT,EC	5.50 5.67 3.67
Undrequi	CI,CT	5.83 5.17 3.33	Earlyinp Partidea	CI, II EC, CT	5.92 5.58 2.83 5.92 5.83 2.33			

Overall Interaction

Communi	II,CT,NT	5.75 5.25 4.17	Honopene	CT,NT	6.17 6.00 2.33	Ethical	CT,NT	6.00 6.00 2.17
Behaviour	CT,NT	6.08 6.17 2.67	Keepromi	TRW	6.17 5.67 3.17	Confide	TRW	6.17 5.92 3.83

Stationery

Pre-contractual			Institutional			Operational		
Factors	I P D	Factors	I P D	Factors	I P D	Factors	I P D	Factors
Volumtra	3.13 5.13 3.94	Characte	6.17 5.13 5.71	Softissu	5.08 5.25 3.92			
Sizeturn	3.33 5.19 4.38							
Cultural	3.13 4.50 3.44	Measperf Formalit	5.83 4.75 4.00 3.17 4.88 3.31	SameLoca Techtran Infoexch Conflict	2.08 3.33 4.17 4.17 4.70 4.20 6.00 5.17 4.38 5.17 4.71 3.67			
Indusnor	4.50 4.42 3.67	Contrasaf	4.29 4.56 4.00	Loyalty	5.21 5.25 3.46			
Reputati	5.54 4.83 3.42	Costtran	4.29 4.63 4.04	Finincen	3.75 5.00 3.94			
Busdrive	4.46 4.60 4.10	Lengrela	5.33 5.21 3.29					
Investre	5.04 5.33							
Position	3.79 5.06 4.38	Nostring	5.17 5.04 3.88	Adapt	5.92 5.25 3.75			
Undrequi	5.83 4.75 3.83	Earlyinp Partidea	5.33 4.58 4.13 5.46 5.17 3.42					

Overall Interaction

Communi	6.75 5.50 3.21	Honopene	6.50 5.71 2.79	Ethical	6.29 6.04 2.21
Behaviour	6.25 5.42 3.04	Keepromi	6.63 5.50 3.08	Confiden	6.92 5.54 3.92

Print Services

Pre-contractual			Institutional			Operational		
Factors	I P D	Factors	I P D	Factors	I P D	Factors	I P D	Factors
Volumtra	4.15 4.64 4.17	Characte	5.70 5.00 5.90	Softissu	4.95 5.10 4.20			
Sizeturn	3.85 5.29 4.75							
Cultural	4.15 5.00 3.92	Measperf Formalit	4.60 5.15 5.15 3.45 5.36 3.47	SameLoca Techtran Infoexch Conflict	2.30 3.6 4.80 4.40 4.80 4.68 5.35 4.70 5.15 4.95 5.20 4.15			
Indusnor	4.65 4.6 3.50	Contrasaf	4.35 6.29 4.50	Loyalty	5.45 6.10 4.20			
Reputati	5.05 5.16 3.70	Costtran	4.35 5.58 4.95	Finincen	4.10 4.86 4.33			
Busdrive	5.35 4.75 4.40	Lengrela	5.45 5.85 4.15					
Investre	5.00 5.75							
Position	3.80 5.57 4.07	Nostring	5.65 5.90 3.55	Adapt	6.25 5.20 5.10			
Undrequi	5.50 5.55 4.20	Earlyinp Partidea	5.75 5.65 4.70 5.75 5.25 3.90					

Overall Interaction

Communi	5.65 5.95 4.25	Honopene	6.50 5.70 3.50	Ethical	6.45 6.65 2.55
Behaviour	5.50 5.75 3.60	Keepromi	6.55 6.25 4.15	Confiden	6.30 5.20 4.25

IT services

Pre-contractual			Institutional			Operational		
Factors	I P D	Factors	I P D	Factors	I P D	Factors	I P D	Factors
Volumtra	4.83 4.92 3.64	Characte	5.83 5.25 5.17	Softissu	4.67 4.58 3.67			
Sizeturn	4.33 5.25 3.27							
Cultural	4.83 5.00 3.73	Measperf Formalit	4.83 4.92 3.83 4.83 4.92 3.64	SameLoca Techtran Infoexch Conflict	3.75 5.17 3.5 4.00 4.33 4.33 4.42 3.75 4.33 5.67 3.92 4.33			
Indusnor	4.33 5.33 3.42	Contrasaf	5.75 4.92 5.18	Loyalty	5.42 4.50 4.25			
Reputati	5.67 5.00 3.58	Costtran	5.75 4.08 5.08	Finincen	4.83 4.58 4.00			
Busdrive	5.25 4.92 4.33	Lengrela	5.75 5.50 3.50					
Investre	5.33 4.92							
Position	5.17 5.00 2.73	Nostring	5.42 4.33 4.25	Adapt	5.33 4.92 3.67			
Undrequi	5.58 4.83 4.00	Earlyinp Partidea	4.42 3.42 5.17 5.08 5.17 3.50					

Overall Interaction

Communi	6.25 4.83 4.08	Honopene	6.25 4.92 4.25	Ethical	6.25 5.50 3.67
Behaviour	5.83 5.17 3.58	Keepromi	6.17 5.00 4.33	Confiden	5.92 4.67 4.67

Baggage Handling

Pre-contractual			Institutional			Operational					
Factors	I	P	D	I	P	D	I	P	D		
Volumtra Sizeturn	5.10 3.40	4.40 4.60	2.90 2.70	Characte 6.40	5.00	5.90	Softissu 5.70	4.90	3.40		
Cultural	5.10	4.50	3.40	Measperf Formalit 6.10 4.50	4.40 4.60	3.60 3.10	SameLoca Techtran Infoexch Conflict 3.80 4.80 6.10 4.50	4.40 3.20 3.00 3.20	3.00		
Indusnor Reputati Busdrive Investre	4.90 5.50 4.90 4.80	4.00 5.00 4.50 4.60	3.50 3.40 3.20	Contrsaf Costtran Lengrela 5.50 5.50 5.40	4.80 5.20 4.70	2.90 3.50 3.50	Loyalty Finincen 5.80 6.00	5.20 4.80	3.10 2.90		
Position Undrequi	4.50 6.20	4.20 5.00	4.00 3.20	Nostring Earlyinp Partidea 5.50 6.00 5.30	5.00 4.30 4.80	3.20 3.70 2.70	Adapt 5.70	5.10	3.00		
Overall Interaction											
Communic	6.50	5.60	3.40	Honopene	6.60	5.70	2.90	Ethical	6.00	6.20	2.90
Behaviour	5.40	5.50	2.80	Keepromi	6.30	5.00	2.60	Confiden	6.20	5.00	3.20

Waste Management

Pre-contractual			Institutional			Operational					
Factors	I	P	D	I	P	D	I	P	D		
Volumtra Sizeturn	5.50 4.83	5.33 5.50	2.50 3.33	Characte 6.67	5.17	5.50	Softissu 5.83	5.83	2.17		
Cultural	5.50	5.00	3.17	Measperf Formalit 6.33 4.83	5.67 5.33	3.17 2.67	SameLoca Techtran Infoexch Conflict 3.67 4.67 5.83 5.83	6.00 5.50 3.33 3.00	3.00		
Indusnor Reputati Busdrive Investre	4.67 5.67 5.50 5.83	5.67 5.83 5.50 6.00	3.17 2.67 3.33	Contrsaf Costtran Lengrela 6.00 6.00 6.17	5.83 5.50 6.17	2.50 2.17 2.50	Loyalty Finincen 5.83 5.00	5.67 5.50	2.33 3.50		
Position Undrequi	5.00 6.33	5.83 5.67	3.17 3.00	Nostring Earlyinp Partidea 5.67 5.83 6.50	5.83 5.17 6.33	2.17 4.17 1.67	Adapt 5.50	5.67	3.17		
Overall Interaction											
Communic	6.50	5.83	2.67	Honopene	6.50	6.00	2.50	Ethical	6.33	6.33	2.17
Behaviour	6.33	6.00	2.00	Keepromi	5.33	5.33	3.17	Confiden	6.50	6.00	3.17

Supplier Contract Process Product
Dypment mgmt Mgmt Mgmt

Cleaning Service

Pre-contractual			Institutional			Operational					
Factors	I	P	D	I	P	D	I	P	D		
Volumtra Sizeturn	3.73 2.97	3.40 3.53	2.83 2.73	Characte 5.80	5.70	5.83	Softissu 5.23	5.10	3.67		
Cultural	3.73	4.70	3.17	Measperf Formalit 5.27 4.73	5.27 5.47	4.17 2.97	SameLoca Techtran Infoexch Conflict 3.80 4.63 5.33 5.40	5.07 4.13 4.00 3.20	4.10		
Indusnor Reputati Busdrive Investre	4.87 5.60 5.63 5.13	5.00 5.00 4.90 5.56	4.10 4.10 3.00	Contrsaf Costtran Lengrela 6.00 4.00 5.80	6.23 5.10 5.53	2.83 4.20 3.13	Loyalty Finincen 5.80 3.83	5.63 3.43	3.37 3.07		
Position Undrequi	4.40 6.17	4.73 5.20	3.73 3.87	Nostring Earlyinp Partidea 5.23 5.80 6.17	5.10 4.63 5.47	3.70 4.03 2.77	Adapt 5.83	5.80	4.10		
Overall Interaction											
Communic	6.47	5.00	3.40	Honopene	6.67	5.90	3.07	Ethical	6.33	5.77	2.60
Behaviour	6.20	5.57	3.97	Keepromi	6.23	5.57	4.37	Confiden	6.47	5.30	4.07

Set Analysis

Pre-contractual			Institutional			Operational				
Factors	I	P	D	I	P	D	I	P	D	
Volumtra Sizeturn	3.74 3.50		2.91 3.03	Characte 6.67			Softissu 5.16		3.74	
Cultural	3.95		3.18	Measperf Formalit 5.38 5.03			SameLoca Techtran Infoexch Conflict 4.14 2.96 5.44 5.18	2.92 4.38 4.14 3.59	3.98 3.94 4.14 3.59	
Indusnor Reputati Busdrive Investre	4.62 5.46 4.86 5.04		3.65 3.61 3.55	Contrsaf Costtran Lengrela 4.51 5.52 5.57			Loyalty Finincen 3.18 4.16 3.40	5.58 4.13	3.61 3.09	
Position Undrequi	4.32 5.89		3.37 3.88	Nostring Earlyinp Partidea 5.28 5.58 5.75			Adapt 5.81		3.98	
Overall Interaction										
Communic	6.29		3.62	Honopene	6.49		3.13	Ethical	6.27	2.56
Behaviour	5.97		3.52	Keepromi	6.32		3.76	Confiden	6.42	4.00

Supplier Contract Process Product
Dypment mgmt Mgmt Mgmt

Appendix F – Interviewees Protocol

Case studies in the financial organisation

Purchasing Department		Interview
	Director of Purchasing Department	1.1
	Head of Purchasing	1.2
	Senior manager Supplier Development	1.3
	Head of IT, Procurement & Outsourcing	1.4
	Senior Manager Procurement Systems & Solutions	1.5
	Development manager for travel	1.6
	Contract manager for Print Services	1.7
	Contract manager for Stationery	1.8
	IT Procurement Senior manager	1.9
	Procurement manager for travel	1.10
	Procurement manager for print services	1.11
	Procurement manager for stationery	1.12
	Procurement manager for IT	1.13
Suppliers		
	Karen Spence	1.14
Travel (7)	Karen Gourlay	1.15
	Helen Forgash	1.16
Print Services (6)	Senior Account Manager	1.17
	Emmanuella Buckland	1.18
Stationery (5)	Senior Account manager	1.19
	General manager for corporate accounts	1.20
	Account manager (Hardware supplier)	1.21
IT services (9)	Sales manager (Hardware supplier)	1.22
	Senior Account manager (Infrastructure supplier)	1.23
	Junior Account manager (Infrastructure supplier)	1.24
Internal Customers (Business Units Managers)		
Travel	VIP travel manager	1.25
	International Banking director	1.26
Print Services	Senior Manager IT department	1.27
	Office equipment general manager	1.28
Stationery	Branch Network general manager	1.29
	Insurance Company procurement manager	1.30
IT services	Senior account manager	1.31
	Senior manager	1.32

Case studies in the airport operator

Purchasing Department		Interview No.
	Director of Purchasing Department	2.1
	Procurement Group director	2.2
	Director of Supplier Development group	2.3
	Senior Procurement manager for utilities	2.4
	Senior purchasing manager for baggage handling	2.5
	Senior supply chain manager for cleaning	2.6
	Supplier Development accounts manager	2.7
	Director of baggage handling connections	2.8
Suppliers		
Baggage handling	Director of operations	2.9
	Senior operations manager	2.10
	Director of operations of 1 st supplier	2.11
Cleaning Services	Director of operations of 2 nd supplier	2.12
	Senior operations manager 1 st supplier	2.13
	Senior operations manager 2 nd supplier	2.14
Waste Management	Director of operations of 2 nd supplier	2.12
	Senior Manager of waste management supplier	2.15
	Operations manager of waste management supplier	2.16
Internal Customers (Business Units Managers)		
Baggage handling	Director of representative body of airlines	2.17
Cleaning Services	General Operations manager (airport 1)	2.18
	General Operations manager (airport 2)	2.20
	General Operations manager (airport 3)	2.21
Waste Management	Senior supply chain manager	2.22
	Airport operations manager	2.23