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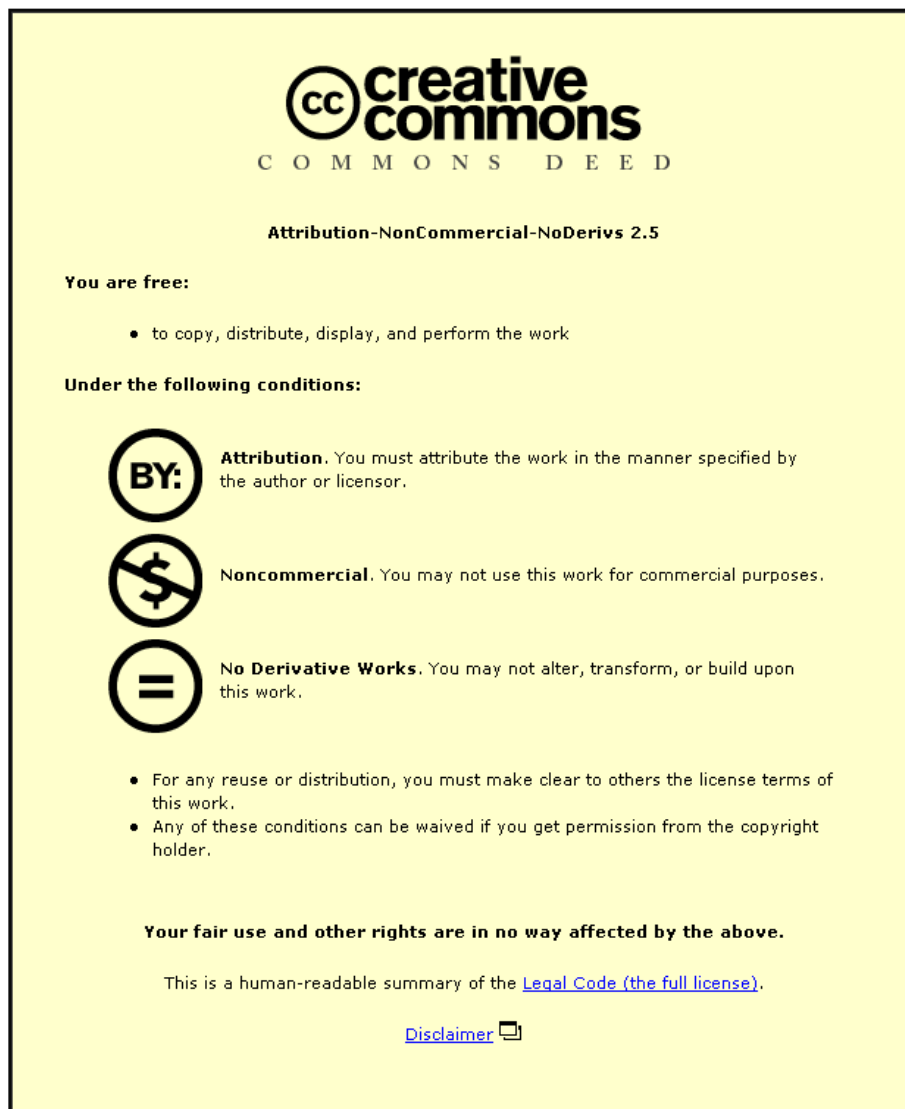
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**Exploring Transactions Between Supply
Chain Entities:
A Psychological Study of Buyer- Supplier
Relationships**

by

Samir Suresh Dani

A Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award of
Doctor of Philosophy of Loughborough University

2005

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Dedicated to my parents

and

my wife Shilpa

and

my daughter Harshita

Abstract

The research presented in this thesis has focussed on exploring buyer- supplier relationships from a human perspective. To date, researchers across the globe have studied buyer-supplier relationships and endeavoured to find means to try to make them better. This has led to many new relationship development programmes initiated by companies and new concepts introduced by academics for the betterment of buyer-supplier relationships. The focus of academics has been in trying to study buyer-supplier relationships from various factors, viz. power, opportunistic behaviour, unethical behaviour, partnerships, collaborations, etc. All these endeavours have focussed on using technology or business processes in order to streamline operations and create environments, which would foster partnerships or collaborations. One aspect not usually given prominence in these studies has been the presence of humans in the relationship as representatives of the transacting companies. Giving this more focus, the researcher feels that organisational culture plays a very strong role in the way organisations operate, and when two organisations transact with each other the individual culture is bound to play a role in the way the transaction is conducted. The individual culture of the organisation also depends upon the humans in the organisation.

Since, the focus of the research was on exploring the buyer-supplier relationships from a human perspective, the research sought this perspective from people working in purchasing or sales functions in different companies. The information was collected by conducting “Phenomenological Interviews” with focus on “critical incidents” affecting the relationship. The information was analysed for themes which led to the need to study buyer-supplier relationships from two perspectives: 1) game-like behaviour, 2) discretion, humans have in the relationship. The presence of game-like behaviour and humans in the relationship led the researcher to study the concepts of “Transactional Analysis” and check for the feasibility to transfer the concepts from a therapeutic setting to buyer- supplier relationships.

The research has been successful in exploring issues affecting buyer-supplier relationships. A methodology for aligning supply chains by taking into account human issues has been proposed. The methodology comprises a relationship framework that is used for studying buyer-supplier relationships on a macro-level based on the levels of satisfaction the entities have with each other. Since high levels of dissatisfaction lead to various change-inducing transactions or game-like behaviour between the entities, the framework identifies the status of the relationship, and can be used to gauge what's going to happen to it, once the transaction is over. The concepts of Transactional Analysis and the tools associated with it, viz. Drama Triangle analysis and structural modelling are useful in studying the dynamics of the transactions from the human perspective and also from a psychological perspective.

Keywords: Buyer- supplier relationships, Transactional Analysis, supply chain relationships

Acknowledgement

This thesis has been a part of my life for some time now, and it has thus affected many people surrounding me. I thus take this opportunity to thank everybody who helped me directly and indirectly during the completion of my PhD.

I would like to thank my supervisor, Prof. Neil Burns who has not only been a good PhD guide but also a very good friend, with whom I could share most of my problems- both academic and personal, which was a great help when times were not right. He has introduced me to various new concepts and has given me the necessary motivation to complete this PhD.

I would like to thank Dr. Stephen Newman, who has been my Director of Research, for his help during the yearly assessments. I would also like to thank Prof. Dennis Kehoe, Dr. Hossein Sharifi, Dr. Nick Boughton, from Liverpool University, who were a great help for this research. The discussions I had with them during the implementation of the research project on “Supply- Chain Alignment” provided me the necessary feedback and suggestions for my research.

The office that I shared with the other researchers from the “Manufacturing Organisation” group in the Wolfson School of Mechanical and Manufacturing, Loughborough University was like a second home. I really had a good time with Avinash, Danny, Biao, Saud and Sarah. There were many people from the department who made my life comfortable during the duration of this research, and I would like to thank all of them for their help.

Living abroad away from home is difficult, but my friends in Loughborough and Leicester have been a great help to me during this time. I would like to thank them for the good times I have had.

Finally, I would like to end on a personal note. I would like to thank my parents, who have been a strong guiding force in my life and who have helped me reach this stage in my career. I would also like to thank my in laws for the support they have rendered on to me during the duration of this research.

Lastly, a very big thank you to my wife Shilpa and daughter Harshita who have supported me throughout and have sustained all my tantrums patiently.

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Chapter One

Introduction

Aim: The aim of this chapter is to present to the reader a background about the research project, the reasons for undertaking the research, and a brief idea of what to expect in the thesis.

1.1 Introduction

The research was initiated as a joint collaborative initiative between Loughborough University and Liverpool University funded by the EPSRC. The aim of the research project was to investigate the inter-relationship and alignment of supply and demand networks from three perspectives namely the *physical/operational*, the *information/knowledge systems* and the *relationships/behaviour* that take place between collaborating partners. Through case studies carried out in the automotive, machine tool and food manufacturing sectors, models of the interactions of the demand networks operations, variables and their alignment issues have been proposed and tested. These models have been combined into a DNA like representation of an intermeshing network of two strands each contributing to the quality of the supply and demand network system.

The research associated with understanding the alignment issues in supply networks through the perspectives of relationships and behaviours that take place between the collaborating partners was conducted at Loughborough University by the researcher. This PhD thesis presents the relationship and behavioural issues between buyers and suppliers in supply networks. This research was combined with the research done at Liverpool University to form the DNA model as described above. Although the thesis presents some information about the DNA model and its constituents, the primary focus of the thesis is to only present the relationship issues and the process undertaken to arrive at the research objectives and subsequently the suggestion of a new perspective to study the relationships between buyers and suppliers.

1.2 Research Context

"It's another example of the multiple CEO's showing great sympathy for the farmers' plight, yet purchasing executives further down the supermarket teams seem to be making their own rules." (Anonymous, 2003)

"Some of the more junior buyers seem to think, for example, we can magic up one million extra chickens in a moment. The poultry industry is not like that." (Anonymous, 2003)

"...from farmyard to kitchen, a few giant supermarket chains increasingly dominate our lives." (Anonymous, 2003)

These quotes depict that the relationships between buyers and suppliers are subjected to many factors viz. power, trust, human behaviour, dominance, etc. and in order to study these relationships all these factors have to be looked at in a holistic perspective.

Also, in research conducted by Craig Carter (1998) to study Ethical issues in Global buyer- supplier relationships, he found that unethical practices conducted by both buyers and suppliers strained these already complex relationships further leading to trust deterioration and relationship break-up. He defined unethical activities as *the specific set of actions taken within the buyer-supplier relationship that are considered unacceptable, inappropriate, or irresponsible by purchasing managers..*

As per the report, an analysis of the survey data from buying firms indicated that unethical activities of buyers fell into two broad categories:

a) Deceitful Practices: This first category consisted of behaviors involving deception, and included survey questions addressing the following activities:

- Purposefully misleading a salesperson in a negotiation*
- Exaggerating the seriousness of a problem to gain concessions*
- Using obscure contract terms to gain an advantage over suppliers*
- Inventing (making up) a second source of supply to gain competitive advantage.*

b) Subtle Practices: The second category of unethical actions included somewhat more subtle activities such as:

- *Writing specifications that favor a particular supplier*
- *Allowing personalities of suppliers to impact decisions*
- *Giving preference to suppliers preferred by top management.*

If these activities are studied it is once more evident that human behaviour is a major factor in these relationships. The behaviour shown by individual human beings is very important to the relationship. It also raises the question whether it is only the human behaviour affecting these relationships or is the organisation as a whole also showing some behaviour that is leading to relationship problems. Another issue that arises is the reason for that particular human or organisational behaviour.

The following is a quote, which depicts another dynamic of the buyer- supplier relationship. This process is the gaming approach and is relevant to the issue of what exactly happens between buyers and suppliers during a transaction.

“It really doesn't matter if an OEM (original equipment manufacturer) needs cost cuts immediately, he asserts. Because the arbitrary approach is a gaming approach and suppliers will learn to play faster than the OEM. There are more suppliers to gang up on automakers and the program will become adversarial. Then everybody loses.” (Kobe, 2001)

Some of the perspectives presented by suppliers against supermarkets in the competition commission report: Supermarkets: A report on the supply of groceries from multiple stores in the United Kingdom published in 2000 are as follows. These perspectives again lend credibility to the fact that power is a very important factor in buyer- supplier relationships, and this power is manifested either by the organisation itself, or by the individual human beings representing the organisation.

“The power of the multiples, and especially of young (c.25/28) buyers, without experience, is frightening. [They have] the power to dictate prices and margins, display or not, allocate space and threaten covertly. It's why we would never allow more than 15 per cent of turnover to be supplied to multiples.”

“... talk about partnerships, but these do not exist, and they ruthlessly erode suppliers’ margins with no consideration of the damage they are doing to that company or its employees. Multiples switch their buyers around every six to twelve months in order that relationships and loyalty to suppliers can be avoided. The new buyer is given carte blanche to de-list suppliers, who are frequently treated with complete contempt.”

“... many of our individual members are extremely reluctant, or refuse point blank, to comment on specific cases. Many of these organisations have 40, 50, 60 or even 70 per cent of their sales with a multiple. The resultant power that the multiples have is huge. This power is often rested in the hands of a small buying team, often young, who are changed at short notice routinely. This makes it extremely difficult to maintain stability within the industry.”

“One supplier said that, over recent months, it had been asked by one multiple to make three separate cash contributions: the third, by telephone, was for a sum in excess of £100,000 and was claimed by the multiple as ‘a contribution towards profits’. The supplier said that the same multiple had introduced other charges, none of which had been negotiated and all of which had been deducted from the next payment. There had been no recourse to complain for fear of ‘upsetting the relationship’. The supplier added that it had been directed by the multiple to use a specified distributor, even if this meant breaking an existing contract with another company. In supporting its claim for anonymity, the supplier said that it would be commercial suicide for any supplier to give a true and honest account of all aspects of relationships with retailers.”

The reason for presenting these quotes from various sources in this section is to draw attention to the fact that there are a lot of dynamics involved in the buyer- supplier relationship scenario. There has already been a lot of research conducted and more is being conducted in the field of buyer-supplier relationships, mainly by studying partnership or collaborative techniques or alternatively the negative issues of power and unethical behaviour. The researcher thinks that the premise presented in this section warrants further research in order to understand whether there are any other issues involved in buyer-supplier relationships, and primarily whether there is any other reason for organisations or individual humans to show the behaviour as depicted in some examples above.

1.3 Research Approach

As seen earlier, there are various factors to consider when studying buyer- supplier relationships. The research approach has been mainly a qualitative one, as the researcher needed to understand and explore whether there were any other issues involved in buyer-supplier relationships and whether there were reasons for a particular type of organizational or individual human behaviour. This was not known from the literature review, but the literature search did lead to some exciting concepts of Exit/Voice and Situational strength (Mischel,1977; Mullins, 1999) which provided more understanding to the aspect of power and behaviour in the supply chains. Exit/ Voice concepts have already been studied in the realm of supply chains (Helper, 1995), but situational strength is a new concept to this research area, and the researcher has tried to get a better understanding of the reasons of organisational behaviour and human behaviour on the basis of this concept. The exploratory interviews and literature case studies highlighted once more the aspect of humans in the chain and the issues of power and dominance both on the part of individual humans and organizations. The aspect of game-playing and the presence of humans in the chains, brought a new Psychological perspective to the research in terms of studying and understanding the games being played and the behaviours shown using a psychological tool known as “Transactional Analysis” (Berne, 1964; Stewart and Joines, 1999). The researcher has presented a brief introduction to this method and has devoted the subsequent thesis to studying and understanding the buyer-supplier relationships using Transactional Analysis.

1.4 Research Objectives:

The research was conducted in two phases. The first phase was a qualitative process which focused on exploring the world of buyers and suppliers and gaining some insights into the dynamics of their relationships. A review of the literature encompassing supply chains and buyer supplier relationships identified that the subject was already saturated with large amounts of published information in the field of buyer- supplier relationships and supply chain management. The interesting aspect was that for most of relationships and transactions, explanations were sought by reliance on economic or technological domains. Very few published works dealt with the relationship scenario from the perspectives of the

people involved in these relationships. Hence the first phase was designed to study the issues raised through the depiction of quotes earlier in this chapter. The objectives for the first phase were:

Objective 1: *To explore the nature of buyer- supplier transactions and the dynamics associated with these transactions particularly from the perspective of behaviours, and attitudes depicted by the transacting entities.*

Objective 2: *To explore the experience of buyer- supplier relationships from the perspectives of buyer and supplier representatives involved.*

Phase one of this research provided two new insights for further study:

- Game-like behaviour
- Discretion , humans have in the relationship

To gain further understanding of these issues, it was decided to try and use two Psychological concepts “Transactional Analysis” and “situational strength” to explain the dynamics of buyer- supplier transactions. Hence, the next phase of research addressed the following research questions:

1. *Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?*
2. *Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?*
3. *If the games arise from the individual or the organization, is this contingent upon the strength of the situation?*

It was not in the scope of this research to try and test the research questions empirically. Hence, it was decided to get a better understanding of the transactions and buyer-supplier relationships by using a concept map (proposed in chapter five) and the ability of transactional modelling using Transactional analysis. In chapter six , a few case-studies are retrospectively analysed using the proposed methodology and Transactional analysis. This does not validate the methodology, but depicts that the methodology and this research is useful and can be improved further with future work.

1.5 Thesis structure

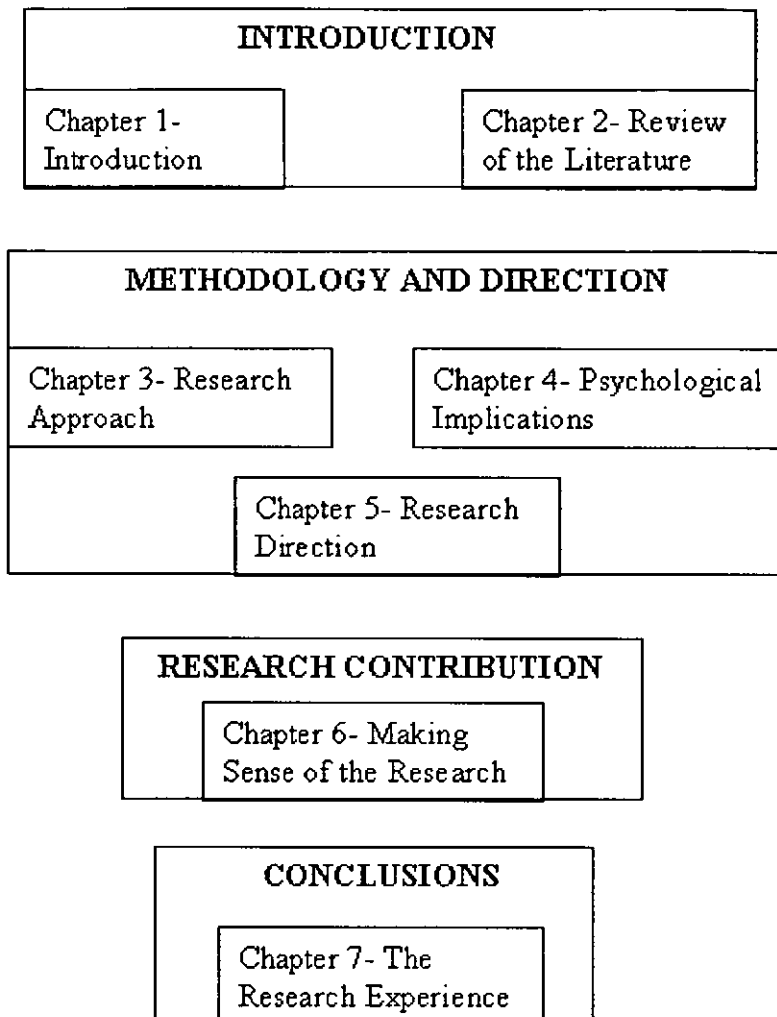


Figure 1.1 Structure of the Thesis

The thesis is structured as shown above.

Chapter one, sets the scene for the research, introducing the reasons for conducting the research and presenting in short the different stages for conducting this research.

Chapter two, presents a brief literature review on the different concepts and theories surrounding buyer-supplier relationships, and presents the research gaps in terms of research objectives for the further stages of this research.

Chapter three, presents the research approach employed by the researcher for conducting this research. It presents a brief review of research methodology and then explains the process of selecting the appropriate methodology for this research based on the research objectives. It also includes the information about the data collected and analysed for this research.

Chapter four, presents the introduction of “Transactional Analysis” for this research and presents a discussion on the feasibility of using it for this research. It also highlights the research questions for the next stage of this research.

Chapter five, presents the development of the concept map relevant to this research and the development of a relationship framework, which depicts the dynamics of buyer-supplier relationships.

Chapter six, presents the development of a methodology for supply chain alignment based on relationship analysis and the use of case-studies to depict the usefulness of the proposed methodology.

Chapter seven, concludes the thesis by summarising the complete research process and presents from the perspective of the researcher, the limitations, contributions and future tasks of this research.

1.6 Summary

This chapter has provided some background information for this research. It has discussed the reasons for conducting this research and presented the different stages conducted for completing this research. It has also presented the thesis structure , which gives the reader an idea of what to expect in this thesis.

Chapter 2

Review of the Literature

Aim: This chapter aims to give the reader some information about the different literature referenced by the researcher to understand the research area. It presents various theories and concepts already available in the field of Supply chain networks and buyer-supplier relationships. The researcher then uses these concepts to generate research objectives which will influence his thinking as the research progresses.

2.1 Introduction

The Alignment of the structure and operations of supply chains (demand networks) has been the focus of a number of recent works in the area of supply chain management (Fisher, 1997; Harland, et. al., 1999; Lamming, et. al., 2000; etc.). Various publications have been devoted to addressing questions regarding alignment of supply chains and the issues involved in aligning. This research has been conducted under the auspices of an EPSRC funded project “The Development of a Systemic Framework for Supply Chain Alignment”. The project was initiated with the intention of studying the various variables, which would provide an insight into “ How do we select the right supply chain and what do we align it to? There has been research conducted on numerous occasions on the aspect of selecting the right supply chains. But, previous research has primarily focused upon operational supply chain alignment and most notably the alternative lean and agile models. Although the role and impact of information transparency along the supply chain have been reasonably emphasised and elaborated in this stream of works, there has been relatively little work to align the strategic and operational perspectives with the information system viewpoint (Lamming, 1996). A second stream (Cox, et al., 2000) has focused on relationships in supply chains and in particular has suggested the power regimes (dyadic relationships between players in a supply chain) and power distribution in the supply chain as the responsible factors for the structural form and operation, and hence the alignment of the supply chains. This approach mainly focuses on value appropriation as the main objective in the creation and management of a supply chain, which corresponds with the power attributes of the supply chain. Both approaches have endeavoured to

develop theories for supply chain management and to discover the DNA of business and supply chains (Cox, 1999). The project was conducted in collaboration by researchers at Loughborough and Liverpool universities. The project introduced a new framework for supply chain alignment, where in it studied the alignment issue from two aspects: 1) the technological and operations perspective, and 2) the relationships perspective. The framework suggested that for alignment of supply chains these two streams had to be aligned internally for a supply chain and externally between supply chains in supply networks. Researchers at Liverpool University concentrated on the technological and operations perspective and the study of the relationships perspectives was conducted by the author of this thesis at Loughborough University.

The author (henceforth called the researcher), had a task of studying the alignment of supply chains from a relationship perspective. This required the researcher to first get acquainted with the concept of supply chains and supply networks and the different theories already published around these two domains. In this chapter the researcher has presented to the readers a brief review of supply chains and their management, followed by the different theories associated with supply chains. This study then led the researcher to delve further into the aspect of supply chain relationships and hence the study of already published research on buyer- supplier relations and issues associated with buyer- supplier relationships. Finally, as the chapter ends, the researcher raises some issues which he thinks, need further exploration in the field of buyer- supplier relationships.

2.2 Supply Chain Management

The phrase 'supply chain management' appears to have originated in the early 1980's- Oliver and Webber (1982) discussed the potential benefits of integrating the internal business functions of purchasing, manufacturing, sales and distribution (Harland, 1996). Since, 1982, there have been numerous definitions for supply chain management, some of them are:

Supply chain management is an integrating philosophy to manage the total flow of a distribution channel from supplier to ultimate customer (Ellram and Cooper, 1993).

Integrated Supply Chain Management is about going from the external customer and then managing all the processes that are needed to provide the customer with value in a horizontal way (Monczka and Morgan, 1997).

All the activities involved in delivering a product from raw material through to the customer, including sourcing raw materials and parts, manufacturing and assembly, warehousing, and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer, and all the information systems necessary to monitor all these activities. Supply chain management coordinates and integrates all of these activities into a seamless process. It links all of the partners in the chain including departments within an organisation and the external partners including suppliers, carriers, third party companies, and information system providers (Lummus and Vokurka, 1999).

There are four main uses of the term 'Supply chain management'

1. The internal supply chain that integrates business functions involved in the flow of materials and information from inbound to outbound ends of the business.
 2. The management of dyadic or two party relationships with immediate suppliers.
 3. The management of a chain of businesses including a supplier, a supplier's suppliers, a customer and a customer's customers, and so on.
 4. The management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers.
- (Harland, 1996)

The research focus for this research is about exploring supply chain relationships and the definitions of supply chain management given above agree that supply chain management is an appropriate tool in order to study relationships between supply chain entities.

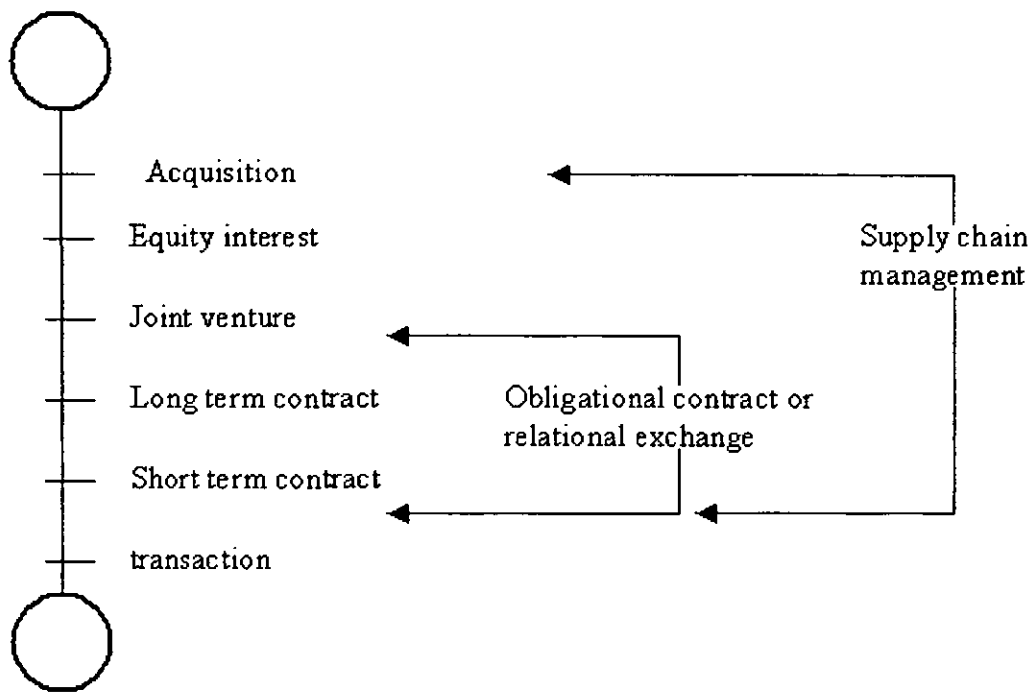


Figure 2.1 : Supply chain management as a type of relationship (adapted from Harland, 1996)

2.3 Supply Chain Alignment

Alignment of the structure and operations of supply chains (demand networks) has been the focus of a number of recent works in the area of supply chain management. Academics have attempted addressing the issues such as “what the supply chain should be aligned to” and “what are the aspects of managing supply chains which need to be aligned”. Two main themes have appeared in published works to answer these questions. Focusing on the physical and operational aspects, the first approach has been to classify supply chains in terms of their structure (vertically integrated or horizontally managed), product strategy (modular or integrated), and process strategy (cost efficient or responsive) in response to the market and products’ characteristics. The classifications lead to suggestions on the alignment of supply chains’ operational strategies [See works by Fisher (1997), Fine (1998), Lamming et al. (1999), Christopher and Towill (2000), Rich and Hines (2000)]. From the operations point of view this approach is essentially based on and supported by the lean approach to manufacturing and has tried to extend lean thinking beyond the

borders of a single company to its customers and suppliers through closer relationships or partnership.

There has been growing academic interest in the configuration of supply chains to suit a particular product and market strategy. Proponents of lean thinking have contributed significantly to the area of supply chains, especially in terms of physical and operational alignment by introducing new insights, ideas and practices in managing the value streams. These valuable contributions, however, have suffered from the lack of a classification framework. Fisher (1997) suggested a framework for overcoming this deficiency by suggesting that the supply chain operations (classified in terms of efficient or responsive) should be aligned to the product/market characteristics (described as either functional or innovative) and that two “valid” alignments exist. Fisher (1997) asserts that functional products require an efficient supply chain since the key costs for such products lie in the production, transportation and inventory costs. Innovative products on the other hand require responsive supply chains where the key cost is market mediation. Academics researching into the application of lean and agile principles to supply chains have proposed that supply chains need to be either lean (where waste reduction is the key driver) or agile (where customer service is the key driver). Adopting the same approach, Lamming et al. (2000) proposed an initial classification of supply chains as an extended version of Fisher’s model, and which incorporates two dimensions of product type (enhanced with the idea of product uniqueness) and product complexity, leading into the identification of four different classifications of supply networks.

Fine (1998) initiated a different perspective in the analysis, classification, design and management of supply chains. Trying to lay out some theories of business genetics, Fine has coined the term clockspeed to represent the rate of evolution in business and the measure which determines the prospective life cycle of the supply chain until it evolves into another form. Technology and competition are considered to be the drivers of clockspeed. Fine introduces three key dimensions in business for which clockspeed can be measured: product technology; process technology; and organizational decision-making where the clockspeed of the latter is implicated by the level of two other dimensions’ clockspeed. According to Fine (1998), the clockspeed of an industry determines the structural form, and hence the characteristics of the supply chain. Fine identifies the capability to design its supply chain as the most important core competency of an

organization. Demonstrating the supply chain dynamics in terms of “Double Helix”, analogous to the biology metaphor, Fine distinguishes between two types of chains. First is the integral end product architecture and the other modular end product architecture, each requiring a different degree of integration.

According to the existing classification and models, supply networks must design their business strategy according to (a) market requirements and characteristics, and (b) the rate of new product introduction. These two factors can be determined by product type (Fisher, 1997; Fine, 1998), product complexity (if applicable) (Lamming et al., 2000), and process (Fine, 1998). In terms of operations, the strategy, according to Naylor et al. (1999), and Christopher and Towill (2000), can be engineered to design the production systems to be lean or agile or perhaps both (the concept of leagility) to take simultaneous advantage of the benefits of leanness and agility. In practice, this means that product configuration should be postponed along the supply chain according to the market characteristics.

This view of Alignment depicts the alignment of the demand networks to the market requirements. The presence of humans in the supply chains warrants further study for considering human behaviour as an important aspect of alignment. This has been proposed to some extent by Gattorna and Walters (1996). According to them, the four key elements that comprise the strategic alignment model are:

- The market and/or client base
- The organisation’s strategy with which it responds to the market
- The organisation’s culture which represents it’s internal capability to implement this strategy
- The leadership/ management style it uses to shape the culture and drive the strategy.



Figure 2.2 : The principle of strategic alignment (adapted from Gattorna, Walters, 1996)

Any strategy is only appropriate in a given set of competitive conditions. Also, specific organisational cultures and leadership styles are only appropriate for given strategic situations. Alignment is the ‘appropriateness’ of the various elements relative to one another (Gattorna and Walters, 1996).

2.4 Supply Chain Relationships

Supply chain relationships have been researched by many researchers to date and they are still a very dynamic area as far as knowledge of relationships is concerned (Harland, 1996; Lamming, et. al., 1996; Landeros and Monczka, 1989; Dyer and Chu, 2000; Porter, 1998; Stuart, 1997). The research has concentrated on the actual dynamics of the supply chain and the role of each entity at the inter-organisational boundary. Supply chain relationships have been studied in the context of different business trends (Harland, 1996). These trends include:

- a) increasing incidence of vertical disintegration
- b) implementation of supplier-base programmes.

- c) focussing on operations
- d) outsourcing
- e) just-in-time
- f) increasing popularity of partnerships and partnership sourcing .

Most of the work on relationship management has been focussed on one or more of the above given trends. Some of the researchers have tried to work on developing Relationship assessment programmes (Lamming, et. al. 1996) which have tried to focus more on Vendor assessment. The emphasis upon managing the supply chain as a source of competitive advantage has led many organisations to reassess the role of the supplier within their own ability to achieve or sustain competitiveness and customer service. In the survey (Lamming, et. al., 1996) the customers identified 'improved overall quality', 'better all-round service', 'improved delivery performance', and 'improved relationships' as their top 4 benefits from using vendor-assessment schemes. The suppliers tended to agree although 'improved relationships' was the top benefit for them. This shows that relationship management is one of the major concerns in Supply chain management.

One major concern that arises is that of Power in the chain. Generally the most powerful entity controls the chain and dictates the operation of the chain. Relationship management is thus also a function of the Power structure of the chain. Most research focuses on improving relationships, but the solutions are more tailored to meet the requirements of the most powerful entity in the chain. Another important feature to consider is the perceptions that buyers and suppliers have about each other's performance and working (see, Harland, 1996, 1997; Holmlund and Strandvik, 1999). Some of the major concepts influencing the study of supply chain relationships are discussed below.

2.4.1 Transaction Cost Economics

Transaction cost economics (TCE) focuses on the costs involved in making transactions rather than the costs of producing a product. TCE emphasises the elements that govern transactions. TCE tries to derive the optimal governance mechanism under a certain set of situational contingencies (Barney and Hesterly, 1999). Three assumptions underlie decisions on a given governance mechanism.

1. Individuals in any economic system have a bounded rationality. It means that while people intend to be rational, in reality their cognitive capabilities are limited.

2. at least some individuals are inclined to be opportunistic or to act in self-interest in guile.
3. information is asymmetrically distributed. Thus parties to many transactions have access to only incomplete, imperfect or imbalanced information. (Williamson, 1985)

Transaction cost economics has an important role to play in how the buyer-supplier relationship is constructed and managed. In the TCE framework, the costs of any transaction comprise the costs of planning, adopting and monitoring operations (Williamson, 1996). According to Williamson (1985), in the case of high level of collaboration, the buyer-supplier relationship will be close to the vertical mode of governance, whereas in cases of lower levels of collaboration, the relationship will be close to the spot-market mode of governance. In the original framework (Williamson, 1985) refers to three dimensions to study the governance mechanisms: transaction specific investments, uncertainty and frequency.

Transaction specific investments involve human and physical assets that are dedicated to a particular relationship and cannot be easily deployed. The researcher's interest in this concept stems from the study of opportunistic behaviour (discussed later in the chapter), and the effect opportunistic behaviour has on buyer-supplier relationships. Jap (2000) has suggested the use of mutual investments as governance mechanisms to limit opportunistic behaviour. According to Williamson (1996), transaction-specific investments are so critical that they transform the nature of the exchange; rendering firms both in valuable and vulnerable positions. In a valuable position, the investments allow for coordination of activities and exploitation of complementarities of assets. In a vulnerable position, transaction-specific investments can create a situation in which a number of potential partners is small and a firm becomes dependent on its counterpart (Kemp, 1999). The researcher limits this discussion on TCE, as the researcher's interest in terms of this research was in Transaction-Specific Investments. If the reader wishes to study this in detail for its advantages and limitations, refer to [Cook and Emerson, 1978; Powell, 1990; Barney and Hesterly, 1999; Anderson and Narus, 1990; Rindfleisch and Heide, 1997]

2.4.2 Relational Contracting theory

Macneil (1980) developed a typology of business relationships as discrete versus relational exchanges. A discrete exchange is consistent with the assumption that individual transactions are assumed to be independent of past, or future relations between the contracting parties and constitute nothing more than the transfer of ownership of a product or service. This resembles the spot-market transaction as proposed in Transaction Cost Economics. Relational exchange, explicitly accounts for historical and social context in which recurrent transactions take place. It views enforcement of obligations as following from the mutuality of interests between a set of parties (Macneil, 1980; Dwyer, et. al. 1987; Dyer and Singh, 1998). In relational exchanges, individual goals are reached in a bilateral system through joint accomplishment (Heidi, 1994), while concern for the long-run benefit of the system serves to restrain individual tendencies to pursue their own self-interest in an opportunistic fashion (Ouchi, 1980; Dyer and Singh, 1998). This bilateral governance incorporates the spirit of a collaborative buyer- supplier relationship as it helps to reduce opportunistic tendencies that erode the value of specific assets. The relational exchange concept along with bilateral governance supports the importance of individual behaviour in the relationship and the concept of situational strength (discussed later in the chapter).

2.4.3 Purchasing Literature

As outsourcing components has become the prime focus of most manufacturing companies, purchasing has become a very important function in today's manufacturing companies. The original approach to purchasing was to 'get the right component at the right price', and was based on one-off transactions between buyers and sellers, two individuals within two separate organisations. The transactions would generally tend to be the active buyer dictating terms and conditions to a passive supplier. Hence, most of the focus in the purchasing literature and in the industrial environment tended to favour the buyer as the customer being the most important entity in the relationship. Pooler and Pooler (1997) describe how this supposition actually leads to an inherent adversarial approach "the essence of buying is to create competition among sellers, just as selling legitimately seeks to eliminate it. The ability to reward or punish a supplier by using economic leverage in purchasing is a powerful responsibility".

Even though terms such as “collaboration” or “partnerships” have expanded the approach taken by purchasing to supplier management and supplier development activities, the dominant role played in these relationships is generally by the buyer or customer. Supplier development itself “has its essence in an active partner (the customer) who puts resources into improving its suppliers” (Burnes and New, 1998). As a consequence of the focus on the buyer, “most of the research on partnerships has tended to focus on the role of the customer in establishing/managing supplier partnerships” (Burnes and New, 1996).

2.4.4 Collaborations

Collaboration is a departure from the discrete type of exchange to the relational bilateral exchange. Collaborating partners work together to achieve mutual goals (Anderson and Narus, 1990; Morgan and Hunt, 1994). A relational exchange continues over time and each transaction is viewed in terms of its history and anticipated future. Since the duties and performance may be relatively complex and occur over an extended period, the parties in the relationship may direct much effort toward careful plans, which define and measure the outcomes of the exchange. Changes in agreements and problems are expected and parties are expected to be flexible and set up a mutual mechanism for solving problems (Noordeweir, et. al. 1990). Hence, in a relational bilateral exchange collaboration requires that activities should be undertaken jointly (Heide, 1994) and that there should be flexibility to make adjustments (Noordeweir, et.al. 1990)

Flexibility to make adjustments is the willingness to make adaptations in day-to-day management as circumstances change (Heide and John, 1992). The partners accept smooth alterations in practices and policies in times of unforeseen or changing conditions. A high level of flexibility allows for ongoing planning and continuous adjustments of obligations between the parties, especially in a fast changing environment (Heide, 1994).

Joint action comprises joint planning and joint problem solving. Joint planning refers to collaborative activities by which future contingencies and consequential duties and responsibilities in a relationship are made explicit in advance (Heide and John, 1992). Dwyer, et. al.(1987) suggested that input to decisions and goal formulation are important aspects of joint planning and improve planning performance. Joint planning then allows mutual expectations to be established and collaborative efforts to be specified at the outset.

Joint problem solving refers to joint activities to resolve disagreements, technical failures and other unexpected situations (Lush and Brown, 1996; Heide and Miner, 1992). Firms often attempt to persuade each other to adopt a particular solution to a problem situation. In collaboration, these persuasive attempts are more constructive than coercive or dominative (Dwyer, et. al., 1987).

2.4.5 Partnerships

Macbeth and Ferguson (1994) use the phrase ‘partnership’ to refer to the intermediate types of relationship shown in the figure:

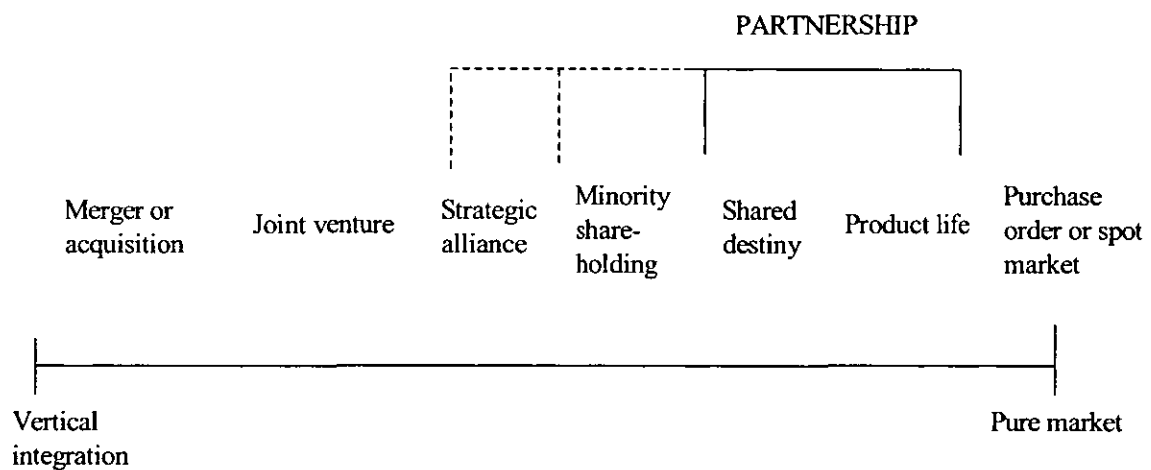


Figure 2.3: Partnership as a type of relationship (adapted from Harland, 1996)

Partnering has received much attention by academics and practitioners, with the automotive industry as a basis for the development of most studies. Langfield-Smith and Greenwood (1998), report that the automotive and component industries provide an interesting focus for studying partnering and collaboration (Veludo, et al., 2004) . According to Kim and Michell (1999), the automotive industry is a good illustration of both the adversarial and the relational models of buyer supplier relationship. It is often claimed that car manufacturers now work almost exclusively in partnership with their suppliers (e.g. Arminas, 2000). Burnes and New (1996) emphasise “there is no universally agreed definition of partnership”. Hill (1996) summarises the theme by saying, “partnership is the relationship between two organisations in order for them to survive

within the marketplace". Rackham (2001) states that "successful partnerships are about radically redesigning business relationship partnership creates new value that could not be achieved within the existing vendor/customer roles".. Many recent practitioner articles have focused on prescribing how partnership can best be achieved (e.g. Rackham, 2001; Kador, 2000).. The importance of supplier management has been recognized by academics and many studies have reported the advantages to be gained from partnerships (e.g. Monczka *et al.*, 1993; Lamming, 1993; Helper and Sako, 1995), or from strengthening existing relationships (Kerns, 2000). Brennan (1997) discusses partnership in terms of dependency between the two parties, whereas Ellram and Hendrick (1995) define partnership as a relationship between two firms which involves a commitment over an extended period of time, the sharing of information, as well as the risks and rewards of the relationships. Veludo, et al., (2004) state that the concept of partnering is important within the MNC (multi-national company) network form of organisation as partnering increases the ability of the organisation to coordinate communication and resources efficiently. Wyatt (2001) has conducted an exploratory study of partnerships in the European automotive industry. According to her, although customer-supplier roles exist, these roles are reinforced through the lack of clear and established partnership roles and behavioural norms, hence customers and suppliers have different perceptions of what constitutes partnership.

The nature of partnerships

Webster (1992) states that the relationship between manufacturers and suppliers can take many forms. Webster's representation of this range is shown in Figure 2.4 . This can be seen on a continuum ranging from purely discrete transactions at one end, to long-term relational exchanges between interdependent partners at the other (Mohr and Nevin, 1990).

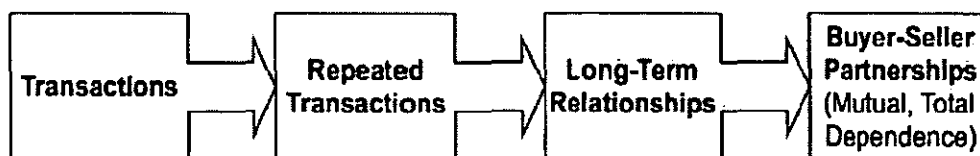


Figure 2.4: The range of supplier relationships (adapted from, Webster,1992)

Webster suggests that there is only one type of partnership. However, Lambert *et al.* (1996) propose that there are three kinds, depending on their character. (figure 2.5)

- (1) “short-term” (type 1);
- (2) “long-term” (type 2); and
- (3) “long-term, with no end” (type 3).

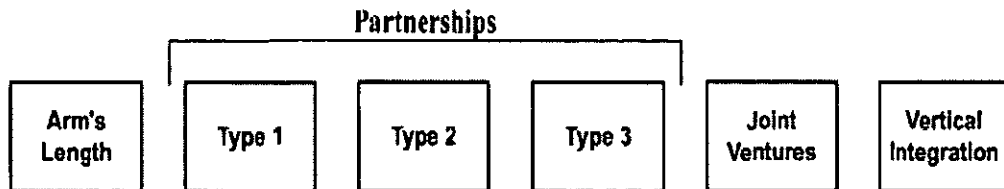


Figure 2.5: Types of relationships (adapted from Lambert, et al.,1996)

Lemke, et al. (2003) discuss the above mentioned (Lambert, et al., 1996) use of the time dimension to differentiate between partnership types by saying that “in practice, it cannot be assumed that a manufacturer and a supplier in a long-term relationship see themselves in partnership. It could be that the manufacturer has purchased the product from the supplier over several years due to a consistently low price. Their relationship may not go anywhere beyond the placing of an order and its delivery. Partnerships are a special form of supplier-manufacturer relationship; they are much closer than other forms and a deeper analysis than that of simply the time dimension”. Lemke, et al. (2003) have concluded in their literature review on “partnerships” that “partnerships... are generally recognised as close business relationships (Lambert et al.,1996; Ellram, 1991). However, although researchers are in agreement that the degree of relationship closeness is a good angle for exploring partnerships, this approach has not previously been operationalised”. According to Ford (1984), manufacturers and their suppliers now emphasize close relationships, rather than “playing the market”, where they focused solely on cost reduction. While, Ford (1984) has suggested that relationship closeness could be explained in terms of distance that exists between the buyer and seller, Kalwani and Narayandas (1995) make the point that the level of closeness may indicate the presence of nothing more than joint action and expected continuity of the relationship. According to Ford (1984), relationship closeness could be explained in terms of five dimensions:

- (1) geographical;
- (2) time (length of the relationship);
- (3) technological;
- (4) cultural; and
- (5) social.

Partnering is thus the preferred choice for relationships in which there is a high degree of mutual interdependence and where the failure to perform by either party severely impacts the performance of the other. The advantages of this approach towards partnering have been depicted by the research conducted by Kraljic (1983) and Olsen and Ellram (1997). In essence, management has struggled with foregoing the short-term cost reductions of arm's length relationships for the long-term benefits of alliances and strong partnerships. Conversely, the management of these long-term relationships requires a substantial amount of resources,(Dwyer et al., 1987; Simpson and Mayo, 1997). Consequently, new research suggests traditional adversarial relationships continue to exist, under the new name of alliances and partnerships, (Williams, et al, 2002). Whipple and Frankel (2000) have indicated that the transition from adversarial to cooperative relationships has been difficult for many managers. Bringing about the necessary changes in organizational culture and behavior for this transition have proven quite overwhelming (Watts et al., 1995). McIvor and McHugh (2000) maintain that organizations will have considerable difficulties in partnering with external entities if they cannot develop a partnering culture internally. On the whole, partnerships can be characterised by a high level of commitment, mutual dependency, trust, and a long-term orientation where the sharing of information as well as risks and rewards are typical, (Lemke, et.al., 2003)

2.5 Issues affecting Supply Chain Relationships

2.5.1 Power

Power is defined as the ability of one actor to affect the behaviour of another. Having or acquiring power is an attractive option for a business in a supply network because it increases its ability to gain maximum advantage for itself. However, the situation is complex in that, although a business may have power as a supplier to one firm, it may not have power with another supplier and may also be subject to the power of a buyer.

The issue of power has been explored by Andrew Cox, et. al. (2000), Jablin (1987), Conrad (1983), Pfeffer (1981) among many others. Dahl's (1957) definition of power is the capacity of actor A to get actor B to do something that actor B would not probably do. According to Cox, et al. (2000) the buyer is dominant when the relative utility and scarcity of the buyer's resources for the supplier is high whilst the relative utility and scarcity of the supplier's resources for the buyer is low. When this is in reverse then the supplier is dominant. In the Cox view, wielding power is not a negative process but an essential element of strategy and planning. All firms attempt to frame their relationships with outside bodies to their own advantage. This advantage is designed to maximize their own revenue and keep competitors out. Having and wielding power does not necessarily have negative connotations for the others in the relationship that are less powerful. All companies will be in a variety of relationships some, where they do have power and many, where they do not. The concept of Power Regimes has been put forth by Cox, et. al. (2001, 2000, 2002) in order to understand the nature of exchange power (buyer- supplier) and its impact on relationship management choices. The framework is informed by a recognition that although power advantages might often be explicitly exploited in buyer-supplier interactions, the very existence of power imbalance conditions buyer and supplier behaviour (Cox, et. al., 2001). The framework also known as the Exchange Power Matrix is constructed around four basic types of buyer- supplier structures- buyer dominance, supplier dominance, buyer- supplier interdependence, and buyer- supplier independence. The four power structures are based on the fundamental premise that the power of one actor or organisation over another is determined by the extent to which that actor or organisation is dependent on the other for particular resources. Hence the framework is a function of two variables: relative utility and relative scarcity of resources brought by each of the parties to the relationship(Cox, et. al. 2000).

High	Buyer Dominance	Interdependence
	>	=
Low	Independence	Supplier Dominance
	0	<
	Low	High
	Relative utility and scarcity of supplier's resources for buyers	

Figure 2.6: The Exchange Power matrix (adapted from Cox, et. al., 2000)

From the figure it is evident that, the buyer would have power (dominance) over the supplier if two conditions are held true. First, the buyer offers the supplier resources that are both relatively scarce and regarded by the supplier as having a relatively high utility. Secondly, the supplier's resources are relatively plentiful and are of low utility to the buyer. If the opposite is true, then the supplier would have power (dominance) over the buyer. The buyer and supplier are said to be interdependent if the relative utility and scarcity of the resources held by each party are high. The buyer and supplier are independent if the relative utility and scarcity of resources held by each party are low. The researcher has presented this information in order to explain some of the underlying philosophy of this concept in looking at buyer- supplier relationships. The information is concise and is not provided in greater depth. If the reader wishes to study the concept in detail, reference should be made to Cox, et al. (2001, 2002). The Power matrix distinguishes four different power scenarios, but these are shown representing the relationship in a dyad. For a supply chain the relationship needs to be considered for the upstream and downstream entities, hence for eg: if there are 4 entities in the Chain A, B, C, D, then the power structures for the chain could be shown as $A < B = C > D$. This is just one depiction, but Cox, et. al.(2000) have depicted 16 buyer-supplier exchanges which they

term as Power Regimes. This depicts who has the power in the chain and controls the working of the chain. The power regimes model is primarily based on an economics point of view and is structured around getting maximum value for an entity from the exchange relationship. According to Cox, (1999), the important decision for companies when getting involved in supply chains is about how they will control and manage the primary supply chain. They face decisions about where they should position themselves in the chain. At one end, they can decide to vertically integrate the whole chain from raw material to end customer, or at the other end, can decide to own only one or two of the resources that exist in the chain. Cox (1999), argues that essentially business is about appropriating value for oneself; it is not about passing value to customers unless circumstances decree that this is the only option available to the company in order for it to sustain itself in business. The theoretical ideal in business is to be able to put oneself in a position where neither customers, employees, competitors nor suppliers can leverage value from the business, while being in apposition to leverage all of them. Thus only by having the ability to appropriate value from relationships with other- whether these are with customers, employers or suppliers- can business success be attained (Cox, 1997). The success or failure of a supply chain management initiative is primarily a function of the complex pattern of exchange power that underpins supply network relationships. It is the nature of the exchange power that defines the real commercial interests of buyers and suppliers and determines whether they can and therefore should try to manage their direct and indirect relationships with others in their supply network (Cox, et. al., 2001). Hence, it is proposed (Cox, 2001a) that, with relation to the Exchange Power matrix, if an improvement in value is to be achieved, it is imperative that buyers change the current power circumstances they are in to one that is more profitable. These changes also known as routes are six in number and depending upon the position the relationship is at present gives an indication to the buyer for next stage. The routes are :

1. Supplier Dominance to Buyer Dominance
2. Supplier Dominance to Interdependence
3. Supplier Dominance to Independence
4. Interdependence to Buyer dominance
5. Independence to Interdependence
6. Independence to Buyer dominance

The suppliers will have counter- strategies to gain Power. The routes the suppliers will try to take will be to increase value appropriation from their relationships with buyers.

The movement by either the buyer or the supplier to interdependence is the most important and difficult. Interdependence as described in Cox (2001b) is a discipline. Parties cannot just do what they want, but must proceed through mutual consent. Interdependence places restriction on the pursuit of self- interest. This is the realm of partnerships and collaborations. For achieving the movement to Interdependence, Cox (2001b) suggests, that buyers should:

1. work closely with preferred suppliers for technology and innovation sharing
2. lock-in high quality suppliers.
3. create jointly owned product /service differentiation.

This also complements the work done by Sandy Jap (2001) wherein she has proposed governance mechanisms to limit opportunism by both parties and create Interdependence. Cox, et. al. (2001), suggests that a firm's success in co-ordinating its direct and indirect relationships in an extended supply network depends on more than just cultural alignment and managerial commitment. The researcher thinks that this is fine until the scenario of strategic movements start. When there is a change in stance taken by a firm about its power position and the dynamics involved, the humans working in the organisations are affected by the transaction or for that matter the transaction is also affected by the humans present in the relationship. There is no mention in the literature regarding this and so it is necessary to study the dynamics of the transactions from a human perspective. It is necessary to explore this perspective to get a better understanding of what happens in the transaction even though the overt decision for the transaction was for an economic purpose. The human involvement lends a more deeper meaning to the supply chain transactions and relationships. Hence one of the objectives of this research would be:

To explore the dynamics of supply chain transactions from a human perspective.

The issue of power is usually accepted as a circumstance of the collaboration and many companies accept the rules and conditions applied by their often larger and more powerful collaborator. The situation becomes more serious if there is a problem to be negotiated where one of the partners stands to lose a considerable amount if they do not at least achieve some reparation. In a problem situation when a consignment of goods has been

received but is now not wanted then the more powerful member may attempt to maximise their own position perhaps at the expense of the other less dominant partner. Hence power has value in that it enables a business to strategically optimise its relationship in favour of its preferred strategy, but can also be used inappropriately or in a manner that causes damage to a relationship. The application of power applied appropriately to define rules of partnership or inappropriately to gain advantage in a problem situation is not always the same as opportunistic behaviour. Although opportunistic behaviour particularly if successful is likely to change power relationships.

2.5.1.1 Facets of power

In supply networks, more than one company may try to exert power on the network. Some companies will see it as their role to control or try to control the network. Generally, the roles that each entity in the network perceives for itself as a member of the network will decide the power structure of the network. A firm may try to increase the power over activities and resources due to the greed / lust or resource scarcity, this causes for Alliances, Mergers and Takeovers in the supply chain networks, or vertical integration. The series of the dyadic relationships between entities will eventually lead to a pattern of power in the network and as many proponents of network theory have said a supply network rarely has a single powerful entity, the network has firms exerting power at different positions depending upon the relative dyadic relationships around the position. Thus, Relative Resource endowment, Amount of information / knowledge possessed, technology, competencies play a very important role in determining powerful entities. Hunt and Nevin (1974) developed a model of power that divided power into coercive and non-coercive types. Negative coercive power means B's perception that A has the ability to mediate punishments for him. If the buyer is the more stronger, more powerful trading partner, it has both coercive and non-coercive sources of power that can be exercised to control the supplier. Punishment is the source of employing coercive type of power. The main sources of Non-coercive power include reward, expert, referent and legitimate power (Ratnasingam, 2000). Hence, in any relationship in the supply chain, the decision to use a certain type of power creates the relationship strategy that transacting entities employ for the relationship. These issues of power sources are used in scenarios such as: if one entity wants the other entity to abide by its requirements, or when creating and distributing value in the chain, or just trying to control the relationship.

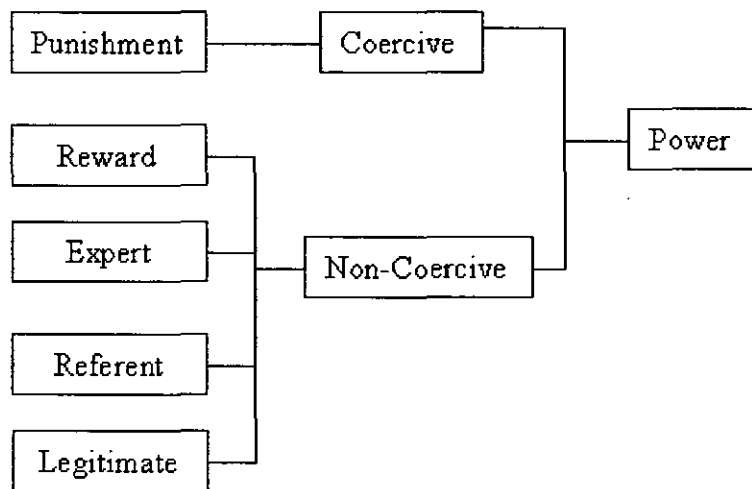


Figure 2.7: Types of Power in a Buyer- Supplier Relationship (adapted from Ratnasingam, 2000)

The notion that supply chain proponents have about supply chain relationships and partnerships is that these would bring about value creation in the chain and this would be passed on to the customer. What really happens is that there is a fixed value in any chain and as the chain is optimised, the value, which is divided along the chain starts getting accumulating near the powerful entity , which means the distribution of value along the chain favours the powerful entity and this is the reason for power struggle in the chain (Cox, 1999), though there are some psychological and social reasons too, which will be considered later. The distribution of fixed value among the entities would take place in forms such as:

- Penalise (An Automobile manufacturer asking suppliers to cut prices by 10% every year)
- Facilitate / service (A Supermarket sells data acquired at point of sales to its suppliers)
- Sharing / Cooperation (sharing of resources ; commitment of resources by members)
- Redistribute (redistributing profit at the end of the year among the network members)

As per Cox,(1997) ; Business Success is not ultimately passing value to the customer, it is about keeping it for oneself. He believes that the two most important points to be followed by entities in supply networks and relationships are :

- The ability to understand the structure of power and leverage operating in existing supply chains
- The ability to understand the functionality flowing through supply chains and how to transform this to destroy existing supply chains and create new power structures.

Porter, (1980, 1998), has put forth some scenarios describing the power relationships between buyers and sellers. The following figure depicts the strategies that buyers and suppliers use to gain power in the relationship and control the supply chain.

<p>The Buyer is Powerful when;</p> <ol style="list-style-type: none"> 1. Buyers are concentrated. 2. Alternative sources of supply exist. 3. The cost of supplies is a high percentage of buyers total cost and so buyers are more likely to shop around and squeeze the suppliers. 4. Buyers backward integration .(buyers developing new suppliers) 	<p>The Supplier is Powerful when;</p> <ol style="list-style-type: none"> 1. Suppliers are concentrated. 2. Supplier Switching costs are high. 3. Suppliers integrating forward. 4. Customers are not perceived valuable.
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Figure 2.8: Porter’s Strategy for Buyers and Suppliers

2.5.2 Exit-Voice

Albert O. Hirschman (1970) while musing on the deterioration in the service of the Nigerian State railway formulated a theory of 'responses to decline in firms, organizations,

and states'. He postulated two types of responses to such problems: 'exit' to a better alternative; and 'voice' defined as 'any attempt at all to change, rather than to escape from, an objectionable state of affairs'. Borrowing Hirshman's theory Helper, (1995) applied the terms to buyer-supplier relationships in the automobile industry. She identified two types of responses to problems arising in a customer-supplier relationship:

1. Exit, where the customer firm's response to problems with a supplier is to find a new supplier;
2. Voice, where the customer's response is to work with the original supplier until the problem is corrected.

The customer's choice of method of problem resolution is an important one, because it affects not only the customer's and supplier's relative bargaining power, but also their propensity to introduce new technologies of various types. It is easy to see that the exit strategy gives the customer a great deal of bargaining power because it has little commitment to any one supplier. Conversely, the voice strategy reduces the customer's bargaining power by increasing its costs of switching between suppliers. On the other hand, most types of technical change require moderate to higher levels of both commitment and administrative co-ordination, thus favouring voice strategy. Trust also plays a very important role in achieving voice relationship as the pay-offs are achieved in the long term and very difficult to observe outright (Helper, 1995). What form this will take depends on the situation, and may vary from supplier to supplier and customer to customer.

Exit represents the "perfect market stance" where customers who are not satisfied take their business elsewhere. This corresponds to the independence stance in the Cox grid. Customers will simply terminate the relationship if the customer-supplier situation fails to live up to promise. This situation is quite different if there is dependency and it is highly likely that voice strategies will be used if there is buyer or supplier dominance. What form this will take depends on the situation, and may vary from supplier to supplier and customer to customer. If either of the parties in the Supply relationship are suspicious of opportunistic behaviour or inappropriate use of power, then the parties depending upon their level of dependency can choose the appropriate strategy to control the relationship.

Exit strategy maximises buyer bargaining power, whereas a Voice strategy maximises most types of technical change. What is thus required is trade-off between bargaining power and technical change. Helper (1995) suggests that while some exit is helpful in encouraging suppliers to listen to Voice, too much exit can have a negative impact on Voice and system performance due to three reasons :

1. When buyer firms instead of using Voice and helping low- quality local suppliers to improve, use exit and start sourcing from other places or abroad, the local suppliers, workers, and communities are left to cope with the consequences.
2. The presence of suppliers practising an “exit- based competition” (acceptance of low margins and little investment in building technological or organisational capabilities) can drive out suppliers who want to practise Voice- based competition.
3. Different organisational structures required by buyer firms to practise both exit and voice on a large scale which makes it difficult for exit and voice strategy to co-exist in a firm.

Humphrey, Ashforth (2000) conducted research in order to study whether a dual strategy (exit-voice) existed in buyer-supplier relationships. They suggested that similar to the Leader- member Exchange theory buyers use two different interaction styles with their suppliers. With in-group suppliers, buyers use Voice strategies and provide extra help, whereas with out-group suppliers, buyers use exit- strategies and threats. This tends to suggest that even though different organisational structures are required by buyers to practise dual strategies and it makes it difficult, the segregation of suppliers in “In-group”, and “Out-group” gives a certain guideline to employees in their representative roles of buyers and suppliers to practise exit or voice.

It is thus necessary to study buyer-supplier relationships from the exit-voice approach to get a better understanding of which strategy needs to be followed by firms to get the best out of the relationships they have in the supply chain.

2.5.3 Opportunistic behaviour

Opportunism extends the conventional assumption that economic agents are guided by considerations of self-interest to make allowances for strategic behaviour. This involves self-interest seeking with guile and has profound implications for choosing between

alternative contractual relationships (Williamson, 1975). According to Jap (2001) opportunism includes overt behaviours such as lying, cheating and stealing, as well as subtle behaviours such as dishonouring an implicit contract, shirking, failing to fulfil promises, and obligations. It is the equivalent of bad faith, the implication being that the party who is opportunistic is not trustworthy. Opportunistic behaviour involves one partner either having access to information that the other partner does not have and then taking advantage of the information asymmetry to gain business advantage. Specific assets can create a complex pattern of interdependencies between supplier and buyer making it difficult to assess the bargaining power of each one. Instead, given a context of small numbers, asymmetric information and uncertainty about the future, there will be incentives for opportunistic behaviour by both parties. A variety of behaviours can occur between partners, some may involve opportunistic jostling to acquire more power for one organisation or the use of power to get some desirable end result for one partner. Opportunism may involve misrepresentations (eg. Making hollow promises or “window – dressing” one’s efforts), unresponsiveness (eg. Aloofness), unreasonable demands (eg. Asking the other party to pay more than their fair share of a problem) and lying (Jap, 2001).

As a buyer and supplier become increasingly suspicious of each other, there is a decreasing motivation to make the exchange successful through co-ordination efforts and idiosyncratic investments. The activities typically require the sharing of sensitive information in order to identify opportunities for joint success (Jap, 2001). If any of the parties are suspicious of opportunistic behaviour the information sharing stops and exchange deteriorates. Lorange and Nelson (1987) suggest that when exchange deteriorates, behaviours such as tolerance of incompetence, replacement of substance with form, scarcity of clear goals and decision benchmarks, and loss of effective evidence are evidence of some of the first observable signs of decline. This also means that the decline in the relationship on a macro level is affecting two firms, but on a micro level is actually affecting and getting affected by the individual humans working in the representative roles of buyers and suppliers.

Hence, it is even more important to explore the buyer-supplier transaction scenario from the perspective of the humans who are working in those roles.

Sandy Jap (1999, 2001) has explored the mechanisms of governance that control opportunistic behaviour although they may not control the inappropriate use of power. According to Jap, what tends to limit opportunistic behaviour between parties are: Trust, bilateral investments and shared goals. If the agents in the transaction have established trust over a prolonged period of time then this tends to limit the opportunistic behaviour and encourage more open communication. Similarly if they have bilateral and shared investments in the outcome of the collaboration and they have shared goals about outcomes then this limits the opportunistic behaviour. The application of power applied appropriately to define rules of partnership or inappropriately to gain advantage in a problem situation is not always the same as opportunistic behaviour. Although opportunistic behaviour particularly if successful is likely to change power relationships.

2.5.4 Unethical Behaviour

There are two major current philosophical traditions in business ethics. One is deontology and the other utilitarianism. In deontology, an activity could be defined as ethical if it is freely undertaken, available to all, injures no one, and benefits some. Based on this definition, activities such as writing specifications that favour a particular supplier, overestimating demand to gain volume concessions, and purposefully misleading a salesperson in a negotiation are considered unethical behaviour.

In Utilitarianism, an activity is considered ethical and morally acceptable if a social cost/benefit analysis yields a positive net result. Thus, activities that may hurt some parties are still considered ethical under this approach, because society as a whole benefits (Fitzsche & Becker, 1983; Robin & Reidenbach, 1987; Carter, 1998).

Carter in his study defined Unethical activities as “*the specific set of actions taken within the buyer-supplier relationship that are considered unacceptable, inappropriate, or irresponsible by purchasing managers*”. Even though his definition takes into account only the buyer side of the relationship, it holds true for the marketing personnel from the supplier’s end.

The study by Carter revealed the following activities that could be considered Unethical:

a) ***Deceitful Practices***: This first category consisted of behaviors involving deception, and included survey questions addressing the following activities:

- *Purposefully misleading a salesperson in a negotiation*
- *Exaggerating the seriousness of a problem to gain concessions*
- *Using obscure contract terms to gain an advantage over suppliers*
- *Inventing (making up) a second source of supply to gain competitive advantage.*

b) ***Subtle Practices***: The second category of unethical actions included somewhat more subtle activities such as:

- *Writing specifications that favor a particular supplier*
- *Allowing personalities of suppliers to impact decisions*
- *Giving preference to suppliers preferred by top management.*

A further analysis of the survey data from buying firms suggested that unethical activities of suppliers consisted of a single set of activities, including:

- *Knowingly over committing resources or production schedules*
- *Lying or grossly misleading customers in a negotiation*
- *Using obscure contract terms to gain an advantage over suppliers*
- *Asking for information about competitors*
- *Offering gifts in excess of nominal value*
- *Increasing prices when there is a shortage*
- *Using backdoor selling techniques such as approaching personnel in engineering, manufacturing, or other departments outside of purchasing*
- *Using less competitive terms or prices for buyers who purchase exclusively from the supplier.*

Looking at the literature, there are numerous instances, (Felch, 1985; Trevisan, 1986; Van del Hengel, 1995; Janson, 1988; Rudelius & Buchholz, 1979; Dubinsky & Gwin, 1981; Puffer & McCarthy, 1995; Husted, et. al. 1996), of Unethical activities identified in buyer-supplier relationships. Prominent among these are:

1. Over-committing resources or production schedules.
2. Increasing prices when there is a shortage of supply of the purchased material or product.
3. Allowing the supplier to become dependent on the purchasing organisation for most of its business
4. cancelling purchase orders in progress and trying to avoid cancellation charges.
5. Overestimating demand to gain volume discounts.
6. Concocting a second source of supply to gain advantage over suppliers.
7. Allowing the personalities of the supplier to affect decisions.

Looking at the activities depicted as unethical, it might look as if these activities are normal and that a company may have to follow any or all of them in order to make profit and stay afloat. But these are termed as Unethical as they hurt the other party and foster an antagonistic relationship. The other issue in unethical behaviour is the involvement of humans in conducting this behaviour. According to Dobler and Burt (1996), purchasing managers can have a significant influence over a firm's reputation. Because these individuals interact frequently with suppliers and other upstream channel members, their behaviour can and does affect how the firm is viewed by suppliers and other outside organisations. Carter (1998) in his study, suggests that if either the buyer or supplier perceives the other party to be engaged in unethical behaviour it leads to a feeling of dissatisfaction from the relationship, and this hampers the relationship in the long-term. The perception of the other party being involved in unethical behaviour also leads to the feeling that the other party is not effective in fulfilling the terms of contract. The human factor has thus a very important part to play in keeping the perceptions right and thus maintaining the relationship. The external environment also plays a major role in influencing the employees behaviour. Osborn and Hunt, (1974) have reported that those parts of an organisation that are most exposed to the outside environment are most likely to deviate from the firm's behavioural standards, including those behaviours related to ethics. This seems to suggest that by creating a strong situation in the firm by having strict guidelines for ethical behaviour can help in reducing the external influence on the employees. But, Webster (1992); Williams, et. al.(1994) have reported that purchasing being a boundary spanning function like marketing and sales, and because of it's interaction with other members of the supply chain, it may be under considerable pressure to depart from accepted norms of behaviour and ethical standards set by the firm. Also,

purchasing personnel who feel a strong pressure to perform might consider certain behaviours as being less unethical than those firms with less pressure to perform (Carter, 1998). Hence, it is most important to explore the involvement of humans in supply chain relationships and look for the human perspectives on these relationships.

2.5.5 Trust

The need for trust between partners has been identified as an essential element of buyer-supplier relationships (Anderson and Narus, 1990; Geyskens, et.al., 1998; Rousseau, et. al., 1998). Morgan and Hunt (1994) reported that trust is a basic requirement in the context of buyer- supplier relationships. Trust is an important lubricant of relationships. It binds parties and has an important future orientation (Ganesan, 1994). Trust guides behaviour in business settings, ,and when trust is operative the risk of opportunism and market instability is reduced (Morgan and Hunt, 1994; Doney and Cannon,1997). A high degree of trust between the partners in a buyer-supplier relationship is favourable for co-ordinated behaviour, whereas low trust leads to competitive behaviour (Anderson and Narus, 1990). Long- term relationships and trust encourage effective communication, information sharing and joint pay-offs (Dwyer, et. al., 1987; Ring and Van den Ven, 1992).Trust significantly reduces the perception of risk associated with opportunistic behaviour by a partner; it increases confidence that short- term inequities will be resolved over the long term and reduces the transaction costs in an exchange relationship (Ganesan, 1994). Liker et. al. (1995) link the concept of trust to mutual dependency, "Trust as mutual dependence suggests that each party realizes that it has much to lose by endangering the relationship." They suggest that the investments made in a collaborative relationship increase the level of mutual dependency, "customers and suppliers have such high levels of relationship specific investments that the consequences of violating this trust far exceed any possible short term gains", as such they believe that trust is a consequence of increased mutual dependency. Nielson (1998) places the emphasis on goodwill trust, "trust in the industrial buyer-seller context, has been defined as the firm's belief that another company will perform actions that result in positive outcomes for the firm, as well as not unexpected actions that would result in negative outcomes for the firm" . In part, trust is therefore an expectation that the other party will not engage in opportunistic behaviours, but instead will engage in behaviours (such as increased investment and open communication) that are beneficial to both the relationship and the organisations involved (Wyatt, 2001).

Trust takes time to build, and is the result of a succession of positive experiences. “A trustful relationship evolves gradually over time through repeated successful interactions and requires carefully nurturing through various forms of hard and soft commitments. A major implication of this is that creating a foundation of trust is a slow, time-consuming and expensive process requiring significant investment of resources” (Lowenthal, 1995), cited in Wyatt (2001).

In the context of this research, trust needs a mention because it is important for buyer-supplier relationships. From the individual human in the relationship, building or breaking of that trust is affecting the individual and the individual is affecting the building or breaking of the trust. If any negative transactions are conducted repeatedly, it will result in a spiral of distrust, which will make the relationship flounder. In this section, trust has been discussed with the intention of making the reader aware that it plays a major factor in the relationship after the transaction has ended. The result or pay-off of the transaction will decide whether the trust is building up or deteriorating. Hence, simplistically whenever supply chain entities conduct any transaction, all that they need to ask is whether this transaction will help in increasing the trust or reducing it. But most transactions are not conducted with that frame of mind, and hence, even though this is an important topic, the researcher limits the discussion to only this section in the thesis.

2.6 The Human perspective

Humphrey and Ashforth (2000), in their study of buyer-supplier relationships suggested that although buyers are likely to have a preferred style of communication, which is derived from their personality, their ability to use the preferred style may depend upon the organizational context. To explain the restriction to freedom of action for the individual the concept of situational strength has value (Mischel, 1977). Mischel, suggested that the conditions or “situational variables” of the psychological environment may be conceptualised as providing the individual with information; this information influences person variables, thereby affecting how the individual thinks and acts under those conditions. “Situations” thus influence behaviour by affecting person variables as how a person encodes the situation, the outcomes he/she expects, the subjective value of the outcomes and the ability to generate response patterns. He reported that there are two

types of situations, that influence the way people behave or take decisions. These situations are :

1. **Strong situation:** Strong situations are those in which most actors construe the situation in the same way, induce uniform expectancies regarding the appropriate response pattern and provide adequate incentives and skills to respond as per the pattern (Mischel, 1977; Mullins and Cummings, 1999). In the strong situation the decision latitude available to the individual is small and the behaviour is largely prescribed by organization policy or some rule set. This situation can be conceptualised as red traffic lights where everybody (most at least) know the rules of the lights and obey them and there are sanctions if they do not (if they are caught). The ambiguity in the decisions to be made is low and the rule set defining behaviour is high. Under these circumstances people no matter what their predisposition, tend to behave in a similar manner under the same stimulus. However, it would be wrong to say that the individual has no influence on the situation strength. There is a mutual interaction between situation strength and the individual disposition to behave in certain ways. For example, an effective manager may try to engineer the situation so that they personally have considerable freedom in their decision-making whilst they ensure that the situation is strong for their own subordinates.
2. **Weak Situation:** The opposite to the strong situation is the weak situation when there is high degree of latitude in decision making and the actual decisions that emerge depend more upon the individual preferred ways of behaving and learnt script messages. Weak situations are those in which there is ambiguity about the meaning of the situation and the appropriateness of various responses, where incentives for any particular response are unclear and where individuals' ability to respond may vary (Mullins and Cummings, 1999). The situation can be conceptualised to an amber traffic light. In the case of an amber traffic light, the situation is weak in the respect that the driver has the choice to stop or go through. If the amber light come after the red, then the driver knows that it is going to turn green, hence he/she can go ahead, if it after the green then he/she has to stop, but if the driver sees only the amber, then the decision to go ahead or slow down is entirely based on personal disposition. The situation does not define strictly what to do, there is a certain latitude given in decision making. If the driver is of an

adventurous disposition, then he/she will only consider the light to be amber and go through, whereas a less adventurous disposition will slow down to gauge whether the light is going to turn red or green before making the decision whether or not to go through.

One of the key factors which influences the nature of the relationship between companies is whether its network of distribution or supply acts with a defined and strong interaction policy. Such a policy results in communication that is not dependent upon the personalities of individuals within the companies, and the culture, leadership or strategic policy dictates the nature of the transactions. It would appear that if the situation were strong, the response to the errant supplier or customer would be to irrespectively apply company policy. It is also likely that the type of employee in the strong situation company will have adapted to that strong situation and will not challenge the system. This is not true of the weak situation where the individual is probably more used to, and accepting of, ambiguity and a lack of a strong company policy, and is likely to deliver an individual response akin to their own ways of behaving in the particular situation. Individual differences best predict behaviour under weak circumstances, while situational variables predict behaviour under strong environmental conditions (Mischel, 1977). In case of buyer- supplier relationships, if the situation is strong and the buyer organisation has created strict policy guidelines for supplier selections and evaluations, it is unlikely that buyers representatives will select suppliers on non- business related criteria, such as how well they got on or how well they liked the suppliers representatives.

The concept of using situational strength in organisational settings, raises the question of the level of discretion employees have in an organisation. The role of discretion has been explored by Hambrick and Finkelstien (1996). Some situations provide managers with more discretion than others. They theorised that managerial discretion, which refers to executive's ability to affect important organisational outcomes, is a function of the task environment, the internal organisation, and managerial characteristics (Carpenter and Golden, 1997). The perception of the strength of a situation is probably related to the personality of the individuals and it is likely that certain people that prefer stronger situations will deliberately select positions where the discretion in decision making is largely controlled by company policies. In contrast others may prefer weaker situations and they either engineer the situation or choose the situation to suit their personality. According

to Weiss and Adler (1984), strong situations have widely accepted rules of conduct which constrain and direct behaviour. In contrast, weak situations allow various interpretations and responses to identical issues. Various researchers have argued that situation strength moderates the extent to which personality differences affect individual behaviour, including decision making. Weak situations are those in which personality differences are most likely to influence decision making and behaviours (Carpenter and Golden, 1997). Hence in weak situations, employees will tend to perceive to have more discretion than in situations whose situational strength is high.

Humphrey and Ashforth's (2000) study of buyer supplier relationships from an Exit- Voice perspective did have some suggestions about situational strength and the effect it has on buyer-supplier relationships. The discussion has been limited to the individual and how personal disposition is affected by situational strength. It would thus be interesting to view the effect situational strength has on buyer-supplier relationships taking into consideration the power regime, and the issues the individual faces as a representative of the buyer or supplier. It is possible that for any one company in an upstream and downstream network, the situation is strong for some products and weak for others. If, organisationally, this is true, it will be interesting to determine what, if any, efforts will be made, and by whom, to change the perceived weak situation into a strong situation.

2.7 Research Focus

The discussion on Supply chain relationships and Power structures does not give an indication as to what really happens in a supply chain transaction. In this case a Transaction is defined as an interaction, the way in which the communication or transfer of material or negotiation or any other behavioural response is conducted. The relationship scenario between the supply chain entities leads to a question: Is there something else happening in the interaction, other than what is seen to the eye at a social level? Are organisations capable of showing any sort of Psychological behaviour or is it a function of the individual humans working in the organisation? What is the complex interaction between humans and their organisations?

This scenario is discussed by Crozier and Friedberg (1977). According to them,

“A given organisational situation never completely constrains an actor(individual human being). He always retains a margin of liberty and negotiation. This margin of liberty (signifying a source of uncertainty for his partners as well as for the organisation as a whole) endows each actor with power over the others, which increases with the relevance for these others of the source of uncertainty controlled by the actor. This relevance is to be understood as the extent to which the source of uncertainty affects the capacity of the other actors to play according to their own strategies. An actor’s behaviour can and should be analysed as the expression of a rational strategy whose aim is the use of power to increase his “ winnings” through participation in the organisation. In other words, the actor will always try to profit from his margin of liberty by negotiating his participation and by seeking to “manipulate” his partners and the organisations as a whole so as to make his participation “pay”.”

Since, individual human beings have a very important role to play in how the supply chain transactions are conducted, it is imperative to study the effect of individual human beings in supply chain transactions and relationships and look at these from their perspective. The review done in this chapter has depicted various facets of studying buyer- supplier relationships, but none of these have considered the human perspective. This research will explore an area, which has not been written about in great detail. Whether there is any novelty to the subject area or not can be judged only after the first phase of exploratory research is conducted. The research objectives for this research have been set out as under :

Objective 1: *To explore the nature of buyer- supplier transactions and the dynamics associated with these transactions particularly from the perspective of behaviours, and attitudes depicted by the transacting entities.*

Objective 2: *To explore the experience of buyer- supplier relationships from the perspectives of buyer and supplier representatives involved.*

The approach selected for studying these objectives is discussed in the next chapter.

2.8 Summary

This chapter has reviewed the different concepts and theories related to supply chains and buyer-supplier relationships. The review and further discussion has culminated into the formulation of two research objectives, which will be the focus for the next phase of the research.

Chapter 3

Research Approach

Aim: This chapter presents the different approaches the researcher had to consider in order to decide the most suitable research approach considering the objectives set out in the previous chapter. Also, presented is a brief description of how the data was collected and analysed, followed by a discussion on the implications of the analysed data for this research.

3.1 Epistemology

An epistemological issue concerns the question of what is regarded as acceptable knowledge in a discipline. A particularly central issue in this context is the question whether the social world can and should be studied according to the principles, procedures and ethos as the natural sciences (Bryman, 2004). Easterby-Smith, et.al. (2002) have defined epistemology as a general set of assumptions about the best ways of inquiring into the nature of the world. The acceptance of a particular epistemology usually leads the researcher to adopt methods that are characteristic of that position. Conversely, where a given range of methods is employed in a particular study it is possible to infer that the researcher holds, perhaps implicitly, a corresponding epistemology (Easterby-Smith, et.al., 2002). The gathering, analysis and interpretation of data is always conducted with some broader understanding of what constitutes legitimate inquiry and warrantable knowledge. In this respect, the quantity- quality debate has been anchored within two apparently opposed epistemological positions. The two poles are known as 'experimental', 'hypothetico-deductive' or 'positivist' and the 'naturalistic', 'contextual', or 'interpretative' approaches (Henwood and Pidgeon, 1993). For the discussion on epistemology for this research, the two positions considered are 'positivist' and 'interpretative' or also known as 'interpretivist'.

3.1.1 Positivism

Positivism is an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond (Bryman, 2004). The term 'positive philosophy' was coined by the French philosopher Auguste Comte in 1853, and is

now known as 'positivism' (Easterby-smith, et al., 2002, Kolakowski, 1997). The key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition (Easterby-smith, et al., 2002). Positivism stands for a certain philosophical attitude to human knowledge; it does not pre-judge questions about how humans arrive at knowledge- neither the psychological nor the historical foundations of knowledge. It is a collection of rules and evaluative criteria referring to human knowledge: it tells us what kind of contents in our statements about the world deserve the name of knowledge and supplies us with norms that make it possible to distinguish between that which may and that which may not reasonably be asked (Kolakowski, 1997). Easterby- Smith, et al., (2002) have proposed a number of implications for positivism in social sciences and management research:

1. independence: the observer must be independent from what is being observed.
2. value-freedom: the choice of what to study, and how to study it can be derived from objective criteria instead of human beliefs and interests.
3. causality: the aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.
4. hypothesis and deduction: science proceeds through a process of hypothesizing fundamental laws and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses
5. operationalisation: concepts need to be operationalised in a way which enables facts to be measured quantitatively
6. reductionism: problems as a whole are better understood if they are reduced into the simplest possible elements.
7. generalization: in order to be able to generalize about regularities in human and social behaviour it is necessary to select samples of sufficient size, from which inferences may be drawn about the wider population.
8. cross-sectional analysis: such regularities can most easily be identified by making comparisons of variations across samples.

3.1.2 Interpretivism

Interpretivism is an epistemological position that advocates the view that a strategy is required that respects the differences between people and the objects of the natural sciences and therefore requires the social scientist to grasp the subjective meaning of social

action (Bryman, 2004). Easterby-smith ,et. al. (2002) have provided a brief understanding of ‘social constructionism’ which is another name given to Interpretivism. They mention that ‘reality’ is determined by people rather than by objective and external factors. Hence, the task of the social scientist should not be to gather facts and measure how often certain patterns occur, but to appreciate the different constructions and meanings that people place upon their experience. The focus should be on what people, individually and collectively, are thinking and feeling, and attention should be paid to the ways they communicate with each other, whether verbally or non-verbally.

3.1.3 Positivism Vs Interpretivism

Philosophically, Positivism and Interpretivism are poles apart in terms of how the research process is conducted. In this section, the researcher will provide details regarding the difference between the two epistemologies from different perspectives. These have been adapted from Lincoln and Guba (1985); and Easterby-Smith, et al. (2002). Lincoln and Guba have compared the two epistemologies with respect to the five axioms important to the research process.

Axioms About:	Positivist Paradigm	Interpretivist Paradigm
The nature of reality	Reality is single, tangible and fragmental	Realities are multiple, constructed and holistic
The relationship of the researcher and the researched	They are independent, a dualism	They are interactive and inseparable
The possibility of generalisation	Time and context free generalisations are possible	Only time and context-bound working hypotheses (idiographic statements) are possible
The possibility of causal linkages	There are real causes, temporally precedent or simultaneous with their effects	All entities are in a shape of mutual simultaneous shaping so it is impossible to distinguish causes from effects
The role of values	Inquiry is value free	Inquiry is value bound

Figure 3.1: Positivist and Interpretivist epistemologies. (adapted from Lincoln and Guba, 1985)

Easterby-Smith, et al. (2002) provide comparison between the two epistemologies using eight classical features of positivist research.

	Positivism	Interpretivism
The observer	must be independent	is a part of what is being observed
Human Interests	should be irrelevant	are the main drivers of science
Explanations	must demonstrate causality	aim to increase general understanding of the situation
research progresses through	hypotheses and deductions	gathering rich data from which ideas are induced
Concepts	need to be operationalised so that they can be measured	should incorporate stakeholder perspectives
Units of analysis	should be reduced to simplest terms	may include the complexity of 'whole' situations
Generalization through	statistical probability	theoretical abstractions
sampling requires	large numbers selected randomly	small number of cases chosen for specific reasons

Figure 3.2: Comparison between Positivist and Interpretivist epistemologies. (adapted from Easterby-Smith, et.al., 2002)

Even though it may seem repetitive, both figures provide a good comparative study of the two epistemologies. The reason for depicting these comparisons is to make the reader aware that when the research is designed one of these philosophies is used as a base, which then determines the methods for data collection and analysis. Hence, when selecting the philosophy it is essential to study the research objectives and then decide the most appropriate epistemology followed by the respective methods. With exceptions in cases, when the research objectives will demand the use of both the philosophical stances, a mixed-method approach is designed, but for all other cases, it is either the positivist approach or interpretivist approach.

3.1.4 Epistemology and research methods

As discussed in the previous section, the epistemological stance decides the research methods to use for fulfilling the research objectives. There are many potential choices to make when developing a research design, and there are a number of resources to guide the researcher in making the ideal choice, but many of these choices are based on certain philosophical stances. Hence an awareness of this can at least ensure that the different elements of the research design are consistent with each other (Easterby-Smith, et al., 2002). If the researcher chooses a positivist stance it means that the researcher is looking to prove the causal relations between variables, thereby testing pre-determined hypotheses, which can often be taken from existing theories. According to Henwood and Pidgeon (1997) Quantification and hence quantitative methods are most suited for positivist research approaches as “quantification..... renders the concepts embedded in theoretical schemes or hypotheses observable, manipulable and testable”.

As seen earlier in the discussion on interpretivism, the important criteria for following an interpretivist philosophy are that human interests are the main drivers of science, research progresses through gathering rich data from which ideas are induced, and concepts should incorporate stakeholders perspectives. These are not only important, but are important when comparing the interpretivist research process to the positivist research process. Unlike, positivist approach the interpretivist has the human at the centre of all activity and the research approach gets designed around getting the most relevant data from the humans involved in the study and from their perspectives. Hence, the reduced need for numerical verification and the emphasis on discovering meaning rather than proving existence leads to the dominance of qualitative methods in the interpretivist approach. Creswell, (2003) has defined a qualitative approach as one in which the inquirer often makes knowledge claims based primarily on constructivist approaches (i.e. the multiple meanings of individual experiences, meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/ participatory perspectives(i.e. political, issue-oriented, collaborative, or change oriented) or both. It also uses strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data.

3.2 Research Design

Research design is concerned with turning research questions into projects. The general principle is that the research strategy or strategies, and the methods, or techniques employed, must be appropriate for the questions you want to answer (Robson, 2002). Research designs are about organising research activity, including the collection of data, in ways that are most likely to achieve the research aims (Easterby-Smith, et. al., 2002). Design in qualitative research is an iterative process that involves tacking back and forth between the different components of the design, assessing the implications of the purpose, theory, research questions, methods and validity threats (Maxwell, 1996). Maxwell (1996) proposed a research design framework comprising of five components. The components form an integrated and interacting whole, with each component closely tied to several others, rather than linked in a linear or cyclic sequence.

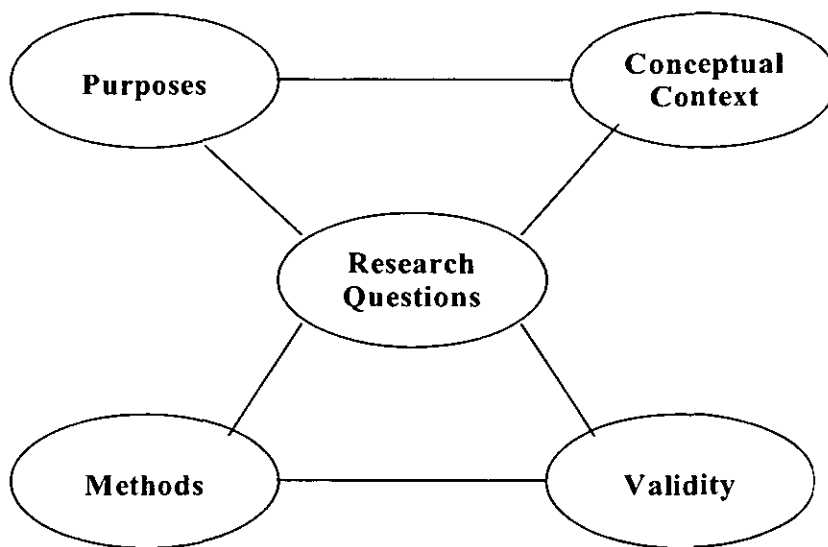


Figure 3.3 : A model of research design (adapted from Maxwell, 1996)

Easterby- Smith, et. al.,(2002) propose that when designing the research process six key choices must be made to get the design right. The six key choices are described by them in detail, but here they are presented only as a depiction of one of the many theories of research design studied by the researcher.

Researcher is independent	vs	Researcher in involved
Large samples	vs	Small numbers
Testing theories	vs	Generating theories
Experimental design	vs	Fieldwork methods
Universal theory	vs	Local knowledge
Verification	vs	Falsification

Figure 3.4: key choices of research design (adapted from Easterby- Smith, et. al., 2002)

In a qualitative approach, the term design may be misleading. Lincoln and Guba, (1985) suggest that even though the term design suggests having a very specific blueprint, design in the naturalistic sense..... means planning for certain broad contingencies without, indicating exactly what will be done in relation to each. Patton (2002), has suggested that a qualitative design needs to remain sufficiently open and flexible to permit exploration of whatever the phenomena under study offers for inquiry. He further adds that degree of flexibility and openness, is a matter of great variation among different designs and different methods can produce different findings. Hence the questions arising are Which research design is the best? Or Which strategy will provide the most useful information to decision makers. The design will hence depend upon the purpose of the study, the evaluation audience for the study, the interests, abilities and biases of the researchers.

3.2.1 The Qualitative – Quantitative divide

Earlier on in the chapter, the researcher has presented the relation between epistemological stance and research approach. Even though it may it may feel pretty straightforward when deciding the research approach, the designing of the research approach warrants the study of other factors, which help in the final research design. It is simple to decide that since the epistemological stance is positivist it will be suitable to use a Quantitative approach and if the stance is interpretivist to use a Qualitative approach. But what exactly is Qualitative or Quantitative research. Bryman (2004) has outlined the differences between quantitative and qualitative research. According to him, quantitative research can be construed as a research strategy that emphasizes quantification in the collection and analysis of data and that :

- uses a deductive approach to the relationship between theory and research, in which the importance is on testing of theories;
- has incorporated the practices and norms of the natural scientific model and or positivism in particular;
- represents a view of social reality as an external objective reality.

Qualitative research can be construed as a research strategy that usually emphasizes words rather than quantification in the collection and analysis of data and that:

- predominantly emphasizes an inductive approach to the relationship between theory and research, in which the emphasis is placed on the generation of theories;
- has rejected the practices and norms of the natural scientific model and of positivism in particular in preference for an emphasis on the ways in which individuals interpret their social world;
- represents a view of the social reality as a constantly shifting emergent property of individuals creation.

Even though these two approaches have been contrasted many times in methodological publications, the recent trend in research methodology and philosophy is to have a mixed-method approach towards research. This has been argued by Hammersley (1996); Bryman, (2004) and many more researchers. There is now a growing divide between researchers who follow the classical system of research which contains strict demarcation between quantitative and qualitative and the other group who are proposing the use of either approach or combination depending upon practicality and research objectives. For this thesis, the researcher has presented the reader with a very brief account of what constitutes qualitative and quantitative approaches. For further information on these approaches and mixed –method approaches the reader may refer to publications by Bryman (2004); Creswell (2003); Hammersley (1996); etc.

3.2.2 Epistemology, methods and research objectives

Deciding whether quantitative is better than qualitative or vice versa is not the criteria for choosing the research approach. Using either of the approaches will result in good research only if that approach was considered to complement the research objectives and their

investigation. In this research the investigation is focussed on exploration. The intent is to explore buyer- supplier relationships and study the dynamics of buyer-supplier transactions to get a better idea of what really happens and what part the humans involved play in those circumstances. This cannot be achieved by having pre framed hypotheses and variables and measuring them using statistical means. The insight can only be sought if the humans speak about the transactions and delve on the dynamics from their perspectives. The richness of the data in terms of the information being given out by the transacting entities without any bounding frameworks will provide a better understanding of the relationships and also help to discover whether there are any issues which have not been tackled previously in this research domain.

The Objectives for this phase of the research were set out as :

Objective 1: *To explore the nature of buyer- supplier transactions and the dynamics associated with these transactions particularly from the perspective of behaviours, and attitudes depicted by the transacting entities.*

Objective 2: *To explore the experience of buyer- supplier relationships from the perspectives of buyer and supplier representatives involved.*

Conducting further research in order to fulfil the above mentioned objectives stems from the assumption that there is not enough literature available in the supply chain domain to explain buyer- supplier relationships and dynamics from the perspectives of the humans involved. Hence, the need to explore rather than explain. Exploring means probing further to find out what is happening, seek new insights and ask questions to assess the phenomena (Robson, 2002). Also, conducting exploratory research suggests the philosophical stance of interpretivist research and the use of a Qualitative approach. Even though various researchers have got involved in discussing the Qualitative- Quantitative divide and trying to prove the best method for conducting research, the researcher feels that for the context of this research, the best method would be to interact with the people involved in these relationships and get first hand accounts of the phenomena. This implies the qualitative approach and a stress more on letting the respondents ponder over incidents and provide information from their perspective. Implementing a qualitative approach has both its strengths and weaknesses as put forth by Easterby-smith, et. al. (2002) :

Strength	Weakness
ability to look at how change processes over time	data collection can take up a great deal of time and resources
To understand people's meanings	The analysis and interpretation of data may be very difficult.
To adjust to new issues and ideas as they emerge	Policy makers may give a low credibility to studies based on apparently subjective opinions
To contribute to evolution of new theories	

Figure 3.5: Strengths and Weakness of qualitative research (adapted from Easterby- Smith et. al., 2002)

Qualitative research suggests different methods for conducting research, of which the most common are Ethnography, Phenomenology, Grounded theory and Hermeneutics. Methods are selected as per research objectives and each will incorporate a certain approach to data collection and analysis. For this research, the researcher has selected “Phenomenological inquiry” as the most suitable method. Bogdan and Taylor(1975) summarise the phenomenological stance, which provides support to the selection of this technique with respect to the research objectives:

The phenomenologist views human behaviour - what people say and do - as a product of how people interpret their world. The task of the phenomenologist, and, for us, the qualitative methodologists, is to capture this process of interpretation...In order to grasp the meanings of a person's behaviour, the phenomenologist attempts to see things from that person's point of view'

3.3. Research approach

3.3.1 Phenomenological inquiry

The aim of phenomenological inquiry is to understand the subjective nature of 'lived experience' from the perspective of those who experience it, by exploring the subjective

meanings and explanations that individuals attribute to their experiences. Patton (2002) defines such a phenomenological 'focus' quite simply as describing 'what people experience and how it is that they experience what they experience'. The methodological implication of this focus on lived experience is that an individual's interpretation of the experience is an essential part of the experience itself (Patton, 2002).

Van Mannen (1983) provides a description of qualitative approach to research that resonates clearly with the objectives of phenomenological inquiry:

'It is at best an umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world'.

Inquiring into the world of lived experience brings its own complexity, and a significant issue when conducting phenomenological inquiry is the ability to translate the interpretive accounts that individuals give of their experiences. As Denzin and Lincoln (1994) point out, 'Subjects, or individuals are seldom able to give full explanations of their actions or intentions; all they can offer are accounts, or stories, about what they did and why. No single method can grasp the subtle variations in ongoing human experience'.

A key aspect of phenomenological inquiry, which differentiates it from more positivist and functionalist methods, is the *explicit* recognition that any explanations given of phenomena 'are at best "here and now" accounts that represent a "photographic slice of life" of a dynamic process that, in the next instant, might represent a very different aspect' (Lincoln and Guba, 1985). It is important to realise that the same person may well interpret things differently at different times and in different contexts. An individual's perspective of an event or experience, therefore, can change over time (Bogdan and Taylor, 1975). Phenomenological research is thus firmly located in a particular context at a particular time. This reflects the existentialist concern for understanding the human-being-in-the-world, where human existence is defined by the current experiential context in which it occurs (Cope, 2003)

One of the defining factors of phenomenological inquiry is that it is firmly located in the 'context of discovery' rather than the 'context of justification' (Guba and Lincoln, 1994).

Phenomenological inquiry emphasises that theoretical propositions and hypotheses should be suspended or 'bracketed' in order to describe phenomena from the perspective of those who experience it. It is only then that investigators can develop an authentic and holistic appreciation of a phenomenon *in its own right*, without being influenced by any theoretical presuppositions about what it 'should' be like rather than what it is actually like (Cope, 2003). For further information on Phenomenological research design, see Groenewald (2004).

3.3.2 Sampling issues

According to Hycner (1999), "the phenomena dictates the method (not vice versa) including even the type of participants." Hence, the type of participants for the research had to represent some sample for a certain phenomena. In the case of this research the phenomena under study was "buyer- supplier transactions" and "buyer- supplier relationships". The participants, i.e. the sample for this research had to serve a specific purpose, and hence the selection of a sampling technique known as "Purposeful or Purposive" sampling. Patton (2002) mentions that the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information- rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term "**Purposeful**" sampling. Patton (2002) further adds that purposeful sampling focuses on selecting information- rich cases whose study will illuminate the questions under study. Purposeful sampling is sometimes called purposive or judgemental sampling. Bernard (2000) suggests that "In judgemental sampling, you decide the purpose you want informants to serve, and you go out to find some." Patton (2002) records a number of different strategies for purposefully selecting information rich- cases. Of these strategies, the one selected for this research is: **Criterion sampling**. The logic of criterion sampling is to review and study all cases that meet some predetermined criterion of importance. Critical Incidents can be a source of criterion sampling (Patton, 2002). Boyd (2001) regards two to ten participants or research subjects as sufficient to reach saturation (referenced, in Groenewald, 2004) and Creswell (2003) recommends "long interviews with up to 10 people" for phenomenological study. The sample size for this research was 12. Although the sample size has support from previous mentioned references, a major reason for having such a small sample was the availability of respondents and the time constraints of this research to interview more respondents. Also, as said above, the critical incidents served as the sample, hence all the critical incidents

derived from the 12 interviews served as the data sample. The respondents selected for the first stage interviews, were automotive dealers, food manufacturing firms, engineering firms, and distributors. The total number of respondents were twelve firms of which three firms were from India. Of the three Indian firms, two firms were engineering firms, and one was a distributor for a “Fast Moving Consumer Goods” manufacturer.

Another data set for the research was data derived from literature. This data set comprised of research publications (e.g. Carter, 1998); journal papers (e.g. Robson and Rawnsley, 2001); newspaper reports (e.g. Lawrence, 2003; Fletcher, 2003); articles from business magazines (e.g. Kobe, 2001; Wincell, 2002; Rigsbee, 2000); information reported on websites (Anonymous, 2003; McClenahan, 2001) and competition-commissions reports (e.g. Supermarkets, 2000). The data from these literature sources was analysed similar to the data from interviews. Using data from both individual interviews and literature provided a richer picture of the transactions and buyer-supplier relationships.

3.3.3 Critical Incidents Technique

One way of getting information from interviewees is the Critical Incident Technique which was proposed by Flanagan (1954). He defines it ‘as a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles.’ He defined ‘incident’ as any observable human activity that is sufficiently complete in itself to permit inference or prediction to be made about the person performing the act. He suggested that for an incident to be ‘critical’ it must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effect. Flanagan has described the technique is valuable as it is able to bridge the gap between the observation, and the recording, and interpretation of the reasons behind the actions (Easterby-smith, et.al., 2002). They mention that this technique can be used by qualitative researchers in conjunction with interviews. Respondents might, for example be asked to track back to particular instances in their work-lives and to explain their actions and motives with specific regard to those instances.

The critical incident technique is a method for coming close to direct observation but avoiding some of its hardships (Gummesson, 2000). According to Bitner, et. al. (1990) critical incidents technique generates data with the level of detail and richness that puts the researcher close to the realities of the process being studied; it is almost direct observation. It is an inductive method in which no hypotheses are needed and the incidents as they appear are allowed to form patterns that the researcher can develop into concepts and theories (Gummesson, 2000). Although, there are various advantages with using critical incidents, Gummesson (2000) points out a few failings. The author suggests that the technique will not provide researchers with the same intense feeling of an incident that they would get through direct involvement and observation; it is still access through intermediaries and understanding second- hand. Also, the incidents have to be fairly brief and well defined.

3.3.4 Early Steps in analysis

The research design specified that the data for this research would be collected using the Critical Incidents technique and review of literature. In the first method, the Critical Incidents technique uses interviews with the respondents as a method to get data. The different methods to record data are hand-written or typed field notes, notes dictated after field contacts, or tape- recordings of interviews. Even though the tape- recordings and subsequent transcription of the interviews gives a richer and complete data set for analysis, it is not always possible for the interviewer to tape- record the interview. It could be any reason from unavailability of recording equipment to denial by the respondents to record the conversation due to confidentiality. In such cases, when tape-recording is not possible, the researcher has to rely on field notes, which are made during the interview or after the interview. The notes made after the interview may suffer from reliability issues as the researcher has to remember the conversation and also make sure that no bias creeps into the account. Miles and Huberman (1994) recommend that for qualitative researchers early data analysis is of utmost importance. They advise that instead of waiting for the data collection exercise to end before starting the data analysis, it is useful to interweave data collection and analysis from the start. In studies with only one round of data collection, these early analysis methods can be useful. They describe a number of methods, that can be used for early analysis, of which the researcher has chosen two methods to facilitate early analysis in this research. The methods are :

1. Contact Summary Sheet
2. Document Summary Form

3.3.4.1 Contact Summary Sheet

A contact summary sheet is a single sheet with some focussing or summarising questions about a particular field contact (Miles and Huberman, 1994). The field worker reviews the written- up field notes and answers each question briefly to develop an overall summary of the main points of the contact. A sample of the contact summary sheet used in this research is shown in Appendix 2. A contact summary sheet is usually best filled out as soon as written-up field notes have been reviewed and corrected. The data on a contact summary sheet are essentially phrases or sentences that the researcher considers to be an answer to the form's questions after the write-up of the contact has been reviewed. There is also a variation in the form of the contact summary sheet, which was considered more useful for this research. Contact summary sheets, as just noted, can be used in a more systematic way by applying codes to them. (Miles and Huberman, 1994). The researcher inserts codes (themes or aspects) that were applied to the salient points selected from the field notes. This information can also generate new codes. The Contact summary sheet has a number of uses:

1. to guide planning for the next contact.
2. to suggest new or revised codes.
3. to help with co-ordination when more than one field-worker is involved in the study.
4. to reorient the researcher to the contact when returning to the write-up.
5. to help with further data analysis.

3.3.4.2 Document Summary Form

Miles and Huberman (1994) suggested the use of a data representation format known as "Document Summary Form" to facilitate recording of data derived from various documents referred to by the researcher. Documents are often lengthy and may need clarifying and summarising. It is important for the researcher to know the significance of the document and the information represented in it. It helps to create and fill out a document summary form, which can be attached to the main document for further analysis.

The forms can also be coded, for later analysis and also for rapid retrieval of data when required.

3.3.5 Issues of Validity

Qualitative methods have often been subject to criticism regarding their validity and reliability. With regard to validity the complexity and depth of the information generated makes it hard for an outsider to assess true validity of qualitative research. Janesick (1994) is one of a number of qualitative researchers who replace the emphasis on validity with an emphasis on credibility. “Validity in qualitative research has to do with description and explanation, and whether or not a given explanation fits a given description. In other words, is the explanation credible?” Hammersley (1996) mentions that qualitative research should not be evaluated in terms of validity criteria that have evolved for the assessment of quantitative research, since these have different epistemological priorities and commitments. Lincoln and Guba (1985) and Guba and Lincoln (1994) are critical of applying validity and reliability standards of quantitative approaches to qualitative approaches as the quantitative approaches have a view that there are absolute truths about the social world and that it is the job of the social scientist to reveal. Instead, they argue that there can be more than one and possibly several accounts of a phenomena.

Hammersley (1992) takes a stance midway between quantitative and qualitative validity. For Hammersley, validity means that an empirical account must be plausible and credible and should take into account the amount and kind of evidence used in relation to an account. He proposes that the a researcher is always engaged in representations or constructions of the social world, and hence the plausibility and credibility of a researcher’s “truth claims” then become the main considerations in evaluating qualitative research. Hence, according to Hammersley (1992), an account can be held to be ‘valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain or theorise’.

In the context of this research, the representation of the phenomena was hence sought through the depiction of ‘critical incidents’ which fairly represented buyer- supplier transactions and which provided insight into their relationships. Also, the choice of the research approach and the methods used in data representation and analysis provides greater support in making this research valid.

Hammersley, also suggests 'relevance' as an important criterion of qualitative research. Relevance is assessed as the importance of a topic within its substantive field or the contribution it makes to the literature on that field.

In the context of this research, the review of the literature on buyer- supplier relationships in chapter two, provided the relevance of this topic. Also, the contribution of this research to the field of buyer-supplier relationships as depicted at the end of this chapter and in chapter five and chapter six, makes it a relevant topic.

The only aspect in which the researcher has failed in terms of the validity criteria, is the use of a process known as 'member validation'(Hammersley, 1996). It is one of the validation techniques for phenomenological inquiry. In this technique, the researcher takes the analysis of the responses back to the participants to enable them to check or comment upon the interpretation. *In the context of this research, it was not possible to go back and have discussions with the interview respondents.*

3.4 Interview Synopsis

For this research, there was no clear cut sampling done for the first stage. The important aspect was to get first hand information about the transactions, hence this information could be sought from any person who worked in the purchasing or sales function. The issue of segregating respondents into industry sectors or functional categories was avoided at this stage as, apart from the research objectives and a few literature references there was no clear cut information about the psychology of the relationships.

The respondents selected for the first stage interviews, were automotive dealers, food manufacturing firms, engineering firms, and distributors. The total number of respondents were 12 firms. Some of the interviews were conducted by the researcher himself and some by other researchers in the project group. This would lead the reader to believe that this method of data collection would have brought in bias in the data collected and the final analysis. The researcher accepts that this was not the best way to conduct the interviews, but the time constraints and the location of the firms made it easier for more than one researcher to conduct the interviews. The issue of bias and reliability of data is a valid one,

and it is possible that some bias has crept into the results. The interviews were conducted by giving the respondents a chance to speak about what they felt about their relationships with their buyer / supplier firms, and the way they conducted these relationships. They were also asked to comment on any situations (critical incidents), which highlighted their relationships in the supply chain and the dynamics involved with those particular incidents. This information suggests that the interviews were structured as the researchers were trying to find some specific information. The researcher thinks that looking at the research objectives there had to be some structure to how the interview was going to be conducted in terms of the topics being covered, hence the researcher had to conduct the interviews using the previously mentioned techniques even though there was a risk of bias creeping into the collected data. But there was no structure in the form of a script for the interview or an order for the questions.

Since the data being collected was sensitive in nature and the respondents were not comfortable giving names or situations on record, the conversations could not be recorded and the researchers had to make field notes to record that data. The researcher feels that this again was not the best way to have conducted the interviews, but there was no other choice and the bias of different researchers making field notes may have led to some bias in the results. As explained earlier in the chapter, the representation of the data using Contact Summary Sheets brought the data under a certain format, which proved useful in the analysis. But this has not affected the results to a considerable degree, as the analysis was based on exploration than finding any specific patterns. It was better if there was new information arriving from the analysis when compared to the literature review. The bias, which has probably influenced this research is the bias, which is existent in the analysis stage. The researcher recognises this bias and accepts that there might have been some bias present in extracting information from the field notes.

3.5 Analysis of the data

Since, the interviews could not be recorded and transcribed, for analysis purposes the data was taken from notes written on the “contact summary sheets” and “ Document summary sheets”. The analysis was done as suggested by Miles and Huberman (1994) using the early analysis techniques and in the same sequence as the interviews were conducted. Another reason for not having a strict regime for data collection and analysis was that,

since the research focus was exploring relationship issues from the human perspective, the researcher was not taking any particular stand from either the buyer or suppliers viewpoint and hence the randomness of the data in terms of mixing views from both buyers and suppliers was not a cause for concern. Hycner (1999) cautions that for a phenomenological approach, the term 'analysis' should not be used to study data. He suggest the term 'explicitation'. The "term (analysis) usually means a 'breaking into parts' and therefore often means a loss of the whole phenomenon.... [whereas 'explicitation' implies an].... investigation of the constituents of a phenomenon while keeping the context of the whole"(Hycner, 1999). Hycner (1999) suggested the explicitation process of five steps for phenomenological inquiry:

1. Bracketing and phenomenological reduction.
2. Delineating units of meaning.
3. Clustering of units of meaning to form themes.
4. Summarising each interview, validating it and where necessary modifying it.
5. Extracting general and unique themes from all the interviews and making a composite summary.

With respect to this research, the above mentioned method was used in the following way:

1. In the first step, the researcher has to bracket his/ her personal views or preconceptions from the respondents. Hence, the researcher listens to the recordings of the interviews to become familiar with the words of the interviewee in order to develop a holistic view. In this research, since the researcher did not have any recordings due to previously mentioned reasons, the researcher had to rely on the field notes and the contact summary sheets to get the complete picture of what the respondent had said.
2. relevant units of meaning were extracted from each interview. These units were in the form of quotes, words, critical incidents(as a complete unit).
3. these units were clustered into themes, which were referenced from the literature review. Any cluster which did not represent known themes was given a new name. The data in the field notes was analysed for these themes. The interview data was studied and where any information pertained to a specific theme, it was registered

in brackets near it in the field notes. The information depicted in the field notes was classified using the codes derived from the concepts studied in the earlier chapter. The major concepts, which were formed into themes were:

1. Power
2. Exit- Voice
3. Unethical Behaviour
4. Trust
5. Situational Strength
6. Opportunistic Behaviour

The contact summary sheets had codes (Themes) inserted from the initial analysis of the field notes. Further analysis of the information on the Contact Summary Sheet broke down the information into new themes, which had not been studied by the researcher in the literature search. These new themes formed the starting point for the next phase of the research.

4. Each interview was summarised for all the clusters emerging from the data. Hycner (1999) mentions that at this point the researcher returns to the informant to determine if the essence of the interview has been correctly captured, and any modifications necessary are done. For this research, this step was eliminated as, the researcher did not have recorded interview data and transcripts from which the informants could compare.
5. The themes emerging from all interviews were considered and a final summary made. Any new themes emerging were highlighted.

The data which was derived from the Literature, was analysed using the same method. The same themes or codes which were used to analyse interview data was used for analysis of literature data. This information was then transferred to the Document Summary Forms . The Document Summary Forms were analysed and new themes emerged. These themes were then compared with the ones obtained from the Interview data and the research focus was narrowed down for this research.

3.6 Discussion

The identification of the concepts studied in chapter two was not much of a surprise, as these concepts are straightforward. Various researchers across the globe, have researched concepts, which have an effect on buyer- supplier relationships (reviewed in chapter two). This phase of the research has re-affirmed that the 6 concepts mentioned previously in this chapter play a vital role in the relationships. The data from interviews and literature depicted that unethical behaviour and opportunistic behaviour had its manifestation in a power struggle. Although unethical behaviour was a function of organisational climate as well as individual human behaviour, exit- voice strategies provided the entities with decision taking ability to depict the behaviour they desired. Situational strength provided the environment for the depiction of individual behaviour or behaviour as per organisational policies. The result of these transactions finally showed in the reduction of trust between the entities sparking a negative tone to the relationship.

The Interviews and literature identified certain incidents during the relationship when there were changes in the way the transactions were conducted. This meant that in the incidents that were identified by the respondents a change had occurred in the relationship, either the power equation had changed or trust had deteriorated, or the relationship had broken. The analysis generated quotes, explanations, descriptions of the incidents which highlighted the issues affecting buyer-supplier relationships. The text could not be segregated out to depict only one concept or theme, as each textual set implied more than one concept. For example:

I used to supply the big supermarkets directly but when I complained publicly that they kept cutting the price, I got de-listed.---- This quote depicts the issues of power, exit-Voice and Unethical behaviour.

The inconsistencies and methodologies created by the OEM's don't allow us to run our business properly. They change their initiatives every time they get into trouble . They force us to change to suit their needs and then if it doesn't have immediate cost impact, they force the end of the initiative, take their money and move on to something else. ----- This text depicts issues of power, opportunistic behaviour, trust and exit- voice.

Hence, all the textual references have not been depicted here. The important aspect of this analysis has been that the data has re-affirmed the presence of these issues in the relationship. But even more important has been the micro analysis of the same text in order to study whether there are some issues underlying these transactions, which influence these concepts and have an effect on how the relationship and transactions are conducted.

3.6.1 The New Themes

As seen above, the 6 major concepts (Power, Exit-Voice, Unethical Behaviour, Trust, Situational Strength, Opportunistic Behaviour) covering the buyer- supplier relationship domain have been identified by the data collection and analysis process conducted by the researcher. This though a useful confirmation does not contribute much to the already existing knowledge on buyer- supplier relationships. But, when the researcher analysed the data again, he found two new themes emerging from the analysis. On a macro level the 6 mentioned concepts were the major influencers on the relationship, but analysing the data on a micro level, revealed that there were two processes, which were supplementing the macro level processes. These were in one way influencing the relationship even further. The two new themes recognised are:

1. Game-like behaviour
2. Discretion , humans have in the relationship

The reason the first theme has been named game- like behaviour is that the transactions occurring between buyers and suppliers as depicted in the interviews and literature are similar to series of steps played in a game such as Chess. Even though the series of steps may be termed as strategy or even business games (Ghemawat, 1997) they are in fact more than calculations or mathematics as the behaviour is being depicted by the humans who are in the relationship. Hence, these transactions are not termed Games, but Game-like behaviour, which takes into account the involvement of the humans and the behaviour shown by them. The second theme is that of “Discretion, humans have in the relationship”. This looks at ‘to what level does human behaviour influence the relationship’. It is not only the influence of human behaviour, but more of whether humans have any role to play in the relationship. What the researcher means by this statement is that as discussed in chapter two, looking at the concept of situational strength, is there a weak situation when the humans actually have the power to influence the relationship or

does the transaction occur only under strong situations created by the two organisations? This is termed as Discretion, the humans have, which translates very simply into whether there is a strong or weak situation. Even though the concept of situational strength was introduced in chapter two, there was a dearth of literature on the use of that concept in buyer- supplier relationships, hence this theme has been suggested as a new theme, since the data analysis has revealed some insight into this issue. The next chapter will delve in greater depth into these topics. In this chapter, the objective is to show the reader how the two themes have emerged.

On analysis of the interviews and literature cases it was strikingly clear that even though the data showed overtly issues of power, the underlying themes in the power domain were that of game-like behaviour and human discretion. Most of these instances though depicting power, also give insights into unethical behaviour. This can be understood from the following instances:

“We get commitment from top management but the program gets derailed at the operations level.”

“The partnership is conceived at the executive level but the lower level departments are never convinced that it is in their best interests too.”

“The OEM’s say they are easy to deal with. All the top- level guys say that and they believe it. But it’s inconsistent with what their people implement. The lower levels don’t have the same balance and perspective as the higher-ups. But I would suggest that is not unintentional. They have created a labyrinth that you can’t get through. Trying to do business with the rank- and-file is a nightmare.”

“The power of the multiples, and especially of young buyers, without experience is frightening. They have the power to dictate prices and margins, display or not, allocate space and threaten covertly. It’s why we would never allow more than 15 % of turnover to be supplied to multiples.”

“It’s another example of the multiple CEO’s showing great sympathy for the farmers plight, yet purchasing executives further down the supermarket teams seem to be making their own rules.”

“Multiples switch their buyers around every six to twelve months in order that relationships and loyalty to suppliers can be avoided. The new buyer is given carte blanche to de-list suppliers, who are frequently treated with complete contempt.”

“Banham adds that they manufacture “phantom bids” at online auctions to drive down prices paid to the supplier.”

“It really doesn’t matter if an OEM needs cost cuts immediately. Because the arbitrary approach is a gaming approach and suppliers will learn to play faster than the OEM. There are more suppliers to gang up on automakers and the program will become adversarial. Then everybody loses.”

In one instance (Carter, 1998) it was revealed that human behaviour tends to support the propagation of unethical behaviour- *the type of purchasing manager who will tend to rely heavily on deceitful practices will use these regardless of the amount of training he receives: “It’s a personal inadequacy that’s rewarded by short-term recognition but long-term failure.”* Even though this may or may not be a generic case, the underlying assumption is that if the organisation creates a weak situation for the humans who are the representative in the relationship, human personality may dictate the way the human behaves during that transaction. Another instance for the depiction of human behaviour is : *purchasing managers experiencing high pressure to perform may be more likely to engage in unethical practices, such as using obscure contract terms or exaggerating the seriousness of a problem when doing business with a supplier, in order to achieve price concessions and meet performance goals and expectations.*

Exit strategies are used by buyers and suppliers in the relationship in order to gain power and this may be reflected by the gaming approach they inculcate or if the situation is weak it may be shown due to individual human behaviour. In the interview data it was clear during a number of occasions that the buyer threatened exit if the supplier did not accept the terms and conditions set by the buyer. This has also been reflected in the literature data. Some of the instances are as follows:

I used to supply the big supermarkets directly but when I complained publicly that they kept cutting the price, I got de-listed.

You have to pay for the stickers advertising the promotion. You have to take the loss because if you drop out they won't allow you back when the price goes back to the proper level

In a typical transaction between a buyer and supplier, if the buyer is powerful, he will put some conditions on the supplier and then pressurise the supplier to accept by threatening to go some other supplier

The instances depicted are but a representation of the different views that buyers and suppliers have expressed about their relationship in the interviews and literature cases. The interview data being mainly field notes are mainly represented as a series of the processes involved in the transaction. A few examples of gaming behaviour from the interviews are :

- On many occasions the buyer gives the wrong order or has surplus inventory as business drops, so the purchasing department of the buyer rejects material on quality grounds even though it is of good quality. Supplier has to accept and even pay for transporting rejected material back to the supplier works, as the buyer is powerful. Sometimes the supplier gets even- the supplier takes back rejected consignments and holds it in stock because he knows that the buyer will have a shortfall in a couple of months and then when the buyer requires more quantity in a short time, the supplier sends rejected consignment and buyer has to accept.
- In another case, when the buyer has wrongly rejected the consignment on quality grounds and the supplier is aware that the consignment is perfect in quality, the supplier keeps postponing getting back the consignment. When the buyer faces a shortfall, the buyer accepts rejected material and sends a letter saying that it is only this time that they will accept the rejected material due to a very small deviation, but will not accept at a later stage. The supplier knows that this situation may occur hence, uses this ploy, to save money on transportation and inventory holding costs. This case repeats frequently.

- In one more case, supplier has contacts in the buyer firm and gets information when the actual shortfall will occur, so the supplier keeps rejected material locally near the buyer and when shortfall occurs sends it to the buyer at an inflated price.
- In this transaction, the names have been changed. X is a supplier to Y. While negotiating for the business, X agrees to the terms set by Y. After they get the business and both parties are locked in, it uses some costing tools to prove that the costs incurred are more and that Y should permit them to increase the costs of the components supplied to Y. Since Y is locked into the agreement, and dependent on X for that period it gives in.
- The Purchasing manager of a large automotive manufacturer highlighted some of the game-like behaviours occurring during Electronic reverse auctions,
 1. *The supplier quite deliberately bids very low knowing that they can lock the buyer in once the supplier has been accepted and they have gained control of the buyer's tooling and some other resources.*
 2. *The buyer attempts to exert some power on an incumbent supplier by forcing it to take part in a reverse auction. This is to pressurise it to reduce price.*
 3. *The suppliers form an arrangement between them to decide who will get the order and then distribute the work between them.*
 4. *The buyer bids for its own work unknown to other suppliers forcing the price down.*

The major game-like behaviours identified from literature sources are :

1. Exaggerating the seriousness of a problem to gain concession.
2. Using obscure contract terms to gain an advantage over suppliers.
3. Inventing a second source of supply to gain competitive advantage.

4. The inconsistencies and methodologies created by the OEM's don't allow us to run our business properly. They change their initiatives every time they get into trouble. They force us to change to suit their needs and then if it doesn't have immediate cost impact, they force the end of the initiative, take their money and move on to something else (Kobe, 2001)
5. The tier 1 are not getting stronger as many people think. Their asset intensity that they have assumed for the OEMs has given the OEM even more leverage. Once the automakers get you in a situation where you have a couple of billion dollars spread across the globe and you are a huge module supplier, you will do anything they say(Kobe, 2001)
6. Increasing prices when there is a shortage.
7. Knowingly over-committing resources or production schedules.
8. Using less competitive terms or prices for buyers who purchase exclusively from the supplier.
9. Concocting / making up a second source of supply to gain advantage over suppliers.
10. Purposefully misleading the other party.
11. Overestimating demand to gain volume discounts.
12. Cancelling purchase orders in progress and trying to avoid cancellation charges.
13. Allowing a supplier to become dependent on the purchasing organization for most of its business.

3.7 Summary

In, this chapter, the researcher presented the methodology for the preliminary data collection and the findings from the analysis of the data. The data analysis of the preliminary data from the unstructured interviews and literature highlighted certain themes in buyer- supplier relations. Some of these themes already have a vast research knowledge associated with them, but there are some findings, which the researcher believes have not been studied in relation to buyer- supplier relationships. The analysis of the data in stage1 has provided additional insights into two new issues other than the ones already researched by various researchers across the globe. One of the issues has been that of the presence of humans in the relationship and the discretion the humans have for the relationship. The aspects of discretion identified in the analysis have been focused on individual discretion or organisational discretion, whether the individual has the freedom to take his/her own decisions or whether his/her decisions are controlled by the organisations. This has been reported in the paper written by Mullins and Cummings (1999), Carpenter and Fredrickson (2001). Another issue highlighted has been that of rational processes conducted by organisations or individuals depicting game-like behaviour. This is another important issue as it has it's base in one or all three of the issues mentioned above, but the manifestation of the issue is through a series of thought out processes leading to the pay-off.

Hence, as per the analysis the two new issues to research further are:

- Game-like behaviour
- Discretion , humans have in the relationship

The next stage of this research will study this aspect in further detail. It is not only relevant to study the new themes identified individually, but it is necessary to study whether these two themes influence each other in any way and if the other themes identified in chapter two also have some influence on these two themes and eventually on buyer- supplier relationships.

Chapter four

Psychological Implications

Aim: The aim of this chapter is to present an argument to consider human elements in the supply chain in order to study supply chain relationships in detail. The introduction of human elements warrants the study of these relationships from a psychological perspective and the chapter then delves into aspects of transactional analysis and presents a case to use transactional analysis tools to depict the supply chain transactions.

4.1 Introduction

This chapter will dwell on the new issues identified in the earlier stage of the research. The aspects of game-like behaviour have been studied for a long time through game-theory. The issue of humans and games has been considered in the field of psychology under the concept of Transactional analysis. Though the concept has a very different underpinning than the game-like behaviour shown in buyer-supplier relationships, the researcher has found similarities and has presented in this chapter the rationality for studying buyer-supplier relationships using Transactional analysis.

Regarding the second issue of human discretion, the researcher has made a case of using another concept from the psychology discipline, "Situational Strength", which will be also be discussed in this chapter. The researcher from here on, makes a case for using these two concepts in studying buyer-supplier relationships. These concepts are not depicted as a panacea for buyer-supplier relationship problems, but are presented as important methods to identify problems and improve relationships in a holistic approach taking into consideration all the other factors associated with buyer-supplier relationships.

4.2 Games

"A game may be defined as a situation in which the outcomes of two or more persons in interaction are conjoint and the persons are not certain which outcome will occur." (Tedeschi, et. al., 1973). Games are a part and parcel of social and working life. As defined above, the persons involved in the interaction are not certain about the outcome, depicts the

complex nature of the situation. How the interaction occurs and what are the other factors influencing the interaction decide the outcome. According to Crozier and Friedberg (1977), “ *the game is much more than an image; it is a concrete mechanism which men use to structure and regularize their power regulations, while leaving these relations- and themselves- free.*” They further add that, “ instead of considering the functioning of an organisation as the result of various adaptive processes in which a collection of individuals or groups with their own motivations adjust to the procedures and “roles” laid down in advance by the organisation, we propose to consider it as the result of a series of games participated in by various organisational actors. By defining the possibilities for gain and loss, the formal and informal rules of these games delimit a range of rational, or “winning”, strategies, which the actors can adopt if they wish their involvement with the organisation to serve, or , at least, not to disserve, their personal aspirations.”

4.2.1 Why study Games?

As seen earlier, power structures give rise to a scenario, which could have four different possibilities for the buyer-supplier relationships. The relationship strategies viz. Exit or Voice and situational constraints such as strong and weak again govern these relationships. But the question that arises from all this information is that where does this lead to. These factors are an effect of how the firm is i.e. the culture of the firm, the evolutionary script, the values, vision, policies, which primarily bring out the psychology of the firm. Any firm in order to insure its survival with respect to the external environment goes through a process way beyond the external boundaries in the form of business strategies or in other words, business games. As per Gabriel (1994) many different games are played simultaneously in organisations in a variety of arenas. The players often try to define rules to suit their own interests. Games account for a lot of time and resources and they are directed towards getting the required pay-off.

The pay-off could be in the form of monetary gains for one entity; or the reconfirmation of the life-script (culture, values and life history) of the firm or the psychological pay-off to the person involved in the transaction. Some of the games are played knowingly as strategies while some are conducted un-knowingly as effects or by-processes of other transactions. Sometimes, in business and professional games, real ulterior motives emerge which seriously impair the health and welfare of the transacting firms and the people

involved with them (Poindexter, 1975). In examining inter-organisational games the researcher is concerned with interpersonal and professional transactions in supply chains, transactions, which are motivated by good intentions and maintained by the honest endeavours of people who unknowingly support a basically faulty premise. These games result in unresolved conflicts and a growing need for more effective services. Since these mounting problems are usually the concern of top administrators who failed to do the job in the first place, the neglected recipients continue to believe they are coping with adversity rather than games their leaders play. Problems do arise because some people in responsible positions have faulty judgement or ability, but too many of their foul-ups are due to games, well- intentioned but dishonest encounters that go under the name of business and professional services. Some services are overtly dishonest, others are the result of games and the inability of people to perform (Poindexter, 1975). There could be a debate as to whether the games being played are individual or organisational. Berne, (1963) wrote that the individual is willing to resign his own games in favour of playing it the group's way. The organisational or group game is more than the sum of individual game players. (Summerton,1993)

There could be another debate about the use of studying the games and the outcomes involved. The rationality for studying these game –like behaviours is that a dysfunctional situation arises when the interactions lead to a spiral of distrust where both organisations feel that they are not winning in the current climate or alternatively, where problem situations are not being adequately resolved to reach a solution that provides joint benefit. To achieve such solutions demands the ability to stand clear of the transaction dynamics and take less obvious alternatives. Sometimes, a third party can spot the transaction problems and recommend courses of action to side- step the current mindset.

The study of games or game-like behaviour can be undertaken by two approaches:

1. game- theory
2. Transactional analysis

Following is a brief discussion on game-theory:

4.2.2 Game Theory

The study of conflicts of interests concerning management problems has been reported by various researchers. Jean- Pierre PONSSARD (1981) distinguishes four approaches for studying conflicts of interest in management problems:

1. The “economic” approach: One of the aims of economics is to analyse the efficiency of the production and distribution of goods and services.
2. The “sociological” approach: Sociology concentrates on studying function, structure and organisation of various distinct bodies such as the civil service, the firm, ethnic groups etc. the observed behaviour- patterns could then be interpreted in terms of individually motivated decisions, which are nevertheless explainable in terms of socially determined collective behaviour norms.
3. The “psychological” approach: psychology operates primarily at the individual level. The behaviour of an individual is interpreted in terms of personal history. The decisions, which he takes, often conceal hidden motives and meanings, which play a decisive role in professional life.
4. The “game theory” approach: in this approach various parties are engaged in a deciding role and they are aware of their objectives and the restrictions under which they have to operate. They are also capable of analysing the positions of other players, and last but not the least, they are able to perceive and implement an overall strategy.

In terms of this research, looking at the four options, the option three “psychological approach” looks to be the most suitable, but option four “ game theory” requires further study before it can be discarded.

Game theory was probably born with the publication of *The Theory of Games and Economic Behaviour* by John von Neumann and Oskar Morgenstern in 1944. (Hargreaves Heap and Varoufakis, 1995). They defined a game as any interaction between agents that is governed by a set of rules specifying the possible moves for each participant and a set of outcomes for each possible combination of moves. Game theory is one of the most widely used tools in every walk of life, be it Politics, business, or any kind of social interaction, in order to study interactions and strategies between people and organisations. Hence, there is no dearth of finding publications and references to study this tool in detail. The researcher

is looking for an insight whether “Game Theory” can be used in the context of this research and hence, is interested in studying the philosophical underpinnings of this concept. The researcher therefore does not provide any details about the techniques of “game theory” , which will be available to the reader from any good reference book on Game Theory (for eg: see Hargreaves Heap et. al. 1995; Ghemavat, 1997; Tedeschi, et.al. 1973; Dixit and Skeath, 1999; etc.). Following is a discussion on the philosophy of game theory and whether it is a suitable tool for this research.

There is no debate about the usefulness of “Game theory” in the wider area on social interactions involving processes of decision- making and solving economic, political or business problems. The bone of contention is the usefulness of “Game Theory” in studying social interactions, which are predominantly governed by human behaviour. Rumelt , Schendel and Teece (1991) cite several specific problems, from a business- strategic perspective, with game theory.

1. knowledge about the strategic phenomena to be studied is outside the scope of game theory and game theorists are generally unwilling to learn much about business, leaving a leading role for strategists who identify phenomena worth studying
2. game-theoretic analyses focus on explaining the possible existence of interactive effects rather than analysing their practical importance.
3. game- theorists model strategic phenomena, in a way that focuses on a minimal number of economic variables to the exclusion of others- psychological, political, organisational and technological which limits scientific testability and practical utility.

There are a few more, but the most important for this research have been presented here. Tedeschi, et. al. (1973), have commented upon the difference between games studied using Transactional Analysis and game theory. They have concluded that it was necessary to build a bridge between the technical (game theory) and non-technical (transactional analysis) approaches. They suggested that along with the more formal and technical aspects of the game, it is important to examine the strategies that people use in attempting to manipulate others, including the application of force, deception, and impression management.

In the context of this research, it was decided to study the feasibility of Transactional analysis in studying and analysing buyer – supplier transactions and relationships because:

1. It was not in the scope of this research to formulate a new method by bridging two concepts (game theory and Transactional analysis) together to study buyer- supplier transactions. Though this would prove beneficial in the future if there is enough time to do it.
2. Looking at the research focus and the objectives, the researcher was more concerned about the human and organisational behaviour (collective human behaviour), hence if only one method was to be selected, then referring to the different methods suggested by Jean-Pierre PONSSARD (1981), the “psychological” method and in this case, Transactional analysis would be the most suitable.

4.2.3 Is there something else happening in the relationship?

The new perception of the relationship raises a very important question about the role of the individual in the relationship. Organisations do have a culture of their own, but this culture again is the script given to them by either the founder persons or the people who control the working of the organisation. The culture is permeated throughout the organisation through the policies and the rules and regulations set in the organisation. This does not mean that every individual operates in the same manner. Under a broad umbrella of the policies each individual works as a part of the same culture but by operating in a manner he feels is right as per his perception of the culture. This is a major point to consider when supply chain entities transact. Do the ego states of the persons transacting come into existence or is it really the ego state of the organisation. The assumption here is that the ego state of the organisation decides to play the game and transmit a certain psychological undercurrent in the interaction; but the way the game is played is decided by the script and ego state of the individual.

The network of interactions involve relationships some transitory and some more permanent both inside the company and external to it. Many of these regular transactions take place at a factual and non-psychological level involving simple day-to-day transactions. However others occur at a deeper level, known as deep structure games (Frost, 1987) during negotiation or if there is a problem situation or if there is a risk of opportunistic behaviour.

In situations of opportunistic behaviour or inappropriate use of power there is still the issue of how both parties in the relationship choose to behave. In this sense behaviour is defined as a sequence of actions that an individual within a company carries out in response to a situational stimulus. The personal disposition of the individual is likely to be very important in determining the behaviour in the relationship. The person will exhibit preferred ways of behaving which may be more evident in stressful situations of resolving problems or delicate negotiations. No matter what the individual predispositions to behave in certain ways, the situation the person works in may control the response. The work situation is very different to the intimate relationship. At work people are within a hierarchy of power relationships, people progress in the organisation by meeting appraisal targets, the organisation they work for is efficiency oriented and the individuals work to targets. These and other differences have been explained by Neuberger (1996).

The transactions that take place between people that represent two organisations in the supply chain are likely to be significantly different from psychotherapeutic relationship transactions. In the collaborative network the amount of interaction between partners or buyers and suppliers is less frequent, less intimate but more strategic. In the network both parties represent their own interests and depending upon resource availability and scarcity exert some power to maximise their own situations. In the network, contact is at many levels, different managers may be involved with different intensities of transaction and in addition the responses of small firms may be very different from those of larger firms. In reality larger firms may seem to present a stronger situation than smaller firms where more individual discretion exists.

This requires a study of what happens in a transaction and a tool, which is widely used in human psychotherapy is Transactional Analysis. It is thus relevant to study the tool and establish whether it could be applied to organisational transactions. It is relevant to use Transactional Analysis, as the theory itself has a detailed study of psychological games that Humans play with each other, and hence intuitively it could be the tool used to study human behaviour in supply chain transactions. But, this will need further study of the theory itself and feasibility whether it is suitable for the research domain the researcher needs to use it for. Following is a brief introduction to the theory of Transactional Analysis.

4.3 Transactional Analysis (TA) - An Introduction

The following is a brief introduction to the subject of Transactional Analysis, and is a compilation of information taken from various books on Transactional Analysis. The reason for this introduction is more of an understanding of what TA is all about and the components of TA. The information is taken primarily from Stewart and Joines (1999), but also has some references from Barker (1980) and Jongeward (1976) .

4.3.1 The development Of Transactional Analysis

Transactional Analysis was developed by Dr. Eric Berne, a psychiatrist in California in the 1950's. In 1949, Berne published the first of six professional journal articles concerning the nature of intuition. Until 1958, these six papers presented the emerging ideas on which Berne founded his development of Transactional Analysis. In the articles on intuition that Berne published in 1957, he first presented his concept of Parent, Adult and Child ego-states and used the term "structural analysis". Berne then went on to write a further paper, which he presented to the American Group Psychotherapy Association in November 1957. It was entitled 'Transactional Analysis: A new and Effective method of Group Therapy'. In this article, which appeared in print the following year, Berne restated his concepts of Parent, Adult and Child ego-states and introduced the notions of games and scripts. This formed the basic framework of Transactional Analysis Theory. In 1958, Berne established the San Francisco Social Psychiatry Seminars consisting of regular meetings with like-minded friends for the development of Transactional Analysis ideas. It was from these meetings that Transactional Analysis developed as a new technique for use with groups. Berne's *Transactional Analysis in Psychotherapy*, the first book entirely devoted to Transactional Analysis was published in 1961. it was followed in 1963 by *The Structure and Dynamics of Organizations and Groups*. The *Transactional Analysis Bulletin* began publication in 1962, with Berne as the Editor. Another important event in the history of Transactional Analysis was the publication of Berne's *Games People Play* in 1964. In 1964, Berne and his colleagues decide to form the International Transactional Analysis Association (ITAA) in recognition of the fact that Transactional Analysis was being practiced by a growing number of professionals outside the USA. Various people have played a major part in expanding the theory of Transactional Analysis to date and to name a few these are: Stephen Karpman, Thomas Harris, Muriel James, Dorothy Jongeward,

Bob and Mary Goulding, Jacqui Schiff and Taibi Kahler. *Games people Play* opened the way for the use of Transactional Analysis more widely, but it wasn't until the publication of *Everybody Wins* in 1973, that the first use of Transactional Analysis in organisations was described in a book.

4.3.2 Transactional Analysis

The definition of Transactional Analysis suggested by the International Transactional Analysis association is “Transactional Analysis is a theory of personality and a systematic psychotherapy for personal growth and personal change”. As said by Thomas Harris (1973), Transactional analysis provided

“ a method of systematizing the information derived from analysing these transactions in words which have the same meaning, by definition, for everyone who is using them. This language is clearly one of the most important developments of the system. Agreement on the meaning of words plus agreement on what to examine are the two keys, which have unlocked the door to mysteries of why people do as they do. This is no small accomplishment.”

As a theory of personality, transactional analysis gives a picture of how people are structured psychologically. To do so it uses a three- part model known as ego-state model. The same model helps us understand how people function- how they express their personality in terms of behaviour. Transactional Analysis also provides a theory of communication. This can be extended to give a method of analysing systems and organisations. Transactional Analysis offers a theory of child development. The concept of life-script explains how our present life patterns originated in childhood. Within the framework of life-script, Transactional Analysis develops explanations of how one may continue to re-play childhood strategies in grown-up life, even when these produce results that are self-defeating or painful. Transactional thus gives a theory of psychopathology.

Transactional Analysis is used in the therapeutic field for psychotherapy. It is used in the treatment of all types of psychological disorders, from everyday living problems to severe psychosis. It provides a method of therapy for use with individuals, groups, couples and families. Transactional analysis is also used in educational settings. It helps teachers and learners to stay in clear communication and avoid setting up unproductive confrontations. It is particularly suitable for use in counselling. Transactional analysis is a powerful tool in

management and communications training and in organisational analysis. The research will try to use this facility provided by Transactional analysis to analyse Buyer-supplier Transactions and relations. Following is a brief introduction to the various terms and ideas used in transactional Analysis. The ones relevant for this research have been explained in more detail.

Transactional Analysis rests on certain Philosophical assumptions. These are statements about people, life and objectives of change.

The philosophical assumptions of Transactional Analysis are:

People are OK

Everyone has the capacity to think

People decide their own destiny, and these decisions can be changed.

From these assumptions there follow two basic principles of Transactional Analysis practice:

Contractual method

Open Communication

People are OK: This is the most fundamental assumption of Transactional Analysis is that *People are OK*. It means that every individual has worth, value and dignity as people. I accept myself as me and I accept you as you. This is a statement of essence rather than behaviour. At times, I may not like nor accept what you do. But always, I accept what you are. Your essence as a human being is OK with me, even though your behaviour may not be. I am not one-up to you, and you are not one-up to me. We are on a level as people. This is true even though our accomplishments may differ. It is true even though we may be of different race, age or religion.

Everyone has the capacity to think: Everyone except the severely brain- damaged has the capacity to think. Therefore it is the responsibility of each of us to decide what he or she wants from life. Each individual will ultimately live with the consequences of what he or she decides.

Decisional Model: You and I are both OK. We may sometimes engage in not-OK behaviour. When we do, we are following strategies we decided upon as young children. These strategies were the best ways we could work out as infants to survive and get what we wanted from a world, which may have seemed hostile. As grown-ups we still pursue these same patterns at times. We may do this even though the results are unproductive or even painful for us. Even when we were young children, our parents could not make us develop in one particular way rather than another. They could certainly exert strong pressures on us. But we made our own decisions whether to comply with these pressures, to rebel against them or to ignore them. For grown-ups, the same is true. We cannot be made to feel or behave in particular ways by others, or by 'the environment'. Other people, or our life circumstances, may exert strong pressures on us. But it is always our decisions whether to conform to these pressures. It is our decision whether we will behave as per the demands of the environment or rebel. We are responsible for our feelings and behaviour. Anytime we make a decision, we can change that decision later. This is true of the early decisions we make about ourselves and the world. If some of these infant's decisions are producing uncomfortable results for us as grown-ups, we can trace the decisions and change them for new and more appropriate decisions. People can change. We achieve change not merely by insight into our old patterns of behaviour, but by actively deciding to change those patterns.

Contractual method: The Transactional Practitioner and the client take joint responsibility for achieving whatever change the client wants to make. This follows from the assumption that both relate on equal terms. It is not expected for the Transactional Analysis practitioner to do things to the client, nor does the client expect that the practitioner will do everything for him or her. Both take part in the process of change, and hence it is important that both are aware how the task will be shared. Therefore they enter into a contract.

Open Communication: Eric Berne insisted that the client, as well as the practitioner, should have full information about what was going on in their work together. This follows from basic assumptions that people are OK and everyone can think. In transactional Analysis practice, case notes are open to the client's inspection. The practitioner encourages the client to learn the ideas of Transactional Analysis. Thus, the client can take an equal role in the process of change. To help in communication, the ideas of

Transactional Analysis are expressed in simple language. It uses familiar words like- Parent, Child, Adult, game, script, stroke, etc.

4.3.2.1 Life positions

Another way of looking at relationships between people is through the concept of “life position”, sometimes referred to as the basic position or existential position. A person’s life position at any given time expresses in some way just how that individual is relating to others in terms of thinking, feeling and behaving. There are four basic life positions as shown in the OK corral,

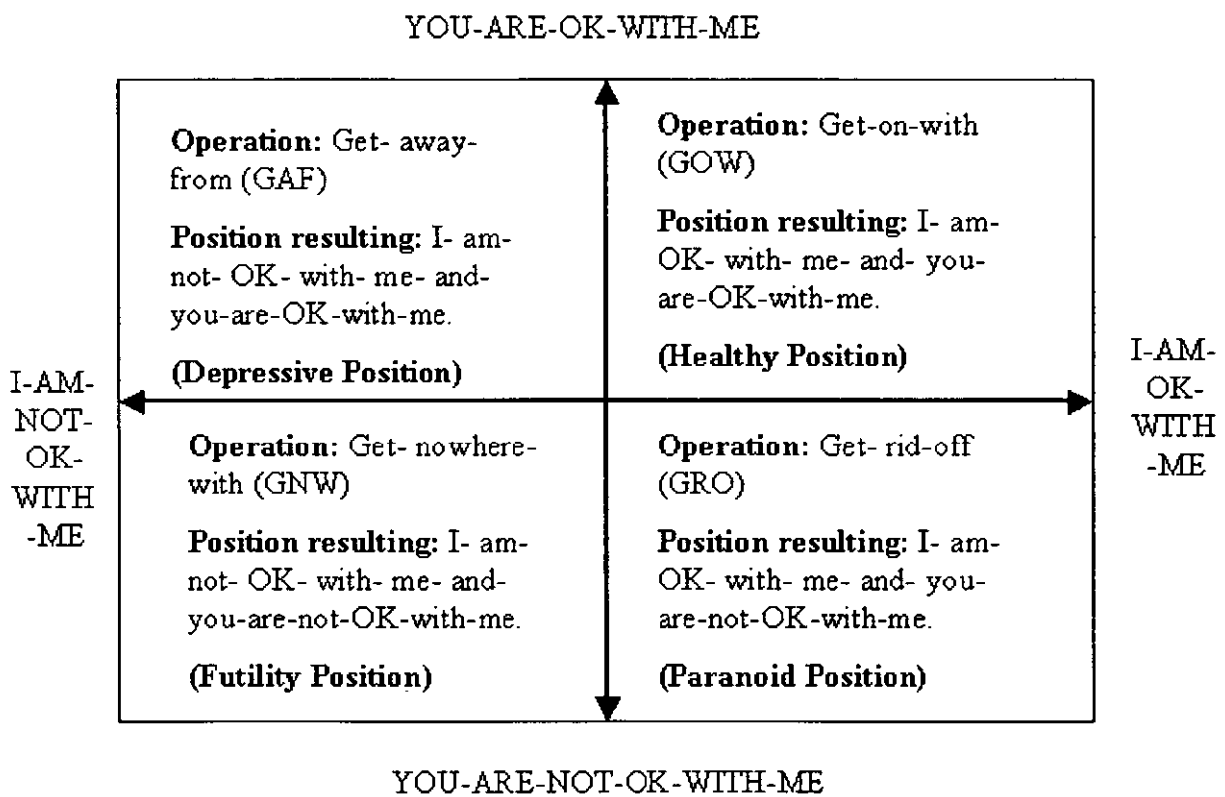


Figure 4.1: Life Position Corral (adapted from Stewart and Joines, 1999)

There’s some disagreement among Transactional Analysis authorities on how Life positions originate and what age. According to Berne, the newborn baby is fundamentally in an ‘I’m OK, you’re OK’ position and only switches from this under pressure of early experiences. He believed that ‘...the position is taken in early childhood (third to seventh year) in order to justify a decision based on early experience’. In other words, the early decisions come first, and the life position is adopted later in childhood to make the world appear to justify what has been decided. This view is based on trust being the starting position of the infant, and that at birth ‘all things are possible’ until this trust is interfered

with. Harris (1973) on the other hand views the birth position as 'I'm not OK, you're OK', perhaps highlighted by the new baby's dependence on those around for food, warmth, strokes etc.

In the view of Claude Steiner, life position is adopted much earlier. He suggests that all children begin in the position 'I'm OK, you're OK'. The child shifts to another position only if something interrupts the mutual dependence between child and mother. This involves interference in the trust the baby has and could be triggered by anything from the baby perceiving the Mother as withdrawing the protection and acceptance she had offered in earlier days to even the process of birth itself. The baby may respond to these discomforts by deciding that she is not-OK or that others are not-OK. The child then goes on to build her script upon this fundamental view of self and others.

Even though there is disagreement on the age at which the life position is formed, but there is agreement that life position justifies script decision. Life position can be defined as "*one's basic beliefs about self and others, which are used to justify decisions and behaviour*" (Stewart, and Joines, 1999).

Characteristics of the Life positions (Barker, 1984)

- a) I'M OK , YOU'RE OK (I+ U+) : This is sometimes referred to as the "get on with" position. People occupying this position are optimistic, confident and happy about work and life. They exchange strokes freely with those they meet, accepting the significance of other people, and decline to put themselves or others down. Their dominant working style with others is collaboration and mutual respect, sharing authority and responsibility and listening constructively, even if they disagree. The problems faced are dealt with as constructively as possible.
- b) I'M OK, YOU'RE NOT OK (I+ U-) : This is sometimes referred to as the "get rid of" position. It is characterised by feelings of anger, fury and hostility. Others are seen as inferior, unworthy, incompetent, wrong and not to be trusted. Behaviour to others is characterised by such things as spite, victimisation, trapping, disdain, abuse and disregard. They may devote much time to the destruction of the sense of self-worth of others. As well as putting others down, they over-inflate their own self-worth and find it difficult to give positive strokes. They are highly competitive

and will try to achieve power and status and whatever cost, even if it means exploiting fellow human beings.

- c) I'M NOT OK, YOU'RE OK (I- U+): this is referred to as the "get away from" position and is typified by feelings such as sadness, inadequacy, stupidity or sense of being ugly. In this position, people experience themselves as inferior or powerless in relation to others. They put themselves down and find it difficult to accept positive strokes, even being suspicious of them. They undervalue their potential and skills and avoid or withdraw from difficult situations and problems.
- d) I'M NOT OK, YOU'RE NOT OK (I- U-): This is referred to as the "get nowhere position" and is accompanied by feelings of confusion or aimlessness and pointlessness. Their attitude is 'Why bother, what's the point?' and they frequently waste time.

4.3.2.2 Script

The theory of script was first developed by Eric Berne and his co-workers, notably Claude Steiner in the mid 1960's. Since then many other transactional Analysis researchers have built on the original script idea. The concept of script now ranks with the ego-state model as a central idea of Transactional analysis. A life script is a personal plan decided on at an early age by each individual in response to external events. The most external factor for an offspring is the behaviour, attitudes and influences of parents, or, in their absence, other authority figures. On the basis of this influence, we make decisions about what kind of person we are and what kind of life we are going to lead, these decisions being crucial to our well-being and survival when we are young. These decisions or adaptations, which are made in an early age may be dysfunctional in our relationships with others when we are older.

The ways we give and get our strokes, structure our time, indulge in rackets, collect stamps, and play games will depend upon our preferred life position and the script we adopt. Our games, rackets and stamps, and time-structuring choices are all part of our script reinforcing and motivating system. Our early experiences give rise to decisions about ourselves, others and the world. This gives rise to the adoption of a preferred life position and a stroke balance, leading to the adoption of a script and script reinforcing behaviour and followed by some kind of script "pay-off" in adulthood, which may be dramatic or mundane, successful or disastrous. On the basis of the kinds of injunctions

given and the quality of the script outcomes involved, scripts are generally classified as: winning scripts, non-winning scripts and losing scripts. This classification is only approximate and is situational. What may count as a non-winning payoff for someone may be a winning pay-off for somebody else. In fact, most of us decide on scripts which are a mixture of winning, non-winning and losing in different areas of life (Stewart and Joines, 1999). But, the most important aspect is that any script can be changed. By becoming aware of one's script, one can discover any areas in which losing decisions were made, and change them to winning decisions. There is also a distinction to be made between the message which is sent, the way it is received and the decisions or adaptation made. For example: somebody can have a 'bad' upbringing and still turn out 'good', i.e. have a winner script.

4.3.2.3 Ego- states

Transactional analysis is a theory of personality and a systematic psychotherapy for personal growth and personal change. As a theory of personality, TA gives a picture of how people are structured psychologically. To do so it uses a three-part model known as the ego-state model. The same model helps to understand how people function-how they express their personality in terms of behaviour. TA also provides a theory of communication, which can be extended to give a method of analysing systems and organisations (Blackeney, 1983).

Observation of spontaneous activity most productively carried out in certain kinds of psychotherapy groups, reveals that from time to time people show noticeable changes in posture, viewpoint, voice, vocabulary and other aspects of behaviour. These behavioural changes are often accompanied by shifts in feeling. In a given individual, a certain set of behaviour patterns corresponds to one state of mind, while another set is related to a different psychic attitude, often inconsistent with the first. These changes and differences give rise to the idea of ego-states. Eric Berne defined an ego-state as a consistent pattern of feeling and experience directly related to a corresponding consistent pattern of behaviour. An ego-state may be described in phenomenon as a coherent system of feelings and in operation as a set of behaviour patterns. In more practical terms, it is a system of feelings accompanied by a related set of behaviour patterns. These may be broken down into three forms:

- a) ego states which resemble those of parental figures- Parent ego state
- b) ego states which are autonomously directed towards objective appraisal of reality- Adult ego state
- c) those which represent archaic relics, still-active ego states fixated in early childhood- Child ego state

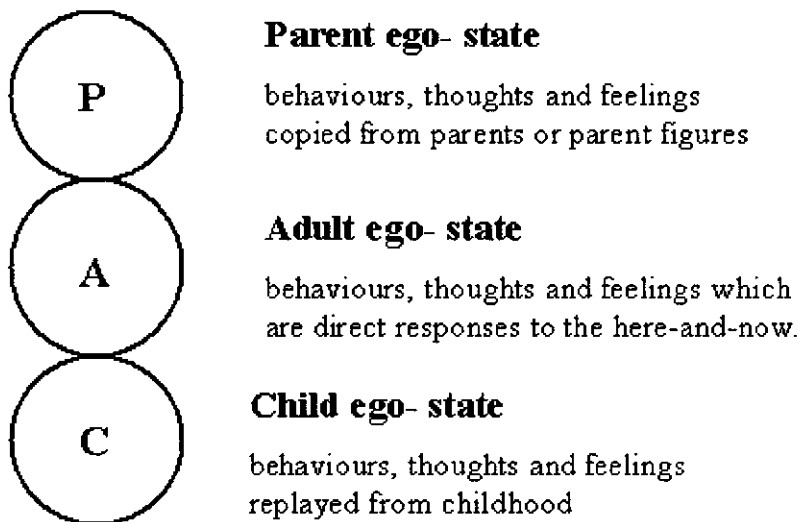


Figure 4.2: The Ego state model (adapted from Stewart and Joines, 1999)

The unit of social intercourse is called a transaction. If two or more people encounter each other in a social aggregation sooner or later one of them will speak or give some other indication of acknowledging the presence of the others. This is known as transaction stimulus. Another person will then say or do something, which is in a way related to the stimulus, and is known as transactional response. Simple transactional analysis is concerned with diagnosing which ego state implemented the transactional stimulus, and which one executed the transactional response. The simplest responses are the ones in which both stimulus and responses arise from the Adults of the parties concerned. Next in simplicity are Child-Parent transactions. Both the types of transactions are complementary, i.e. the response is appropriate and expected and follows a natural order of healthy human relationships. Transactions tend to proceed in chains so that each response is in turn a stimulus. The rule of communication is that communication will proceed smoothly as long

as transactions are complementary and its corollary is that as long as transactions are complementary, communication can in principle, proceed indefinitely.

The converse rule is that communication is broken off when a crossed transaction occurs. The most common type of crossed transactions are: when the Adult of A communicates with the Adult of B and instead of the Adult of B communicating with the Adult of A; the Child of B communicates with the Parent of A or the Parent of B communicates with Child of A. These types of transactions are the principal concern of psychotherapists.

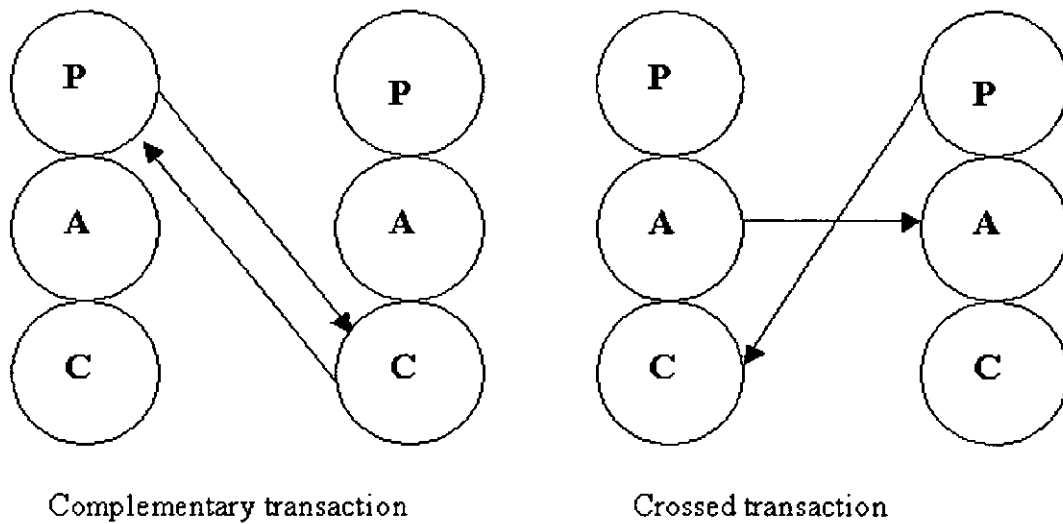


Figure 4.3: Complementary and Crossed transactions (adapted from Stewart and Joines, 1999)

4.3.2.4 Time structuring

Berne said that “the eternal problem of the human being is how to structure his waking hours. In this existential sense, the function of all social living is to lend mutual assistance for this project” (Harris, 1973). This problem troubles some people perpetually but others may experience it relatively rare. When individuals fail to achieve a satisfactory structuring or programming of their time they will look to others to do it for them. This is the explanation of the occasions when for no apparent reason people ask ‘What shall we do next?’ or ‘We need someone to organize us’. This need is called structure hunger. It is said to be an outgrowth of recognition hunger, which stemmed from the need for stroking (stroking hunger). The infant cannot programme his time but simply performs those actions, which result in pleasure from moment to moment, (positive strokes). As the infant

grows he becomes increasingly capable of distinguishing between options for rewards or pleasures and he also gains the ability to defer gratification between options for rewards or pleasures and he also gains the ability to defer gratification as the number of these options increase. However, the disposition of the Child may prevent the free exercise of choice between options.

Whenever people get together in pairs or groups, there are six different ways in which they can spend their time. Eric Berne listed these six modes of time structuring as: Withdrawal, Rituals, Pastimes, Activities, Games and Intimacy

Withdrawal: This is the choice of having no contact with others. It may be purposeful and deliberate, based on an Adult ego-state decision. Most people generally, need some time for themselves, when they want to be alone. Though the extent and duration of the withdrawal will tend to vary from person to person. In some situations, withdrawal may be dysfunctional, for example: avoiding a difficult person, problem or situation that has to be faced.

Rituals: a ritual is a 'socially programmed use of time where everybody agrees to do the same thing' (Harris, 1973). Rituals are highly predictable and formalised exchanges between people based on social customs and they are important in holding the fabric of society together. They are as simple as a everyday greeting: hello, how are you? Very well and you? Fine thanks' or may be complex, for example a coronation or election. The basis of a ritual is that everyone is agreeing to do the same thing during that time. It is a predetermined way of behaving towards others, a set of transactions, which is recognised and accepted by all concerned. The purpose of rituals, according to transactional analysis is to allow a group of people to structure the time, they spend together without becoming too close.

Pastimes: Pastimes are a way of structuring time around topics of mutual interest. They offer little threat and operate as a means to get to know people and decide whether or not to form closer friendships and/ or to do business together. They are also important for self-confirmation, i.e. re-affirming who we are, what interest groups we belong to and our status in society. They typically occur at parties and other social gatherings, and also at tea breaks and mealtimes at work. Not having pastiming skills may be a serious disadvantage

in developing relationships with others. Because of their lack of pastiming skills, some people are seen as being either withdrawn. On the other hand, some people never get beyond pastiming with others and thus never form close relationships.

Activities: Activity is any behaviour directed towards external goals, such as hobbies and sport, household activities, social activities and work. Activities can be very satisfying in themselves through creativity or productivity and very rewarding because of the strokes gained from others.

Games: A psychological game is an on-going series of complementary transactions leading to a well- defined predictable outcome. Games are a way of maintaining the person's view of the world. Games have the capacity for producing large quantities of intense strokes that are mostly negative. Although games must, by definition, be structured and predictable forms of transactions, they nonetheless have a higher information potential than ritual, pastime, or activity. Games tell us about an individual's ego-state (internal condition) as well as his pay-off values(Goldhaber,1976). Since, in this research buyer-supplier relationships are studied through the concept of Transactional analysis games, a detailed explanation of Transactional Games and the processes used for analysing these games is provided later in this chapter.

Intimacy: Intimacy is the most risky, and at the same time, the most rewarding way of structuring time. It is that relationship between two people, which can exist independently of all other means of structuring time. It feels genuine, true with no ulterior motives or exploitation. Intimacy, which is based on the 'I'M OK-YOU'RE OK' basic position, is game-free as goals never are ulterior. It is a relationship in which the Adult is in charge of all those concerned and it allows the emergence of the natural Child, (that part of the child which is creative, spontaneous, curious, aware, free of fear), as opposed to the adaptive child (that part which has adapted to parental influences). It is unpredictable and unprogrammed and can be risky and frightening, with the potential for personal rejection (when we open ourselves up to someone else, we may not get an open response back). This why so many people avoid it, particularly if they have any doubts about their sense of OK-ness.

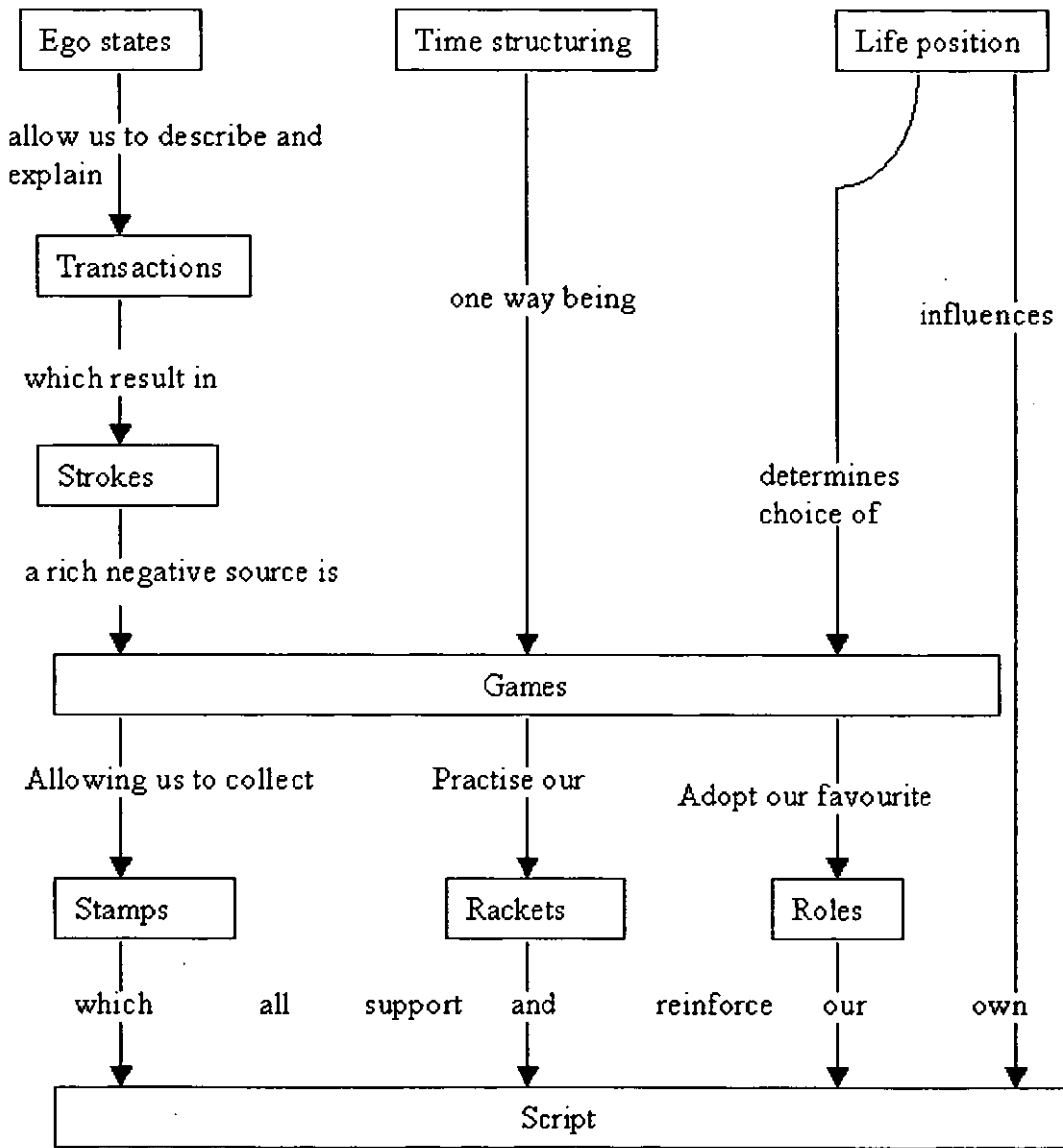


Figure 4.4: The main concepts of Transactional Analysis (adapted from Barker, 1980)

4.3.3 Transactional Analysis Games

Games are a form of time structuring, based on a particular kind of transaction involving two or more people (Barker, 1980). In games people play, Berne has defined game as , “ A Game is an ongoing series of complementary ulterior transactions progressing to a well-defined predictable outcome.” According to Stewart and Joines (1999), there is disagreement among Transactional Analysis writers about the proper definition of a game.

They say that Berne himself defined games differently at different stages of his thinking. In earlier definitions of the game, Berne stressed the importance of Gimmick for the game, but in the later definitions and after introducing the concept of Formula G, he referred to the Switch and crossup as being the essential features of the game.

Stewart and Joines (1999) prefer to use Berne's later definition of games and define games as "those sequences that follow all the stages of formula G, including the 'switch of roles' and 'moment of confusion' represented by the switch and crossup." The reason for not considering the earlier definition involving only the gimmick has been set out by Stewart and Joines (1999), and Hewson and Turner (1992). According to them, transactions without the Switch have been described in modern transactional Analysis by another concept: racketeering. Fanita English, (1977) has made a clear distinction between the process of racketeering and the process of game. Racketeers resemble game-players in that they exchange ulterior messages, taking racket-feeling pay-offs at the same time. The racket feeling pay-offs will enable the player to feel justified in feeling stupid, angry, incompetent or whatever the racket pay-off is. In racketeering the transactions are at a complementary level and there is no manipulation as found in a game. There is no switch involved in racketeering. The parties may keep on racketeering as long as they both want or have energy to, and then simply stop or do something different. When racketeering does not work, one of the parties in the transaction pulls the switch and the exchange is transformed into a game.

According to Stewart and Joines (1999):

' A game is the process of doing something with an ulterior motive that :

1. is outside of Adult awareness;
2. does not become explicit until the participants switch the way they are behaving;
and
3. results in everyone feeling confused, misunderstood, and wanting to blame the other person.'

Some features that are typical of games are:

1. games are repetitive: every person plays his/her favourite game time and time again. The other players and the circumstances may change, but the pattern of the game remains the same.

2. Games are played without Adult awareness: even though the games are played repetitively the players get aware that they are playing the game generally only after the pay-off is received.
3. games are predictable: when the first move is made in the game, the outcome is assured, unless the players are enlightened and aware and can spot what's happening.
4. Games involve an exchange of ulterior transactions between the players: In any game, there is an explicit social message, and also a covert psychological message, which declares the players true intentions.
5. Games always include a moment of surprise or confusion: when the game ends the players sense that something different happened, and somehow the players have changed roles. Since the players are unaware that they are playing the game, when the switch occurs and the outcome comes to surface there is surprise and confusion as the players get aware of the situation.

Different Degrees of games (Berne, 1964; Steiner, 1974; Stewart and Joines, 1999):

Games can be played at different degrees of intensity;

1. **First- degree game:** has an outcome, which the player is willing to share with his/her social circle. It is mild and usually leads to mild discomfort. First degree games make up a big proportion of the time- structuring at parties and social gatherings.
2. **Second- degree game:** has an outcome, which the player would rather conceal from the public.
3. **Third- degree game:** is one which is played for keeps, and which ends in the surgery, the courtroom, or the morgue.

4.3.3.1 Why people play games

People play games to further their life script (Stewart and Joines, 1999). Eric Berne suggested the sequence by which we achieve this. At the pay-off of each game, the player experiences a racket feeling. Each time he/ she does this, the feeling is stored away as a stamp. Thus each person chooses games to yield the kind of stamps that will advance the person towards the script ending that he/ she has decided upon. The script story may be played through in miniature many times during the player's life. People choose the degree

of their games to suit the degree of their script pay-off. Each time the game is played, the player uses the pay-off to reinforce that the script beliefs he/she has about self, others and the world are true. Games are also used to confirm one's basic Life- Positions. Games are a reliable way of getting a supply of intense strokes. The strokes exchanged in the opening stages of the game may be positive or negative, depending on the game. At the switch, each player gets or gives intense negative strokes. Whether positive or negative, every stroke exchanged during a game entails a discount. Fanita English (1977) suggests that people begin seeking game strokes when their strokes from racketeering are in danger of running out.

Barker (1980) suggests the consequences and payoffs of games. According to him, by playing games, people:

- avoid responsibility for the problem they have
- avoid the risks in being close to and open with others.
- Make people and situations more predictable
- Exchange negative strokes
- Structure time in a predictable way
- Keep re-experiencing a favourite bad feeling
- Confirm a life position
- Further their life plan.

Types of games :

Games have been identified and described in the Transactional Analysis literature (Berne, 1964; Steiner, 1974; Ernst, 1971; Jongeward, 1976; Hewson and Turner(1992), etc.). Most games can be classified according to the strokes they tend to provide (Goldhaber, 1976). Many games allow people to collect negative strokes by discounting themselves(e.g., Kick Me, Harried, Stupid, Schlemiel, Poor me). Some games enable people to give negative strokes by discounting others(e.g., NIGYSOB, If it weren't for you, Blemish, Yes-But, I'm only trying to help you, Rapo)

4.3.4 Game Analysis

Game analysis involves identifying those elements of a person or group’s communication pattern when they interact simultaneously at two levels- social (overt), and psychological (covert)- and when they are unaware of this doublespeak (Summerton, 1993).

Transactional analysis literature presents various procedures for game analysis. Although, the most widely used processes have been the Con+Gimmick formula put forth by Berne, and the Drama Triangle put forth by Karpman, there are a number of new procedures researched and published for Game analysis. Summerton (1993) has presented a brief synopsis of all the available processes of game analysis in his paper, which explains the dynamics and limitations of each process. The researcher has focussed on using only the processes introduced by Berne and Karpman, as the other new processes introduce many more variables to the analysis and thus it is out of the scope of this research. Following is a brief description of the two types of game analysis. Although there are many literature sources for game analysis the following description is adapted from Stewart and Joines (1999).

4.3.4.1 Game Formula

In 1972, Berne developed his final theory of game analysis, “Formuls G”, or also known as the game formula. The six elements of Formula G include the con, gimmick, response, switch, crossup and payoff. The con and gimmick refer to the open and hidden messages and the response to the series of duplex transactions. The switch is the ending of the transactions and the move to the culmination of the game. The crossup is the moment of recognition, and the payoff is the outcome. Barker (1980) has explained the same process using ego-states.

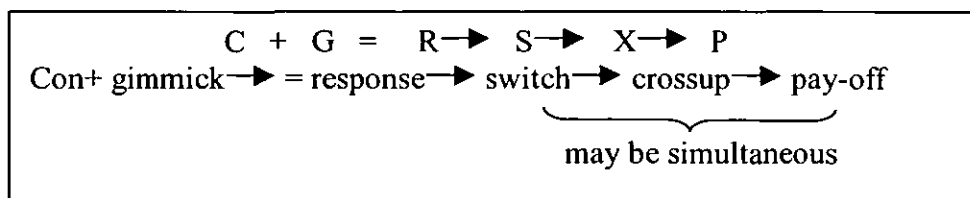


Figure 4.5: The Con-Gimmick Formula

This formula illustrates a game between person A and person B as follows. The game is initiated by A's discount (i.e. put down of self or other), referred to as con. A's little professor has already spotted intuitively that B is a likely partner for the game about to unfold. If B does respond accordingly to the secret message by also discounting, he/she reveals the part of him/her that is interested in being 'hooked' by the con, and referred to as the gimmick. A series of social transactions then follow, usually Adult to Adult, referred to as the response. At some point, each player switches, i.e. they drop the facade of social messages and demonstrate explicitly the previous hidden messages, together with the ego-states involved. At this point, a moment of confusion (the crossup), perhaps very brief, may be experienced by each person, followed by the pay-off, i.e. the 'bad feelings'.

4.3.4.2 Karpman Drama Triangle

In 1968, Stephen Karpman (as quoted in Summerton,1993), put forth the concept of 'switch'. He devised a simple yet powerful diagram for analysing games, the Drama triangle . He suggests that whenever people play games, they are stepping into one of the three scripty roles: Persecutor, Rescuer, or Victim. He summarized role changes in a person's script with his drama Triangle. Berne used the 'switch' to describe the transition from the familiar duplex transactions of the first part of a game to the less comforting outcome of the game by linking the two elements he had identified: the series of complementary ulterior transactions and the well- defined outcome. Usually, someone who is playing a game will start at one of the positions and then will switch to another. This switch in Drama triangle positions takes place at the moment of the switch in the game formula (formula G).

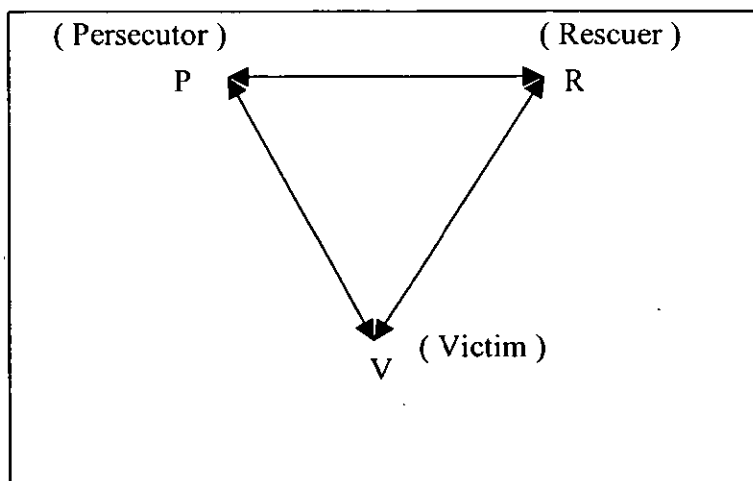


Figure 4.6: The Drama Triangle

As per the Drama triangle,

A **persecutor** is someone who puts other people down and belittles them. The persecutor views others as being one-down and not-OK.

A **rescuer** , sees others as being not-OK and one down. But the rescuer responds by offering help from a one-up position.

A **Victim**, sees himself/ herself as one down and not-OK. Sometimes the victim will seek a persecutor to put him/ her down and push him/ her around. Alternatively, the Victim may be in search of a Rescuer, who will offer help and confirm the Victim's Belief ' I can't cope on my own'.

Every one of the drama Triangle roles entails a discount. Both the persecutor and Rescuer discount others. The Persecutor discounts other's value and dignity. Extreme Persecutors may discount other people's right to life and physical health. The rescuer discounts other's abilities to think for themselves and act on their own initiative. A Victim discounts oneself. A victim seeking a Persecutor will agree with the persecutor's discounts and views himself/ herself as someone worthy to be rejected and belittled. The victim seeking a Rescuer will believe that he/she needs the Rescuer's help in order to think straight, act or make decisions.

When transactions start between two persons, each has decided upon the role he/she is going to play. As the transactions progress , at some time, the roles are switched and this causes the pay-off, but also leads to feeling bad for both the players. For e.g. when A&B start to play, A is in the Rescuer position and B is the Victim. B expects to be rescued by A and as the transaction progresses, the switch occurs and B takes the role of the Persecutor and A takes the role of Victim. Both get their required psychological pay-off as both knew the outcome when they started to play, but it also leads to both of them feeling bad about the transaction, as both have to move into a different roles.

Another way to analyse games is to use a transactional diagram. This is specially useful in bringing out the ulterior transactions between the players. The transaction diagram is a depiction of the ego-states during the transactions and the flow of transactions between the different ego-states.

4.4 Transactional Analysis in Organisational settings

Just as individuals have scripts, so do organisations (Jongeward, 1976). The lifeline of many organisations resembles the lifeline of a person. According to Hewson and Turner (1992), it is important to emphasise that the organisational script should be looked at as more of a metaphor, rather than assuming the organisation is an actual sensing and thinking body. An organisation is a social construct, and the actuality is that individual people are operating in fairly predictable and patterned ways, to achieve some agreed common purposes through some kind of contract. Using metaphors is a way of gaining extra insights (Hewson and Turner, 1992). Jongeward (1976) reports that in her observation, the most powerful force in forming the script of many organisations is the personality, will and script of the founder. How that individual operated, how that person related to others, what life goals he/ she held, what parent tapes he / she followed are all likely to be eventually solidified into what is commonly known as company policy- both written and unwritten.. Once these dramatic patterns are set, they often remain in spite of a turnover in personnel. It is however not uncommon for a new charismatic leader to take over the organisation and revitalise the place by influencing the organisation's script with his/her own script. As per Barker (1980) authority and formality are two important dimensions to consider when studying organisational scripts. As far as authority, the more authoritarian an organisation is, the more Critical Parent it will be in its behaviour. Conversely, the more participative and collaborative the organisation (less formality), the greater the emphasis on Adult- adult and Free Child- free Child transactions, and the greater the permission for staff to develop, learn , explore and innovate. He also mentions that some organisations can find it very difficult to change to a participative style of organisation, if adequate structures, help and time are not allowed for all concerned to relearn and cope with the change. Organisational scripts tend to influence the type of Life position the organisation holds and this also affects the way individuals working in the organisation communicate with others internal and external to the organisation. The flow of messages within and between organisations is affected directly by key variables inherent to the organisation (e.g.: size, structure, purpose, history, environment and so on). Communication between two people or within small groups can rely on nonverbal variables such as facial expressions, tones of voice, or physical touch (Goldhaber, 1976). Goldhaber, further adds, that while there are many interpersonal situations in organisational communication, there are also times when hardware, large audiences and

written media are used. Hence, he reported three propositions inherent to organisational communication:

1. Organisational communication occurs within a complex open system, which is influenced by and influences the environment.
2. Organisational communication involves messages, their flow, purpose, direction and media.
3. Organisational Communication involves people, their attitudes, feelings, relationships and skills.

Transactional analysis can be used in organisational settings if these propositions are understood. This research focuses on buyer- supplier transactions and primarily on the aspects of game-like behaviour and situational strength, hence if Transactional analysis is to be used in this study organisational communication as described above needs to be studied. Organisational communication as defined by Goldhaber (1976): “ *the flow of messages within a network of interdependent relationships*” can also be used for playing games both on an individual level and organisational level. But game playing in organisations is destructive and waste energy, time and money. The time spent on games may be critical in terms of the reduced quality and effectiveness of relationships and work (Unhelkar, 1999).

When it is said that games are being played in organisations or between organisations, it is an explanation of the games played by individual human beings with each other and on an inter-organisational level, by being representatives of the organisation. The description of games that are played “by organisations” as entities with each other, has not been recorded. The nearest explanation for these can be found in the concept of the “Law and order” game put forth by Shaffer (1970). The Law and Order game is a game societies play with each other. Shaffer (1970) reports that using societies instead of people in games has an initial difficulty in that societies do not communicate as equals. But they do engage in complementary transactions, the difference being that one society has a monopoly on force. The subordinate society’s advantage is a sort of natural cohesion; it functions well and that, rather than the management of force is usually its playing strength. Each of the players inhabits roles, which correspond to Berne’s Parent- Adult- Child roles. The difference is that the roles are not equal- the subordinate society’s Parent role is not equal

to the dominant society's Parent role, it is merely complementary. If this reasoning is transferred to the scenario of Buyer – supplier transactions, it is logical to say that the attributes of the players, described in the Law and Order game match the attributes of the transacting entities in buyer- supplier transactions (game-like behaviour).

1. societies do not communicate as equals..... one society has a monopoly on force: This is true in the case of supply chain relationships. *Either the buyer or supplier in most of the cases, has a monopoly on power and controls the relationship.*
2. The subordinate society's advantage is a sort of natural cohesion; it functions well and that, rather than the management of force is usually its playing strength- *This again explains the clubbing together of suppliers in order to get into a powerful position with the buyer.*
3. The difference is that the roles are not equal- the subordinate society's Parent role is not equal to the dominant society's Parent role; it is merely complementary- *This is also true of the buyer- supplier relationship, the dominant entities Parent in the buyer- supplier relationship will always wield more power than the Parent of the other transacting supply chain entity.*

Although, logically it looks as if it appropriate to study buyer- supplier transactions using the framework of the “Law and Order Game”, it is not in the scope of this research to study the aspect of organisations as entities and hence, the games that they play with each other. The focus of the research is on the experience of the individual human beings in the supply chain transaction. At a later date, it would be a worthwhile exercise to study “Games that Organisations Play” using the frameworks set out by the “Law and Order Game”.

4.5 Transactional analysis of Buyer-Supplier Games

Power difference between collaborators is one main stimulus to ulterior transactions, and possibly also games. The collaborator with less power may often comply with the wishes of its more powerful supplier or customer but it may also try to exert its own power in what it considers to be a safe way and in an indirect manner typical of ulterior transactions. Games are more likely when there is a clear dominance imbalance. To study the Psychological aspects of the supply chain relationship , it is necessary to view the

organisation in a different way

What happens in the communication transaction between interacting companies in the network is not clearly known? Here, it seems that the Transactional Analysis technique may be used although not in quite the manner conceived by Eric Berne (1964). In TA, a game is an ulterior set of transactions usually with a negative pay-off which reinforces script messages of at least one of the participants. Certainly, the assumption is that games in the Berne sense may occur between individuals inside the company and between the buyer and supplier, particularly, for the weak situation. However, the patterns of ulterior transactions in the supply chains are not quite the same as the Berne games because they are carried out as strategic moves by both companies and have an effect upon their long-term survival.

For transactions between companies, the aim is to win – or perhaps to reaffirm - dominance and gain advantage or counteract some others' dominance. So what the outsider may perceive as being a negative transaction, which produces a negative payback is actually *essential* for many businesses, and enables them to maintain their power base and their dominance.

The researcher believes that the techniques of Transactional Analysis can be used to model these interactions. Transactional Analysis applied in the weak situation involves script messages coming from the *parent adult* or *child* states of the individual. These correspond to the *parental* injunctions, the “should” and judgments, whilst the *adult* is factual and not loaded with feeling and the *child* is emotional and feeling. According to Transactional analysis people can speak from a number of script positions namely I'm OK You're OK etc. In the weak situation it is individual pathologies that has the most significant importance and determine the response patterns. In the strong situation, in its purest state, the organisation pathology will be dominant. Berne extended his work to the organisation defining the etiquette, the character and the technical culture. In the strong situation the organization procedures and rules defines the stages and verbal patterns of the transaction. Using Transactional Analysis the transactions can be depicted using the Parent-Adult-Child Model. From the research by Fox (1975), every firm or group has three aspects; the technical culture, etiquette and character. The technical culture is the Adult or rational aspect and consists of whatever scientific or technical knowledge and skill is required to carry out the group activity. The etiquette is the Parent or traditional aspects of group

culture; it enforces the social contract and provides form to the group process. Character, (Child) the emotional part of the culture, consists of those behaviours permitted by the etiquette. Fischer (1993) describes the job of the organisational Parent to set policies and behavioural rules. It takes information from its external environment and internal systems and transforms it into policies and behavioural rules for the adult and Child. This theory is also put forth by Blakeney (1983), wherein he says that organisations are open and social systems. They interact with the external environment. They take in energy inputs (stimuli, in TA terms) and use internal processes and structures (ego states) to transform them and make energy outputs (responses). He also proposes that every system is comprised of sub-systems each having ego-states. This means that when two firms in the supply chain transact, the PAC of the Purchasing of one organisation will transact with the PAC of the Marketing of the other transacting organisation. In reality most industrial situations will involve some directive from the company intermingled with response patterns from the individual. The organisational script and the individual script will interact depending upon respective powers and dispositions. No individual is going to completely accept the company injunction about behaviour, and in most cases the company would not want this, however in some situations ambiguity in behaviour and decision-making must be removed. In many cases the individual interacts with a strong situation attempting to make it weak and give themselves more latitude of decision-making.

In many respects in the working environment the individual interacts with his own organisation and both attempt to manipulate each other to get what each desires. The main interest in this research has been some verification of the existence of games. Early industrial examination of the relationships has tentatively confirmed that sometimes-opportunistic behaviour does take place and also often particularly in problem situations where one party needs to win then some form of game does take place. Rather looking at these games from a mathematical sense as in game theory the major interest is with the psychological transactions and whether the technique of TA can be used as a reasonable modelling tool to represent the pattern of transactions. In TA terms a game has a definite sequence of activity typically involving a pattern of transactions, a switch, for example, where victim becomes persecutor and a negative pay-off for one of the parties. In our sense a game may not involve all these stages but may involve a regular patterns of interaction some corresponding to the Berne games, some being collusive in nature and some simply being a regular repeating patterns of transactions that this person or

organisation frequently exhibits under the same stimulus. The assumptions are that for the weak situation the game set is largely specified and controlled by individual personality whilst for the strong situation the interaction between the person and the organisation is more complex and the organisation controls to a greater extent the transaction patterns between collaborators. These games in the strong situation can be called organisation games. The organisation game set is likely to be still part of the repertoire of games defined by Berne but they form a unique set that is strongly influenced by the organisation rules and procedures about behaviour preferences.

4.6 Individual or Organisational games

In examining inter-organisational games the researcher is concerned with interpersonal and professional transactions in supply chains, transactions which are motivated by good intentions for the organisation and maintained by the honest endeavours of people but may in the longer term result in lowered trust between participating organisations and damage future transactions. There could be a debate as to whether the games being played are individual or organizational. Berne, wrote that the individual is willing to resign his own games in favour of playing it the group's way. In Transactional Analysis Berne defined many games that occur in various situations. These games depend upon life-scripts and learnt patterns of behaviour and have pay-offs that confirm life positions.

Whenever companies or individuals interact, there is bound to be some relationship pattern. Sometimes, this may be dysfunctional and need some action to improve it. At other times, it may lead to highly productive relationships. The extent to which the relationships can be planned and controlled is difficult to define. A highly-regulated company will probably have set procedures for handling negotiation, and this will result in a strong situation. Some companies may have relatively low levels of trust within their respective organisations and, as a consequence, higher levels of regulation, Ackroyd et. al. (1998). Such firms are also likely to impose high levels of regulation upon their less dominant partners.

The behaviour between individuals in the organisation or when they are acting as proxy for the organisation involves transactions of primarily verbal communication. However, behind this communication there is a significant element of psychological message. In addition, the verbal communication can become abusive and loaded with feeling itself

(Krone, et al., 1987). Language games are used by organisational actors to disguise their political intentions to mobilize support and provide opposition (Pfeffer, 1981). Various games have been raised for example “making out” games to compensate for loss of control over the labour process (Burawoy, 1979). Such behaviour is not clear and predetermined with fixed objectives but it is rational to opportunities and to the behaviour of other actors with respect to the decisions they make. For example an individual may enter an organisation with every intention to be productive but may be pressurised to behave in certain ways and limit their work output. They have to choose the strategy to adopt to stay productive or join in the group game and risk sanctions if they do not. These organisational games exist within the company between individuals and groups. They also occur between collaborating organisations. Inherently the complex issue of power is involved; power that may shift and move as the game is played so that the one that started as the dominant partner may not be the dominant partner at the end of the game.

In the organisation people exist in a complex network of games somewhere they are the victim of the game and some they strategically manipulate to their own advantage. In many respects how they progress within the organisation and gain power depends upon their skill to strategically manipulate the games to their advantage. Games can exist as surface phenomena which are political games that provide surface context defining the frame of reference for the individual in the organisation (Culbert and McDonough, 1980) such as networking and ingratiation to achieve empire building. The games can be intra-organisational between groups and between individuals and the dominant coalition. For example, “them and us” games. Or the games can be deeply embedded inside the organisation representing the social reality of the organisation and not always within the conscious knowledge of the participants. They are designed to maintain power balances. A further discussion of these levels of games is provided by Frost (1987).

4.7 Limitations and assumptions for using Transactional analysis

Earlier, in the chapter, a case was made for the application of transactional Analysis to buyer- supplier game-like behaviour. It is not so easy as it sounds, as there are a number of limitations and assumptions that the researcher has to rely on :

1. The games depicted in Transactional analysis are mainly repeating patterns of ulterior mechanisms conducted by individual human beings to get the required psychological pay-off. This theory is transcended to individual human beings, but not so much in their personal private context, but more in the context of organisational behaviour. Hence, the researcher has to assume that the patterns of ulterior mechanisms if not repeating in exactly the same fashion, are committed for a definite pay-off, which may or may not be psychological.
2. In transactional analysis terms, games are played by individuals in an unconscious frame of mind, i.e. the individuals are oblivious to the fact that they are playing the game, but are more concerned with the psychological pay-off, and may or may never realise that the pay-off they received after a transaction was due to the game play they were involved in. In this research, the game-playing is a very conscious commitment and the players know what they are getting into. The behaviours are planned and played. Hence, if argued this may not be an appropriate application of Transactional Analysis. To support the assumption of using Transactional Analysis for analysing game-like behaviour between supply chain entities, the researcher refers to the description of Psychological games given by Scott, (1976). According to Scott, psychological games always include (1) a hidden meaning, (2) a set of repetitive moves, (3) a switch or unexpected turn of events, (4) a predictable payoff. In terms of TA, this is valid for each entity involved in the game, whereas in supply-chain game-like behaviour all the above mentioned attributes are present, but are experienced in a different way. To explain, consider (1) hidden meaning- for the entity, which initiates the behaviour, there is no hidden meaning, but for the entity on the receiving end, there is a hidden meaning to the transaction; (2) a set of repetitive moves- this could be experienced by both entities depending on the ability to react to a situation; (3) a switch or unexpected turn of events- for the receiving entity, the switch or unexpected turn of events will be felt strongly, whereas for the party initiating the behaviour will brace themselves for the event; (4) a predictable payoff- for the entity initiating the behaviour the payoff will be predictable.
3. The major assumption for using transactional analysis is that since humans are involved in the transactions, it can be assumed that humans will show some

psychological behaviour even though they are playing a very structured and planned game.

4. One of the most important assumptions is that the use of Transactional analysis for this research will be restricted to using the modelling capabilities to represent transactions and analysing game like behaviours as depicted by researchers (Hewson and Turner,1992; Goldhaber, 1976; Summerton,1993; Barker,1980, etc.) who have studied the application of Transactional Analysis in organisational settings.

4.8 Research Questions

The discussion in this chapter raises a few questions which need further study to understand the original research focus of studying the supply chain transactions and relationships from the human perspective. These research questions are shown below:

Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?

This is an important aspect to study, as it provides insight into the reasons for individual behaviour in intra- and inter- organisational communication. Whether individuals are depicting a certain kind of behaviour because of the situational context (strong or weak) is important to know as it shows the influence organisational culture can have on the individual. Also, another factor that may be affecting individual behaviour and how the transactions are held could be the power relations in the organisations, translating to whom and to what extent an individual has to report to.

Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?

This chapter presented a brief synopsis of Transactional analysis and the different components comprising this theory. For this research, the essential components are the aspects of Transactional Analysis games, their analysis, and the representation of transactions using transactional diagrams. Hence, one of the important questions arising

out of the study is whether these components can be applied to study and explain the dynamics of the supply chain transactions. Where the power struggle between buyers and suppliers gets manifested in game-like behaviour, can they be represented using the transactional diagramming method used in transactional Analysis.

If the games arise from the individual or the organization, is this contingent upon the strength of the situation?

This research question pertains to the aspect of situational strength and the effect it has upon supply chain transactions. The aspect to study is that, if the transactions between buyers and suppliers get manifested in to game-like behaviour, does the strength of the situation decide whether this behaviour is on account of the representative individuals or due to the organisation,

4.9 Summary

The discussion in this chapter has provided the reader some understanding about Transactional Analysis, and the importance game- like behaviour has in terms of supply chain relationships. Also, the importance of Human discretion in these relationships has been discussed, followed by the presentation of three research questions for further study.

Chapter 5

Research Direction

Aim: The aim of this chapter is to set a direction for the topics studied in chapter four. The chapter presents the evolution in thinking for using the tools and concepts studied in the previous chapters, and also presents a concept map which tries to bring together the different concepts cohesively.

5.1 Introduction

The previous chapter set the tone for the further study of the concept of Transactional Analysis in the field of buyer- supplier relationships. Even though the researcher has tried to convey the various concepts in the realm of Transactional Analysis, it is still not clear to the reader how these concepts will actually be used. The researcher thus sets out to depict the use of the concepts in this and the next chapter using data derived from the previous stages of interviews and literature cases.

This chapter presents a concept map for studying buyer- supplier relationships and transactions. The concept map takes into consideration some of the concepts introduced in this thesis in the earlier chapters. Transactional Analysis provides a valuable insight into the process that underlines these transactions and relationships and has been included in the analysis of buyer-supplier relationships. The reader should bear in mind, that as said earlier, it is very difficult to validate the use of Transactional Analysis in buyer- supplier settings, unless it is done hands-on and the researcher has been present to actually witness the event, which has not been possible in the case of this research. Hence, the other method was to understand the transaction as it happened and interrogate it from all possible angles in order to get a rich picture. The use of transactional Analysis in this setting has been taken at face-value accepting transactional Analysis to be a validated tool in itself and hence accepting its use in these settings. Also, it has been used by various researchers Jongeward (1976); Goldhaber (1976); Hewson and Turner (1992); Barker (1980); etc. in organisational settings, and this provides some basis for use of this valuable tool in buyer-supplier settings.

5.2 Development of the Concept map

As seen in Chapter 2; Supply chains are being researched through different angles. Different researchers and companies are focussing on various aspects of the chain. A considerable amount of study has been done regarding Buyer- supplier relationships. Vendor-assessment programmes; Partnership theories; Buyer- supplier Co-operation; etc. have given a fair representation about how the interactions occur between the two entities. Most of these studies on buyer supplier relationships have focussed on studying either the issues of logistics or finance or in present days, information sharing. The aspect of studying the human elements in these relationships considering game-like behaviour and discretion and the effect that has on Inter-organisational relationships is the novelty of this research. To get a comprehensive understanding of the different concepts studied in chapter two within the context of this research, the researcher has used the technique of developing a “concept map” or “conceptual framework” as described by Miles and Huberman (1994). According to them, a conceptual framework explains either graphically or in narrative form, the main things to be studied- the key factors, constructs or variables- and the presumed relationships among them. Frameworks can be rudimentary or elaborate, theory-driven or commonsensical, descriptive or causal.

An important element in the relationship process is communication. The researcher has proposed that communication in the supply chain relations takes place in three different scenarios: stress, negotiation, and day-to-day. A stress communication occurs when a dispute or problem arises and there is a possibility of a win-lose situation. It is believed that situations of stress or general business negotiation are likely to lead to the occurrence of organisational games. In situations of stress, most companies will adopt a strategy to win or at least minimise the damage to them, and the ability to wield some power, combined with strong-situation, where the organisation dictates transaction policy, leads to the potential for organisational games. A similar situation of winning and losing occurs in negotiation and again, games are likely but the patterns of transaction will be different from those occurring in stress situations.

The figure 5.1, below depicts the different stages of communication occurring between supply chain partners and the different situations under which games may be played.

Situation Strength	Day-to-day	Negotiation	Problem – Stress
Strong	Mainly it will be adult to adult transactions here. Unlikely to be much difference between voice and exit strategies.	There is potential for group games. Probably more likely with voice strategy. Exit strategies are probably still adult to adult.	Here there is potential for Group based games. This is particularly true for voice strategies. Exit strategies are more likely to result in crossed transactions.
Weak	This is unlikely to be much different to the Strong situation.	There is potential for individual games – particularly in voice situations.	Projection of blame may result using standard TA games.

Figure 5.1 : Patterns of communication

The concepts studied in chapter two were structured using the concept map approach. The concept map is shown in Figure 5.2 and as depicted in the figure, the concept map is a compilation of the thinking and research by Cox et. al. (1999, 2000, 2001), Hirschman (1970), Helper (1995), Mischel (1977) and Mullins et. al.(1999) and aims to determine whether regular patterns of communication take place between collaborating and transacting companies. The concept map is very important in terms of this research as it brings together different concepts into a structure that provides an important insight into the processes occurring in the relationship. The transactions or game-like behaviour depicted is the culmination of the relationship process, which further affects how the relationship will be conducted in the future.

The thinking behind developing the concept map is as follows. When conducting the EPSRC project jointly with Liverpool University (discussed previously in the thesis), the aspects of market and demand pressures on Supply chain management were studied in depth and this lead to the researcher focussing on the aspects of the pressures on the transacting entities to confirm to perceptions of performance (Harland, 1996) and level of interest each entity have in the other. These factors play an important role in deciding who has power in the relationship and this is supported in the literature by Cox, et. al. (2000, 2001, 2002) when discussing power structures in supply chains and the four different power regimes, viz. Buyer Dominance, Supplier dominance, Independence and

Interdependence. The analytical framework developed by Cox recognises that although power advantages might often not be explicitly exploited in buyer-supplier interactions, the

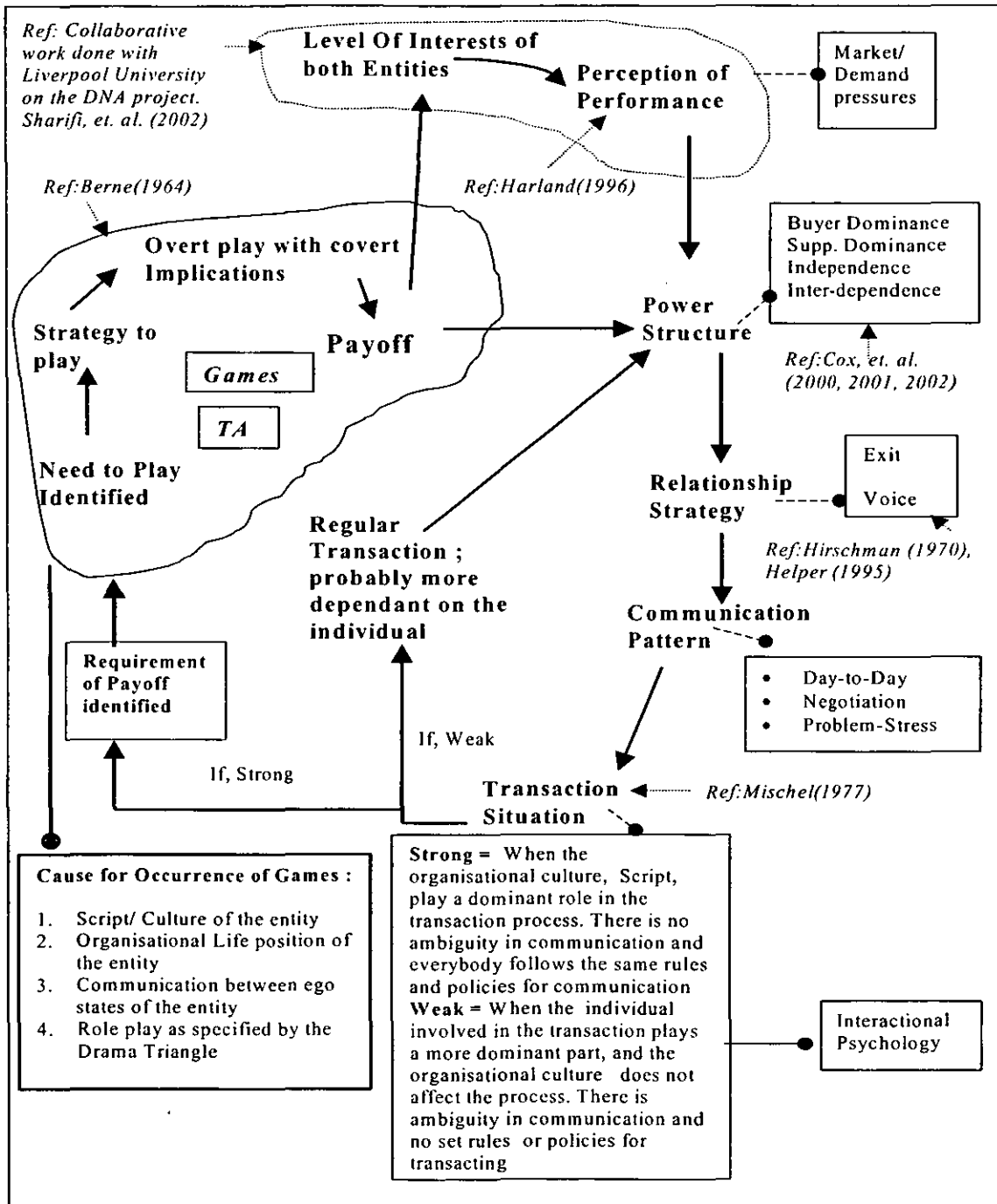


Figure 5.2: Concept map for depicting psychological behaviour between supply chain entities

very existence of a power imbalance conditions buyer and supplier behaviour. They contend that power does not become any less important to an understanding of buyer-supplier relationships simply because it is not exercised. Whenever companies or

individuals interact, there is bound to be some relationship pattern. Sometimes, this may be dysfunctional and need some action to improve it. At other times, it may lead to highly productive relationships. The extent to which the relationships can be planned and controlled is difficult to define.

The power structures seems to suggest that in terms of dominance and independence the dominant entity may or may not amicably find solutions when issues crop up in the relationship, but in situations of interdependence the entities in the relationship always strive to find solutions to any issues in order to keep the relationship working. The aspect of entities trying to make or break the relationship has support from the research conducted by Helper (1995) using the concepts of exit and voice proposed by Hirschmann (1970).

The researcher has previously proposed in this section that the communication patterns for conducting the relationship will vary as per three situations: day-to-day, stress or negotiation. Hence the power structures and the use of exit or voice will have a profound effect on how communication is conducted during any of three situations.

Once the communication pattern is known it is also important to know who will be conducting the transaction and at what level. The concept of situational strength (Mischel, 1977) gives further insight to this issue of whether the individual conducts the transaction on his own or conducts it as per the guidelines set out by the organisation he/she is representing. In this case, if the situation is strong then the individual conducts the transaction as the organisation wants it to be done, whereas if the situation is weak then the individual is free to conduct the transaction as per his own personality. The exact form of the transactions depends upon the strength of the situation and the learnt patterns of behaviour, which have been developed either within the organisation (strong situation) or by an individual who has autonomy to decide on interaction communication (weak situation). In addition to the comparative power between collaborators the commitment to resolving any problems is also important. In this research the concept of the voice and exit strategies is used. Voice participants are generally members of an inner-group that argue out and negotiate problem situations whilst exit strategy participants generally exit the relationship when serious problems emerge. An exit strategy is often used by a buyer when it has a wide range of supply alternatives and it is not committed to purchasing from a particular supplier. The derived concept map incorporates power difference, voice and exit

strategy in addition to the concept of situation strength. A weak situation is one where there is some ambiguity and latitude in defining the rules of the relationship and consequently interacting people have significant discretion in deciding the transaction patterns. This is in contrast to a strong situation where the discretion for the individual in decision making is less and the transaction pattern is strongly influenced by the rules of the group or organization. The transactions may vary across each value stream inside a company or there may be a consistent policy for all the value streams. A pervasive power culture, a large defensive company, a highly-regulated company will probably have set procedures for handling negotiation, and this will result in a strong situation as defined by Mischel (1977) where company policy dictates the transaction process. Some companies may maintain relatively low levels of trust within their respective organisations and, as a consequence, higher levels of regulation, Ackroyd et. al. (1998). Such firms are also likely to impose high levels of regulation upon their less dominant partners.

Companies try to utilise as much power as they can in situations and change dependency relationships in ways to maximise their advantage. For example:

1. A relatively small supplier has a large part of its business dependent upon one customer who, by virtue of its power, is able to define the rules of the interaction partnership to its own benefit as well as defining the supplier's benefit. However, a supplier will probably try to reduce its dependence upon a particular customer by diversification, and then it may be able to acquire leverage with its customer to achieve better benefits. In this case, the less powerful has attempted to increase power to achieve greater benefit and less risk from the dominant partner.
2. A supplier exploits a negotiation situation by first accepting the price targets set by a more powerful buyer, and then attempting to exert its own power by technically locking-in the buyer with, for example, significant investment in the supplier's tooling and methods, so that switching costs would be prohibitive for the buyer. Then the supplier may be able to reverse the power balance to some extent to adjust the pricing situation to its own advantage.

The final aspect of the concept map stresses the use of Transactional Analysis and the concept of games as set out in Transactional Analysis (Berne, 1964). The concept map

suggests that the transaction may be conducted as a game by the entities in order to get the required pay-off. If the situation is strong then the pay-off is decided by the organisation and the game-like behaviour to be shown is also decided by the organisation. If the situation is weak, then the individual decides his individual pay-off along with the required organisational pay-off and depicts game-like behaviour as reported in the literature on Transactional analysis games. Using the terminology of Transactional Analysis (Berne,1964; Stewart and Joines, 1999), the concept map identifies the situations, which can produce such patterns. The patterns form the basis of what are called organisational games, drawing parallels with the individual games described by Berne(1964). An organisational game is a regular pattern of ulterior transactions between organisations, generally resulting in a negative pay-off for one of the partners. An ulterior transaction is a communication pattern containing psychological messages, which may not be consistent with the spoken communication. It is the assumption that the actual variety of these complex repeating patterns of games can be modelled using Transactional Analysis (TA) game theory. One of the beliefs arising from the concept map is that for the weak situation the game set is largely specified and controlled by individual personality whilst for the strong situation the interaction between the person and the organisation is more complex and the organization controls to a greater extent the transaction patterns between collaborators. These game like behaviours in the strong situation can be called organisation games. The organisation game set is likely to be still part of the repertoire of games defined by Berne (1964) but they form a unique set that is strongly influenced by the organisation rules and procedures about behaviour preferences.

Although the concept map depicts that the concepts have a direct relation between them in the transaction process, this has not been proved and is shown through intuitive reasoning based on the literature review of the concepts studied. It is not in the scope of this research to prove the effect of each concept on the other, but more to study the effect of power, exit – voice and situational strength on the game-like behaviour shown during transactions.

5.3 Where does this research fit in?

The aim of the research project described in this thesis was to investigate the inter-relationship and alignment of supply and demand networks from three perspectives namely

the physical/operational, the information/knowledge systems and the relationships /behaviour that take place between collaborating partners. The research was carried out over an eighteen-month period and was supported by the UK's Engineering and Physical Research Council (EPSRC) as a collaborative project between the Universities of Liverpool and Loughborough. Through case studies carried out in the automotive, machine tool and food manufacturing sectors, models of the interactions of the demand networks operations' variables and their alignment issues have been proposed and tested. These models have been combined into a DNA like representation of an intermeshing network of two strands each contributing to the quality of the supply and demand network system (Sharifi, Kehoe, Burns, et. al. ,2002)

The alignment of the physical/information system is modelled as a continuously evolving DNA strand. Similarly another equally important strand is suggested in the proposal which represents how interpersonal and inter-organisational relationships interact with the physical structure of the supply chain. With the combination of these two interconnected and intermeshing strands, a new presentation of the DNA structure of demand networks which in this case stands for Demand Networks Alignment has been depicted.

The physical/information strand schematically illustrates the causality between the various elements of the system - market demand, product characteristics and business goals - aligned to the strategic and operational characteristics of the demand network - the information, , and logistical systems including transportation and storage systems and their locations. The causality in the relationship strand defines how the transacting companies in the demand network communicate with each other. The patterns of communication proposed between collaborating partners form the basis of what are called organisational games.

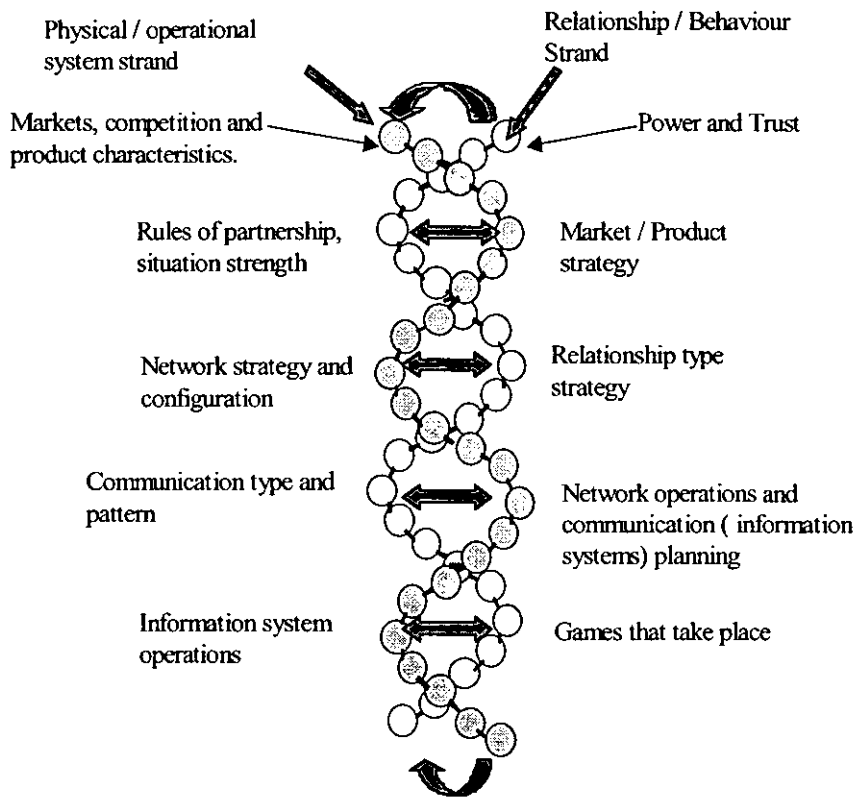


Figure 5.3: Demand network Alignment (adapted from Sharifi, Kehoe, Burns, et. al. ,2002)

The two strands were developed simultaneously by the Universities of Liverpool and Loughborough and validated through a number of case studies. The suggestion of a double helix effect within which the two main systems of a supply chain work interactively to create, develop and manage the demand network was basically generated from observations from the case studies. The case studies in particular provided convincing evidence of the effects on the structure and operations of a supply chain of the power distribution and relationships within the supply chain. The ownership of the supply chain in terms of knowledge, technology, finance and market, and the power these advantages confer could, and evidently have, affected the structure of the supply chain. However, ownership and power have not necessarily been beneficial either to the whole supply chain or to the owner. The onset of game playing can result from the misalignment of the supply chain from this point of view.. Furthermore, these behavioural aspects have been found to have a severe effect on the structure, performance and hence success of the supply chain.

5.4 The Research Fit

The researcher has tried to familiarise the readers with the basic concepts studied in this research and how the thinking has evolved around the research domain. The research aim has been mainly exploratory, to explore whether there are other dimensions to buyer-supplier relationships other than the ones already studied by various researchers around the globe. Hence, the discussion in this thesis has been revolving around a few sets of data depicted in chapter 3, as the researcher feels that the amount of data is not so important in this context as much as the information coming out of it. The concepts studied have been brought together in the concept map earlier in this chapter, but something more is needed to use the concepts in a defined manner. The researcher now will present his perspective on the relationships and provide a framework which he feels describes the psychological process that underlines these buyer-supplier relationships.

The concept map, as described earlier in the chapter has been a very important milestone in this research as it brings together various concepts in one logical flow. It has also been remarked earlier that proving the exact relationships between the concepts is not in the scope of this research. However the concept map has proven useful in developing the DNA structure for supply chain alignment. The concept map was a representation of the relationship approach to alignment, which was incorporated into the DNA structure by combining it with the research done at Liverpool University. The most interesting part of the concept map is the depiction that there are many factors affecting the relationship, and also that all these factors interplay to affect the individual human beings in the relationship. The concept map provides a linear flow between the concepts, whereas the DNA structure links up the various stages in the concept map to the issues of physical alignment as put forth by researchers at Liverpool university. The concept map and the DNA structure provide evolutionary processes to study supply chain alignment. The focus of this research has been identified as studying the effect of these concepts on individual and organisational behaviour, hence there is a need to focus more on the processes that occur after the concepts have played their part. Hence, if the concept map (fig. 5.2) is referred to again, the study needs to focus on the part of the concept map, which highlights the behavioural aspects of the relationship. This is primarily the aspects of game-like behaviour and whether the behaviour is conducted by the organisation or individual. This has been transferred to some extent in the DNA structure wherein if the reader follows

figure 5.3, it will be clear that in the relationship strand of the DNA structure the process starts at the power and trust level following through to game-like behaviour and in turn aligning with the various stages in the physical strand. The game-like behaviour culminates the relationship process and then the next set of processes start again with the power and trust level. The DNA structure thus depicts the alignment between the physical and relationship strands and that the game-like behaviour is just the start for another relationship scenario.

Neither figure spells out what exactly happens when the behaviour has been conducted. There is therefore further need to study the after effects of the behaviour on the relationship. This does not undermine the importance of the concept map and the DNA structure but adds to that knowledge by going one layer deeper into the processes to figure out the underlying processes occurring between the need for game-like behaviour and the next stage of power play. This has been proposed in figure 5.4, The figure uses the same concepts as depicted in the concept map, but where the concept map depicted the processes occurring for one organisation, figure 5.4 depicts two organisations and the interactions occurring between them. It focuses on the game-like behaviour and the result of the behaviour, when depicting that power, situational strength and exit-voice strategies play important roles in achieving the desired result of the behaviour.

The philosophy behind studying transactions and the relationship behaviour stems out from the following figure 5.4. As seen in the figure, the outcome of the game-like behaviour brings out a change in the power structure of the relationship. It is not always that there will be a change of power, but sometimes the status-quo in the relationship remains and the relationship just progresses as it is, until a change is sought by the other party. In terms of the buyer-supplier relationships, the entity, which does not get the required outcome, stays dissatisfied and tries to get the change done. The duration of time in between the two events is mainly filled with distrust, bad feeling and on a personal level- resentment. As seen earlier in the thesis, one of the requirements for studying these game-like behaviours is that these behaviours will lead to a spiral of distrust, which will further lead to a disintegration of the relationship. It is not always that each entity in the relationship will strive for partnership or collaboration. The reason for being in the relationship for some entities would be to get as much as possible out of the relationship without considering the interests of the other entity.

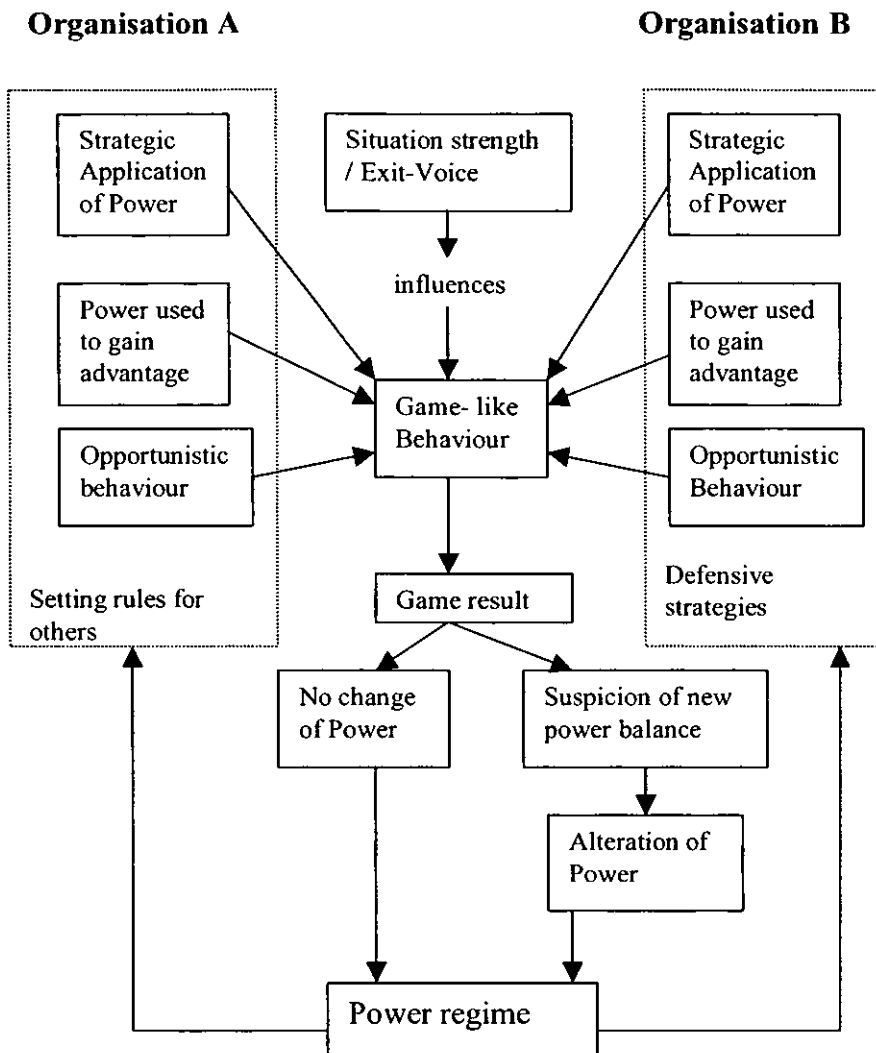


Figure 5.4: Dynamics of the transactions and relationship between supply chain entities.
 (Organisation A or B could be either the buyer or supplier in different situations)

This is particularly alright if that is what the entity stands for or in other words that's what its strong situation strength suggests. This research does not discuss or suggest whether it is beneficial for buyers or suppliers to have collaborative relationships or strive towards transparency or partnership, nor does it say that it is good to exert power in the relationship. This research does the task of presenting the various scenarios that occur between buyers and suppliers and the underlying processes governing these scenarios. Also, suggested are some pointers for buyers and suppliers to move towards partnerships. These pointers are not suggested as the only solutions for achieving partnerships or collaborations, nor are these in anyway presented to undermine the already published and

future work that so many esteemed researchers are already conducting in this field. The suggestion merely tries to use the vast literature available and present some additional pointers from the perspective of this research.

In this research it is assumed that in a weak situation individuals involved in transactions adopt patterns based upon their own predispositions, maximising their own power, access to information, or political influence. In contrast in a strong situation the organisation or group provide strong guidelines and sanction people if they depart from the guidelines. In the strong situation the organisation ensures that a certain behaviour results when a stimulus occurs. The organisation may do this because it needs controlled and predictable responses for safety reasons or to minimize damage resulting from a problem, or to guarantee particular performance levels. However, in both strong and weak situations the relationship between the individual predisposition for behaviour and the prescribed behaviours preferred by the organisation is complex. People with certain trait patterns will seek to maximise their own situation regardless of the strength of the situation others will prefer to work in environments having particular situation strengths and they will seek employment in companies offering these conditions. A framework for these interactions between individuals in collaborating organisations is shown in Figure 5.4. The figure depicts the process of two organisations transacting in a supply network relationship. The power regime (Cox, et al., 1999) network entities will decide how the game is played and the aspects of power coming into play. The effect of situation strength will decide whether the persons representing the organisations play their own game or play the organisation's game.

Looking back at the figure, after the game-like behaviour or transaction occurs, the entities view the event from their own perspective, particularly interesting is the research done by Harland (1995,1996), on customer dissatisfaction. The underlying processes that provide some reasoning to the behaviour can be explained with recourse to the Klein's goal orientation motivation model (Arnold et al., 1998). The researcher speculates that this depiction of the process represents particularly the way people interact across a network of organisations in a distribution or supply chain. When the Klein's goal orientation model is modified it depicts the internal processes as they occur within the organisation as the organisation plays the game with the transacting organisation in the supply network. The reasoning as said above uses the Klein's Goal orientation motivation model where the goal

of the organisation is to gain the competitive advantage or the critical resource or profit or simply justify its evolutionary script. The goal leads to behaviour which is the game playing, the result of the game is then compared with the set goal and if there is no error then the organisation knows the best strategy to fulfill its goal and continues the same behaviour. But if there is an error, then two steps are possible:

- 1) if the situation is familiar to the organisation the organisation knows the right processes from its previous experiences, and so unconsciously it responds in that script and tries to fine tune the process until it can achieve the goal.
- 2) if the situation is not very familiar, then the organisation based upon effect of variables such as power regimes, situational strength etc. will try to either change the goal or if that is not possible will try to change the behaviour in order to achieve the set goal.

The effect of situation strength will decide whether the organisational dispositions effect the persons in their behaviour or their personal dispositions. This has in no way been validated as a separate model of buyer-supplier behaviour, but is merely a speculation, which provides the reader some understanding at individual organisational level. This process may be perfectly right or in fact may not be a valid representation for the behaviour, but it provides a valuable perspective for the decisions taken by the organisations after the transaction is complete. This research will not delve on this reasoning in detail as the objective of this research is not the processes of achieving decisions , but more of deciding what next to do once the decisions are taken.

Looking at the outcome of the event, it is thus assumed that each entity queries the event in the following way; (this is an assumption and is not in any way proof of what entities actually do, but it is logical to consider the following questions:

1. Did the transaction proceed as required?
2. Was the pay-off (outcome) received as required?
3. Do we want to change the pay-off or the way the transaction is conducted?

Considering how this research has developed and assuming that both buyers and suppliers will have their respective perspectives on the transaction, the researcher hence forth

presents the new perspective to these relationships. It is suggested that in the buyer-supplier relationship four scenarios could exist:

1. The Buyer is satisfied, Supplier is dissatisfied.
2. The Supplier is satisfied, Buyer is dissatisfied.
3. The Buyer and Supplier, both are dissatisfied
4. The Buyer and Supplier, both are satisfied.

Buyer's level of satisfaction with relationship	High	Buyer Dominance <i>Exit I</i> Buyer is satisfied, Supplier is dissatisfied	Interdependence <i>Voice IV</i> Buyer is satisfied, Supplier is satisfied
	Low	Buyer is dissatisfied, Supplier is dissatisfied <i>Exit II</i> Independence	Buyer is dissatisfied, Supplier is satisfied <i>Exit III</i> Supplier Dominance
		Low	High
		Supplier's level of satisfaction with relationship	

Figure 5.5: The Relationship Matrix

The Relationship Matrix presents the relationship scenarios in four quadrants. Even though the relationship scenarios look similar to the framework developed by Cox, et. al. (2000) , it does not in any way undermine the importance of the original framework and supports it by adding another dimension to the study of buyer-supplier relationships.

The four quadrants signify four different scenarios occurring at different times in the same relationship. The matrix presented is also a tool to gauge the future of the relationship. At face value, the framework looks to be very simplistic and may raise doubts in the minds of the reader whether it has any real value. The researcher thinks that the tool is not meant to be a clear-cut solution for a relationship problem, but more of a starting point for further diagnosis of the relationship. It is suggested that the use of this matrix is done more for

deciding the future of the buyer-supplier relationship which spells out some suggestions for achieving it.

Some of the questions that may arise when a buyer or supplier organisation decides to use the tool for gauging the future of the relationship are:

1. Is the Organisation willing to form partnerships?
2. Are the individuals willing to follow strict policies for dealing with the other entity?
3. If the organisation is willing to go for Interdependence, are individuals in the organisations playing their own games and acting as an hindrance to this activity?
4. If the organisation is not willing to go ahead with the partnership, what are the consequences of the relationship?

These questions are important from the perspective of relationship strategy and formulating the roadmap for achieving the strategy. The researcher thus suggests the following use of the framework:

Every entity in the relationship is bound to have a perspective on how the transaction occurred. This has been shown earlier in the chapter and the four scenarios have been suggested. These four scenarios as modelled in the framework suggest that entities will accommodate themselves on one of the quadrants of the framework. Once this initial position is sought, then starts the strategy to move to the desired quadrant to get desired pay-off. The complexity increases and the game-like behaviour increases when both entities have a different agenda and each is trying to get the desired output according to Porter's model (Porter, 1998), the buyers and suppliers will try to gain as much advantage as they can from the relationship, hence the outcomes will differ and the strategies too. The only consensus when the movement will lead to the same quadrant is for partnerships. This can be represented by the fourth quadrant, where both parties are interdependent upon each other and thus are in a state of partnerships. This may seem very simplistic in explanation when compared to the different types of relationships set out by Cox, et. al. (2002), and partnerships would be described in a different way, but the underlying logic of referring to the fourth quadrant as a partnership quadrant due to the level of interdependence is sufficient for this research. As the tool is used further and specific strategies are obtained,

the reference to Cox's work would be an advantage. These strategy movements could be depicted as below:

No movement	the entities are satisfied with the outcomes and the quadrants they are in, so they will not be any movement.
Quadrant I >>>> Quadrant III	The buyer is satisfied , but the supplier is not, hence the buyer tries to maintain status quo, but supplier tries to shift the outcome to that of quadrant III, in order to get into a more powerful position.
Quadrant I >>>> Quadrant II	The buyer is satisfied and supplier is not , the buyer tries to get rid of the supplier and hence has to move into quadrant II, which spells out that buyer is not satisfied with the relationship, the supplier maintains status quo.
Quadrant I >>>> Quadrant IV and Quadrant III >>>> Quadrant IV	The buyer and supplier both move towards the Fourth quadrant, of interdependence. This has to be done by both the entities and the result is a partnership. As the framework suggests, the situation leads to a voice strategy, wherein both entities amicably sort out differences and try to maintain the partnership.
Quadrant III >>>> Quadrant I	The buyer is not satisfied , but the supplier is . Hence the supplier tries to maintain status quo, but buyer tries to shift the outcome to that of quadrant I, in order to get into a more powerful position.
Quadrant III >>>> Quadrant II	The Supplier is satisfied and buyer is not , the supplier tries to get rid of the buyer and hence has to move into quadrant II, which spells out that supplier is not satisfied with the relationship, the buyer maintains status quo.

Quadrant II >>>> Quadrant IV	This is a major task as both the entities are not satisfied in the relationship and they have to make an extra effort to revive the relationship, and move from independence to interdependence.
Quadrant IV >>>> Quadrant II	This movement is also a major step as both the entities decide to move out of the relationship. Voice strategy changes to exit.
Quadrant II >>>> Quadrant I	The buyer decides to move to Quadrant I and gets his outcome and position of power, supplier stays in position of dissatisfaction until the next move.
Quadrant II >>>> Quadrant III	The supplier decides to move to Quadrant III and gets his outcome and position of power, Buyer stays in position of dissatisfaction until the next move.
Quadrant IV >>>> Quadrant I	The buyer decided to move out of the partnership to a more powerful position.
Quadrant IV >>>> Quadrant III	The supplier decides to move out of the partnership to a more powerful position.

Figure 5.6: The movements (quadrant- hopping)

As seen above, the table sets out 12 movements, which will occur in these relationships. The movements as suggested above are the individual decisions taken by the buyers and suppliers probably in a proactive or reactive mode. Hence, it is difficult to comprehend how the decisions are taken. If the decisions are taken in a proactive mode, then the buyer and supplier will decide their strategy or movement without taking into account the decisions taken by the other entity. Whereas, if the decision making process goes into a reactive mode, then the situation would be like a game of chess, where each entity knows its strategy map, but also plays only after the other entity has made its move. If the decisions are taken in a reactive mode, it may be easier for the researcher to comment on the scenarios, but if the decisions are taken in a proactive mode, the situation gets complex and it is difficult to predict how the transaction will culminate. The relationship, if not exited will progress through a series of different movements until both entities are satisfied with the state of the relationship.

The researcher will now explain each movement in more detail,

1. **No movement** : In this situation both entities are satisfied with the result and are ready to continue in their present situations. For both entities to be satisfied with the result, (it could be any quadrant), the entities have analysed their environments are aware of their strengths or weaknesses, their power positions and are willing to maintain the status quo. If the situation is of quadrant IV, the situation of good partnership, both entities are happy about the relationship, and using voice strategy try to maintain the relationship. If the entities are in quadrant II, the entities have agreed to exit the relationship, and are not ready to reconcile or get back again in the relationship. If the entities are in quadrant I and there is no strategic movement, it suggests that the buyer is powerful, and the supplier knows it and agrees to that relationship. The supplier knows that this is the only way it can survive and so maintains status quo. Is the entities are in quadrant III, the supplier is powerful, and the buyer knows the power position and is willing to maintain status quo to stay in business.
2. **Quadrant I >>>> Quadrant III** : In this scenario, the supplier is not satisfied with the outcome of the relationship or transaction. The supplier wants to get back into his position of power or at least try to get as much advantage out of the relationship. The movement will be conducted by using any of the strategies put forth by various researchers for supplier power, striking is the work conducted by Porter (1998). Also, looking at this movement from the perspective of this research, the supplier may try to conduct game-like behaviours depicted in chapter 3 to gain a powerful position or gain advantage in the relationship.
3. **Quadrant I >>>> Quadrant II** : In this scenario, the buyer wants to exit from the relationship, hence will try to move to the quadrant, wherein the buyer shows dissatisfaction with the supplier. The supplier is already in a dissatisfied state and so it is easy for the relationship to end. The relationship will keep going only if any one of the entity makes an effort to rejuvenate the relationship. Also, looking at this movement from the perspective of this research, the buyer may try to conduct

game-like behaviours depicted in chapter 3 to exit the relationship and move into quadrant II .

4. **Quadrant I >>>> Quadrant IV and Quadrant III >>>> Quadrant IV** : This scenario is of working towards a common goal, and having a complete voice relationship. It is of creating a situation of interdependence wherein, it is in the interests of each entity to stay in the relationship and make an effort to keep it that way. The movements have to be done on the part of both entities. It is a major step, wherein both entities without paying attention to their power positions, (the power positions may still be prevalent based on other factors viz. size of the company, profitability, technology, etc.) try to instil governance mechanisms as reported by Jap (2001) and other researchers (Powell, 1990; Heidi, 1994), in order to achieve the stage of interdependence. It is a major task, as each company has to move from its level of satisfaction and think about the satisfaction of the other entity in the relationship. This movement calls for the elimination of game-like behaviour. If the buyers and suppliers have to achieve this, they have to get into a strong situation mode, wherein organisational policies will clearly spell out the elimination of unethical behaviour and create strict rules of transaction as agreed by both entities and would be followed by employees from both organisations. It is essential for organisations conducting this movement that they eliminate individual game-like behaviour as explained in chapter five. This is essential so that individuals adhere to the strong situation and do not try to make it weak on the individual level so that they can indulge into psychological games to get their required pay-offs. It is thus suggested that organisations willing to conduct these movements, also look into the employment of the right people into positions wherein the individuals have to transact at an inter-organisational level. If individuals working in these positions are indulging into game-like behaviour they should be sent for training or if it is serious than if the individual agrees to sign a psychological contract, get them to meet a Transactional Analysis practitioner.

5. **Quadrant III >>>> Quadrant I**: In this scenario, the buyer is not satisfied with the outcome of the relationship or transaction. The buyer wants to get back into his position of power or at least try to get as much advantage out of the relationship. The movement will be conducted by using any of the strategies put forth by various

researchers for buyer power, striking is the work conducted by Porter (1998). Also, looking at this movement from the perspective of this research, the buyer may try to show game-like behaviour as depicted in Chapter 3, to gain a powerful position or gain advantage in the relationship.

6. **Quadrant III >>>> Quadrant II** : In this scenario, the supplier wants to exit from the relationship, hence will try to move to the quadrant, wherein the supplier shows dissatisfaction with the buyer. The buyer is already in a dissatisfied state and so it is easy for the relationship to end. The relationship will keep going only if any one of the entities makes an effort to rejuvenate the relationship. The supplier may use any of the instances of game-like behaviour depicted in chapter 3 to exit the relationship and move into quadrant II.

7. **Quadrant II >>>> Quadrant IV**: In this scenario, both the entities are dissatisfied with each other, hence the easiest option out is that of exit, but the other option which is difficult, but not impossible will be that of creating interdependence. As shown earlier the movement to the fourth quadrant is about creating the interdependence by instilling governance mechanisms, and eliminating game-like behaviour. In the previous movement to the fourth quadrant both parties were willing to move even when one of them was in a state of satisfaction and power, hence it took quite an effort on the part of the powerful entity to create a real partnership. In this case, both parties are dissatisfied, hence it is the final attempt on their part to reconcile and try to achieve interdependence before they can exit. This again calls for instilling governance mechanisms (Jap, 2000; Powell 1990; Heidi, 1994) and eliminating game-like behaviour through creation of a strong situation for employees working in functions having inter-organisational transactions.

8. **Quadrant IV >>>> Quadrant II** : This scenario though not a common one, might exist if for some reason the two entities decide to call it a day and exit the relationship. This is a very difficult movement, directly from a state of interdependence to independence and will have a lot of financial implications involved. The researcher feels that the movement will occur over a period of time, but will be in stages, wherein the entities will try to move from Quadrant IV to

Quadrant I (buyer getting the power), or to quadrant III (supplier getting the power), followed by the movement to quadrant II in order to exit.

9. **Quadrant II >>>> Quadrant I** : In this scenario, the buyer moves from a position of dissatisfaction to position of satisfaction. The movement is in terms of the buyers game-like behaviour to get back the power position by depicting dissatisfaction to the supplier and taking hold of the transaction on its own terms and conditions.
10. **Quadrant II >>>> Quadrant III** : In this scenario, the supplier moves from a position of dissatisfaction to position of satisfaction. The movement is in terms of the suppliers game-like behaviour to get back the power position by depicting dissatisfaction to the buyer and taking hold of the transaction on its own terms and conditions.
11. **Quadrant IV >>>> Quadrant I** : In this scenario as described previously, the buyer decides to move out from the state of partnership and interdependence to position of buyer dominance.
12. **Quadrant IV >>>> Quadrant III** : In this scenario as described previously, the supplier decides to move out from the state of partnership and interdependence to position of supplier dominance.

As explained above, these movements affect the relationship and eventually will determine the longevity. The relationship matrix has still not been validated in industrial settings. However, the researcher will try to provide some further explanation about the use of the matrix using a few instances from the interview data. This is in no way a thorough validation and should be seen as an initial analysis of the proposed relationship matrix. These cases are explained in the next chapter. The researcher has also not sought to use the case-study approach for this exercise as the information available is not extensive. It should now be clearer to the readers that this research was not conducted with the objective of proving any particular theory or concept, but was more geared towards exploring the vast knowledge surrounding buyer-supplier relationships and figuring out whether there was still a small piece missing from the puzzle.

5.5 Summary

In this chapter the researcher presented his framework for studying buyer- supplier relationships and in this process has sought the use of established concepts in buyer-supplier relationship literature. It has been suggested that the established theories and concepts could be used once the initial understanding of the relationship is sought by using the proposed framework. The next chapter presents some explanation of the use of this framework by referring to interview data.

Chapter 6

Making sense of the Research

Aim: The aim of this chapter is to investigate whether the ideas depicted in chapter 5 could be put to practice. The chapter presents the information in the format of a few case-studies to depict the use of the information derived from this research.

6.1 Introduction

The researcher has explained the concepts of Transactional Analysis and the use of Transactional Analysis for studying buyer-supplier relationships. As set in the initial stages of this research, the aim was to have a better insight into buyer-supplier relationships and not the detailed study of game-like behaviour, the discussion about game-like behaviour has been restricted to chapter 6, and henceforth game-like behaviour will be discussed as one element of the relationship issues in buyer-supplier relationships. In chapter 5, the researcher presented a concept map which brought together the different concepts presented by the researcher in the previous chapters into a cohesive framework highlighting the process of the relationship. Generally, what is seen in a relationship is the then and there transactions, and the insight behind that transaction is lost. The researcher has tried to capture that insight in this research, and presented the buyer-supplier relationship scenario as a process of various concepts and perspectives which finally culminate into the game-like behaviour. This makes the study of game-like behaviour paramount not only in its individuality but also as the culmination of the transaction through the different processes. Not every process or perspective will be used for each culmination, hence the objective of this part of the study is not only the game, but to try and explain the dynamics of the transactions using the concept map, fig. 5.4, and the relationship matrix proposed in Chapter 5. This involves studying the most common game-like behaviours and back-tracking the transaction and deciphering the reasons or perspectives for the behaviour.

6.2 Initial Proposed Methodology

The concept map depicted in fig. 5.2 was an important start to the study of the concepts affecting supply chain relationships. The concept map provided insight into the possible process occurring in any organisation when it transacts with another in a supply chain relationship. The concept map though not validated on its own (as explained earlier) provided a fertile ground for focussing the study on the behavioural aspects of the relationship and the implications of the behaviour towards the future of the relationship. The dynamics of the behaviour are depicted in fig. 5.4, which represents two organisations transacting with each other. The concept map and fig 5.4 highlighted the aspects of the transactions, but the information about the motives for the transaction was missing. This led to the development of the relationship matrix (fig. 5.5), which depicts the motives for the transactions based on levels of satisfaction of the two transacting entities, as well as the outcomes of the transaction. The concept map and fig. 5.4 fit in between the motives and the outcomes. Hence, together these three figures depict why the transactions are conducted , how they are conducted and what happens after the transactions are over.

The researcher proposes a methodology, which he has named as being the “Initial Proposed Methodology” to study the transactions and the behaviours occurring in buyer-supplier relationships. The methodology takes into account the knowledge generated about buyer- supplier transactions taking into account the three above mentioned figures. The methodology is used to analyse buyer- supplier transactions and hence their relationships. The methodology consists of three stages to analyse the transactions. The third stage is a subset of the second stage , and needs to be used only in certain conditions. The methodology is shown in fig. 6.1. The three stages of the methodology provide analysis of the relationship using a transaction and showing how the relationship changes over the time frame of the transactions, the actual dynamics of the transaction and the effect the humans have in the transaction and also the effect the transaction has on the humans.

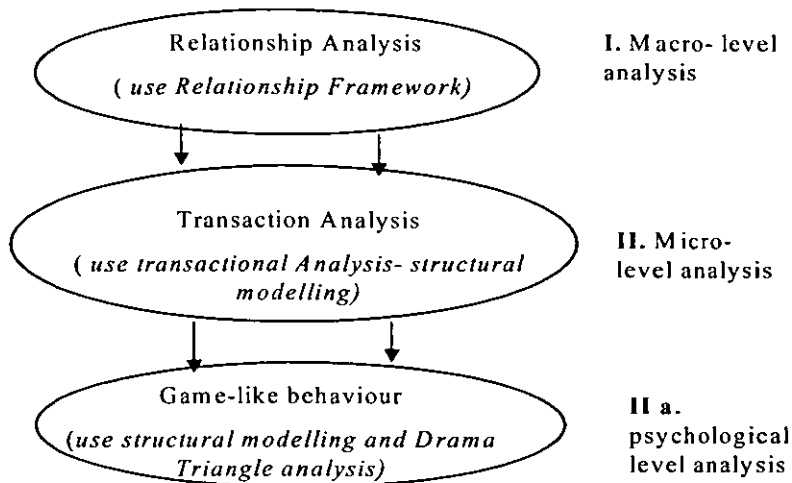


Figure 6.1: Initial proposed methodology

As seen in the figure, there are two stages in the methodology : 1) Macro- level and 2) Micro- level. The Micro-level stage has an additional sub- stage, which is the psychological- level analysis.

I] Macro- level analysis: The initial phase of the analysis is not an analysis of the dynamics of the transaction, but more of the relationship. The transaction forms a cause for the effect it has on the relationship. The relationship framework looks at the changes in the relationship on a macro level. The analysis begins with determining the quadrant in which the relationship was prior to the change inducing transaction. This is done by looking at the level of satisfaction the buyer and supplier have with the relationship. This information can be found out by communicating with people working in the purchasing and sales departments of transacting companies. Also, if the number of transactions (game-like behaviours or change inducing) occurring between the entities has a high frequency it would suggest that both entities are dissatisfied and keep trying to achieve a better level of satisfaction with each transaction conducted. When the transaction occurs, the levels of satisfaction change and hence the relationship status changes, which is represented by the change in quadrant. The final outcome of the transaction leads to the final levels of satisfaction and this decides which quadrant the relationship status ends in after the transaction completes. When the transaction is being conducted, the relationship may go through several quadrants before ending in one quadrant for some time before another transaction from either entity changes the status quo. Also, since each transaction may

have its own time frame for completion, sometimes the relationship may be in one quadrant momentarily, and sometimes if the transaction is taking weeks, months or even years to complete, the relationships may be in specific quadrants for longer times.

IIJ Micro-level analysis: This step of the analysis looks at the micro level dynamics of the transaction. It studies each stage in the transaction from the perspective of Transactional analysis to gauge how the humans involved are conducting these transactions and the psychological underpinnings of their actions when subjected to strong or weak situations. This stage depicts the dynamics of the transactions using the structural modelling capabilities of Transactional Analysis.

IIaj Psychological – level analysis: This step of the analysis comes into existence only when the transactions depict game-like behaviour which alters the power status of the entities after the transaction is conducted. For example: The buyer is in the persecutor mode and controlling the relationship with its power while the supplier is in the victim mode. When the transaction completes, the supplier gets power over the buyer and hence the supplier switches to persecutor mode as it starts controlling the relationship and the buyer moves to the victim mode. As described above, if the transactions brings about this switch, then the dynamics of the transactions are studied using the method of Drama Triangle Analysis.

6.2.1 Using the methodology

The concept map as discussed in the previous chapter includes different concepts, which have been brought together to study the processes underlying the buyer-supplier relationship. Most of these processes will have no direct validation for the cause and effect of their processes in this thesis. But most of these concepts have a vast reference base associated with them and it was not in the objectives of this research to study these concepts, but more to use these concepts as they have been published in various literature sources and take validation at face value. The use of the concept of exit/voice in conjunction with the concept of power regimes, has been done through the use of intuition during the literature review. Hence, validation has not been sought for it. The idea behind the use of these concepts is more about presenting a new insight than validating whether certain processes occur to a certain degree or not. Other researchers who would be interested in validating the processes through statistical means could take up the validation.

This may change the concept map in the future, but as this research presents it in a more intuitive form, the research presents a valuable starting point for further academic work in this field. Looking back at the most common transactions in buyer-supplier relationships which are termed as game-like behaviour and which are to some extent the cause of discontent and conflict in the relationship, this process map is generic and the reader would have to look at each transaction as given in chapter five and use that information to decipher each transaction. In this chapter the researcher has presented the usefulness of the initial proposed methodology by attempting to explain a few cases (interview data and literature sources). This exercise will also try to give a reasonable answer for the research questions highlighted in chapter four. Since, the data collected in the first phase was in the form of critical incidents, some of the critical incidents will be used as data for this exercise. Each critical incident identified by the respondents will be considered as one case-study, as the objective of the exercise is to try and explain the dynamics of the transactions (critical incident). In terms of a sample the data set for this exercise does not present a pattern, but the researcher thinks that it is more important to figure out whether the framework is useful, than try and match the framework to a certain data set. Also, not all the cases are concerned with game-like behaviour, but more with depicting transaction and relationship dynamics.

In the next section, the researcher has analysed six cases using the initial proposed methodology generated in chapter six, and the Transactional Analysis concepts studied in chapter four. The procedure for analysis is depicted below:

Case Context: This section of the case presents information on how the data was collected for a particular case, the respondent and the interviewer for that case and any particular comments made by the respondent.

Transaction Synopsis: This section presents the particular transaction being analysed. It presents in brief the dynamics of the transaction. There is also detailed information in terms of behaviour shown by the entities and the outcomes.

Analysis : this section presents the macro-level analysis of the transaction, using the relationship matrix (fig. 5.5) proposed in chapter five.

Transactional Analysis modelling and Drama triangle analysis: This section presents, the micro-level analysis of the transaction, using tools derived from Transactional Analysis.

6.3 The Cases

6.3.1 Transaction 1: “Got You”

Case Context: The respondent in this case was the owner of the company. The company is a SME supplying crankshafts to a very large automobiles manufacturing company in India. The researcher contacted the owner for an interview, which was held in the premises of the company at 6.00 p.m. after office hours. The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The researcher explained to the respondent that he was studying buyer-supplier relationships and asked the respondent to describe his relationship as a supplier to the large automobile company. The respondent explained how the relationship was formed and the various investments done by the supplier company to build the complete operations of the company around the requirements of the buyer company. The researcher then asked the respondent about any issues or problems encountered by the supplier in this relationship. The respondent explained that in the past small issues were always sorted out on a personal basis between the respondent and the purchasing representatives of the buyer company. He also said that payment was a constant issue as the buyer company never paid on time. The researcher then asked the respondent to comment on the future of the relationship, wherein the respondent though not ready to divulge any more information relented and explained to the researcher how the buyer company was changing its supply strategy, which was going to affect the supplier company to a great extent and how the supplier company was thinking of dealing with the new development in the buyer-supplier relationship. This new development in the relationship has been analysed by the researcher below using the frameworks and Transactional analysis.

Transaction Synopsis: The supplier has invested in resources for the last 4 years and made a business surrounding the supply. The buyer is very powerful: so dictates, contracts only once, decides price and does not negotiate or re-contract later, the supplier has to abide with the buyers rules. Recently the buyer has decided to create a new supplier network with only two companies as first tier suppliers, then it will streamline previous supplier

network by de-listing a lot of suppliers abruptly without notice and force the remaining to act as second tier suppliers potentially reducing supplier margins. The buyer has a commercial stake in both the first tier companies.

Supplier Action: The supplier knows that the buyer is powerful, and that it will lose the supply contract within a years time, so due to the pressure and fear of losing out, the supplier has decided that it will attempt to increase its personal power. The Supplier has developed the ability to gain a power position. The supplier made parts supply indispensable, and then checked whether any competitors could deliver. Once it was known that there was no competition the supplier ramped up the price by 40%, which the buyer had to comply with for a short term as it did not want to stop the supply. The supplier meanwhile is looking out for other buyers and trying to integrate horizontally. The buyer will have to comply with the supplier process for a few months until it can develop a new supply source.

Analysis: Studying the information available for this case and using the relationship matrix, it is possible to ascertain that for some time, the relationship was in quadrant I, as the buyer was satisfied with the relationship and the supplier even though dissatisfied had agreed to the status quo. For a long time the relationship continued in quadrant I even though there were moments when the supplier would have voiced disagreement to the buyer, but eventually did not try to change the status of the relationship for fear of losing the business. The buyer decided to move the relationship to Quadrant II, when it asked the supplier to modify its position in the supply chain from a first tier to second tier thus reducing the supplier's margin. If the supplier did not comply it would be de-listed and the buyer and supplier would exit from the relationship. The supplier eventually knew that in a few months time it would have to exit as continuing the relationship was not financially feasible, so the supplier decided to change its strategy for the last few months. As written earlier the supplier-collected information about the buyer's other sources of supply for the product that it was supplying. On finding that it was difficult for the buyer to find a source of supply soon, the supplier decided to take the relationship to quadrant III by increasing the price of the product by 40% as it knew that the buyer had no other alternative. Thus for a few months the supplier was able to move the relationship to Quadrant III, but knew that eventually it is going to move to quadrant II, when the buyer finds an alternative source of supply and then ends in an exit relationship.

This analysis sounds rather simplistic, but if the reader would delve into the underlying processes in this transaction, there are elements of a power struggle, the use of resources to achieve maximum advantage, the use of porter's strategy and finally decisions based on exit-voice strategy which determines the health of the relationship. Also, as said earlier it is not the objective of the researcher to present the best relationship situation or critique on the disadvantages of certain relationship situations as stated in Carter (1998), Lamming (1995), etc. In this case two game-like behaviour are shown:

1. The first by the buyer firm, when it decides the strategy to make more money by changing the supply chain structure. Even though this may seem to have no direct psychological implications and look a very rational strategic move, it can still be modelled using Transactional Analysis. The psychological transactions are more of the covert transactions shown by the buyer in depicting its power position to the supplier.
2. The second game-like behaviour is shown by the supplier firm, when it sees that the buyer has no alternative to procuring the product and increases the price to get an advantage for a short duration. This again may look as a very rational transaction, but this has the underpinnings of a psychological transaction. The two game-like behaviours are actually parts of the complete transaction which starts with the buyer transacting from the parent mode, the supplier reacting from the parent mode thus making it a crossed transaction and then the buyer again getting control of the situation and ending it in the parent mode. This type of game-like behaviour has been noticed in various literature cases reviewed and interviews conducted by the researcher.

Quadrant I >>>> Quadrant II >>>> Quadrant III >>>>> Quadrant II

Transactional Analysis Modelling

1 As the buyer is a powerful entity, it is in a position to control the relationship. Hence, it has decided to streamline its supply base for strategic gains, but at a level of discomfort for the suppliers. The buyer then asks the supplier in the case to change status from first tier

supplier to second tier supplier. This is an adult to adult transaction and represented by 1. But it does send out an ulterior message, represented by 2, which says that we are powerful, and you better listen to us. (see figure 6.2)

2. The supplier does not accept this, but does not communicate about this to the buyer. The supplier wants to get back at the buyer, hence searches for a way to get even. The supplier recognizes that the buyer is dependent on it for the parts it is supplying. The supplier wants to exit from the relationship, but before doing that wants to get even with the buyer. Hence, the supplier ramps up the price of the parts by 40% and threatens to quit. This transaction occurs at an adult to adult level, represented by 3. The ulterior transaction is represented by 4, where the supplier has the power and represents “Got you”.

3 The buyer knows that at least for a short time, until it can create a supply base for the parts, it has to comply, hence accepts the price increase, which is again a adult to adult transaction and is represented by 5.

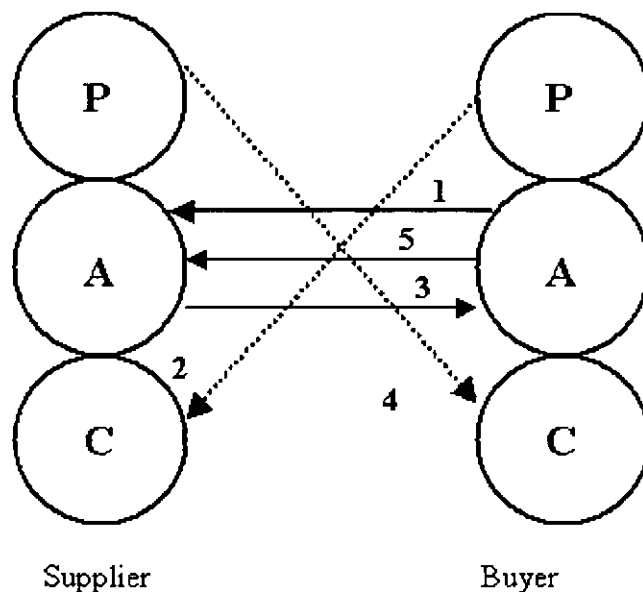


Figure 6.2: Got you

The behaviour depicted by the supplier in this case has been noticed in various forms the cases of suppliers using lock-in strategy or increasing the prices after the contracts have

been signed and the buyer becomes dependent upon the supplier for supply. The different methods have been discussed in cases 3 and 4 in this chapter.

Drama Triangle Analysis

This behaviour can also be studied using the Drama Triangle Analysis technique used in Transactional Analysis. The Drama Triangle Analysis technique provides a psychological perspective to the transaction. It is eligible only for transactions or behaviours, which have the capacity to be termed as game-like behaviours. For regular transactions, even though there may be crossed transactions, it is not necessary that a switch would have occurred in the roles being played by the two entities in the relationship. Hence, in the case of buyers and suppliers it is interesting to note the roles the two entities are in before the transaction or behaviour is conducted, and the roles they are in after the event. The switch of roles and the behaviour shown by the entities provides greater insight into the type of relationships the two entities have with each other, and what to expect in the future. For eg. A buyer may have a tendency to start the transaction in the rescuer mode, by offering various incentives to the supplier to start supply, and eventually as the supplier is locked in, the buyer switches it's mode to that of persecutor and changes requirements of the contract or adds some more conditions, which the supplier has to follow. By using the drama triangle analysis, the supplier can assume that it is the tendency of a certain buyer to move into the persecutor mode later in the relationships, hence, the supplier can make a decision either 1) not to enter into a relationship with the buyer, or 2) change it's behaviour so that it can gauge the moment of switch and pull the switch itself to get the upper hand in the relationship.

In this transaction, the buyer starts the transaction in a persecutor mode, wherein the buyer exerts its power, and the supplier takes the role of the victim, wherein it is less powerful and has to abide with the buyer's requirements. But as the transaction proceeds and the switch occurs when the supplier ramps up the price. The supplier knows that the buyer is completely dependent on it for the parts, the supplier switches from the role of a victim to that of the persecutor. The buyer now occupies the role of the victim as it has to comply with the supplier's requirements until it can create another switch to reverse roles.

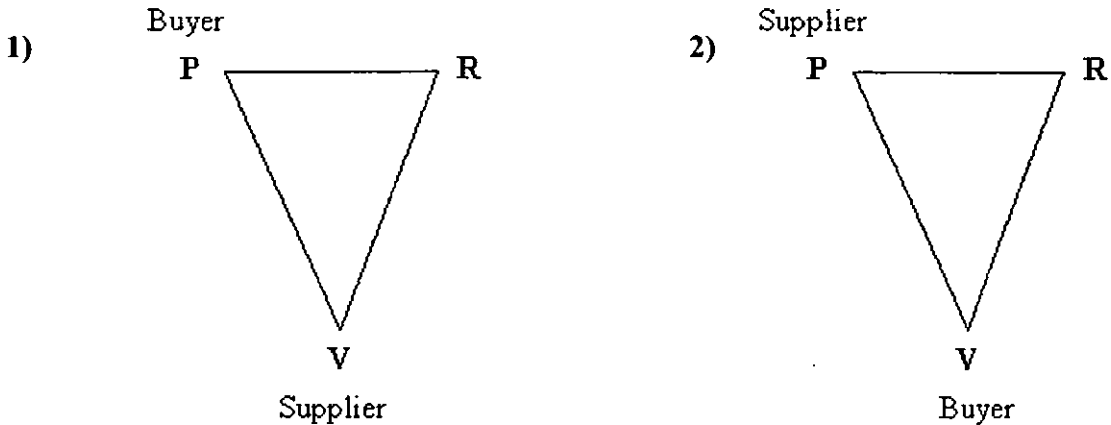


Figure 6.3 Drama Triangle analysis of transaction 1

6.3.2 Transaction 2: “Not Again”

Case Context: The respondent in this case was the owner of the company. The company is a distributor of Fast Moving Consumer Goods (FMCG), for eg: washing powder, processed food, tea, coffee, etc. in India. In this case the respondent’s company was in the role of a buyer. The researcher contacted the owner for an interview, which was held in the premises of the company at 11.00 a.m. The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The researcher explained to the respondent that he was studying buyer-supplier relationships and asked the respondent to describe his relationship as a buyer to the large FMCG company. The respondent explained how the relationship was formed and described the operations . The researcher then asked the respondent about any issues or problems encountered by the buyer in this relationship. The respondent explained that in the past small issues were always sorted out on a personal basis between the respondent and the sales representatives of the supplier company. He explained a few issues , which have been depicted in the transaction synopsis. The researcher then asked the respondent to comment on the relationship, wherein the respondent was more than eager to tell the researcher how the supplier company had suffered after the respondent’s company had severed relationships wit the supplier. The dynamics of this relationship has been analysed

by the researcher below using the framework and Transactional Analysis. The relationship does not suggest the presence of game-like behaviour, but the use of the framework and Transactional Analysis is useful in studying how the relationship changed over time.

Transaction Synopsis: In this case, the buyer is a distributor and the supplier is a very large Fast Moving Consumer goods manufacturer. The supplier in this case being the powerful entity ruled the relationship. On interviewing the owner of the distribution company, the information received was that the supplier being a big profitable multi-national firm exerted its power during all transactions. The distributor company virtually had no say in any transactions. The distributor company was dissatisfied with the relationship and would protest against the supplier's style of working. The distributor primarily was unhappy with the following scenarios:

- 1) Advance signed cheques were taken from the distributor.
- 2) Consignment contained material the distributor did not want and could not sell.
- 3) Distributor could not reject or send back unwanted material.
- 4) Payment to the supplier was done as soon as consignment was despatched and there was no credit given to the distributor.

The distributor finally decided to leave the supply network as margins were reducing and the supplier was too high-handed. After the distributor left the supply network, the supplier had to change distributors 6 times in 3 years as they could not set up a new distribution network. The supplier then asked the previous distribution company to join the network but the distribution company has found another supplier company and has refused.

Analysis: Studying the information available for this case and using the relationship matrix, it is possible to ascertain that the relationship was in Quadrant III for a long time, as the buyer was dissatisfied and the supplier being powerful exerted power to control the relationship and get the required pay-off. The buyer finally decided to move to quadrant II in order to exit the relationship. The only strategic move in this case was the exit, as the supplier company was not ready to move to quadrant IV and the buyer was not in a position to move the relationship to quadrant I. Hence, the buyer exited from the relationship after it was able to get a new supplier. Eventually, the previous supplier was unable to set up a new distribution network and approached the distributor to reconsider

and join the supply network. The supplier was now ready to take the relationship to quadrant IV or even to quadrant I, but the distributor company refused.

Quadrant III >>>> Quadrant II>>>>Quadrant IV or Quadrant I

Transactional Analysis Modelling

1. The Supplier is a powerful entity, hence controls the relationship as depicted in the transaction synopsis. Even though, the transactions are always on an adult- to- adult level, represented by 1, the ulterior message represented by 2, is that of power and that the supplier has to listen to buyer. (see figure 6.4)

2. The Buyer decides to quit the relationship, which it conveys in an adult- to- adult way, represented by 3. The supplier is in a powerful position and does not care that the buyer has left.

3. After a few years, the supplier approaches the buyer again, as it has failed in a number of attempts to create a robust distribution network. This is an adult- to- adult transaction (4). But the buyer is now in a powerful position, and even though it declines the offer in an adult- to- adult transaction (5), it actually sends out an ulterior message (6), saying that it is powerful, and the supplier will have to listen to it in the future if it decides to accept the contract.

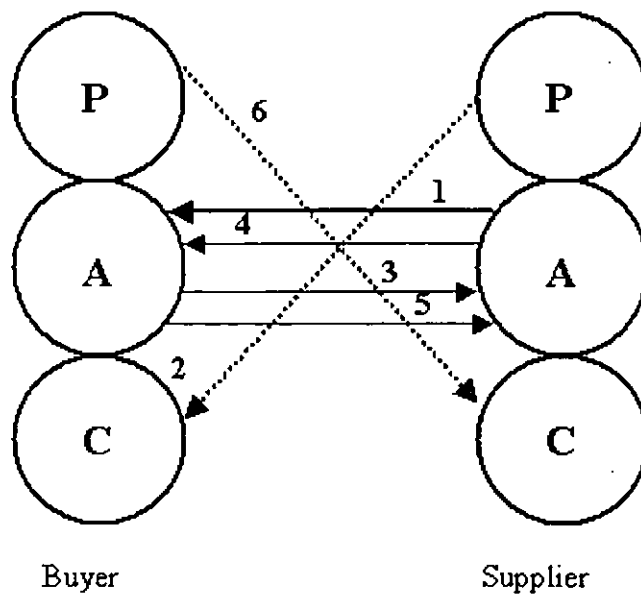


Figure 6.4 : Not Again

6.3.3 Transaction 3: you may be powerful, but . . .

Case Context: The respondent in this case was the sales manager of the company. The company is a supplier of driver control products in the UK automotive industry. One of the principal investigators of the “Supply chain alignment” project described in chapter one had a meeting with the respondent. During this meeting the interviewer briefed the respondent about the project and asked the respondent whether it was suitable for him to talk to the interviewer about the relationship his company had with the automotive buyer . The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The interviewer asked the respondent to describe his relationship as a supplier to the large automobile company. The respondent explained how the relationship was formed and the various investments done by the supplier company to build the complete operations of the company around the requirements of the buyer company. The interviewer then asked the respondent about any issues or problems encountered by the supplier in this relationship. The respondent explained that the buyer regularly forced them as a supplier to keep reducing the costs and at every contract renewal the price of the parts had to be reduced, which was not financially feasible for the supplier company. If they did not agree to this requirement from the buyer, they were warned that they may lose the business. The supplier in this case, used some game-like behaviour to get back into a powerful situation with the buyer and make the relationship financially viable for them. The researcher has analysed this information using the relationship framework and Transactional Analysis.

Transaction Synopsis : While negotiating for the business, the supplier agreed to most of the terms and conditions set by the buyer and entered into a long-term partnership at agreed and negotiated prices. Some time after the business relationship had been established, a lock-in situation had developed which tended to give the supplier more power. The supplier used objective reasoning backed by tools such as activity-based costing to justify a pricing increase. In this situation the buyer agreed when presented with the facts. The transactions took place over a significant time interval.

Analysis: Studying the information available for this case and using the relationship matrix, it is possible to ascertain that the relationship was in Quadrant I as the buyer was

satisfied with the relationship and the supplier even though dissatisfied had agreed to the status quo. The buyer is a large automotive manufacturer, hence is powerful and can dictate the terms of the relationship. The supplier tries to move the relationship to quadrant III. For this the supplier uses a strategy of lock-in. The supplier agrees to the terms and conditions of the contract during the negotiation stage and gets the supply contract. Later the supplier proves to the buyer using costing tools, that it is not feasible to supply at the contracted price and gives an ultimatum to the buyer either to increase the price or lose the supply. The buyer cannot afford to lose the supply, hence agrees to the supplier's demands. The supplier is successful in moving to quadrant III. The buyer regains its power position later when the buyer invites the supplier for an Electronic reverse auction when the next round of negotiations take place. This type of game-like behaviour has also been discussed in case no. 1.

Quadrant I >>>> Quadrant III >>>> Quadrant I

Transactional Analysis Modelling

1. Initially power seemed to reside with the buyer and the supplier agreed to all the requirements of the business at a reduced price in order to win the contract. A series of transactions occurred, associated with the negotiation and establishment of the contract. These were conducted on primarily an adult-to-adult basis, shown as transaction 1 in Fig. 6.5
2. After some time the supplier had become closely integrated into the buyer's product lines. The supplier considered that it was strong enough to ask for a price rise but it had to be based on some objective data. This is shown as the surface adult-to-adult transaction 2 with an ulterior message of 'now that we (the supplier) have more power, you have to pay more' shown as transaction 3.
3. A negotiation process took place and the buyer agreed to most of the price increase. On the surface this is the adult-to-adult transaction 4. However, at a later time it invited the supplier to take part in an internet auction for the supply of the parts, but the ulterior message was 'we will get you later' and this is represented as transaction 5.

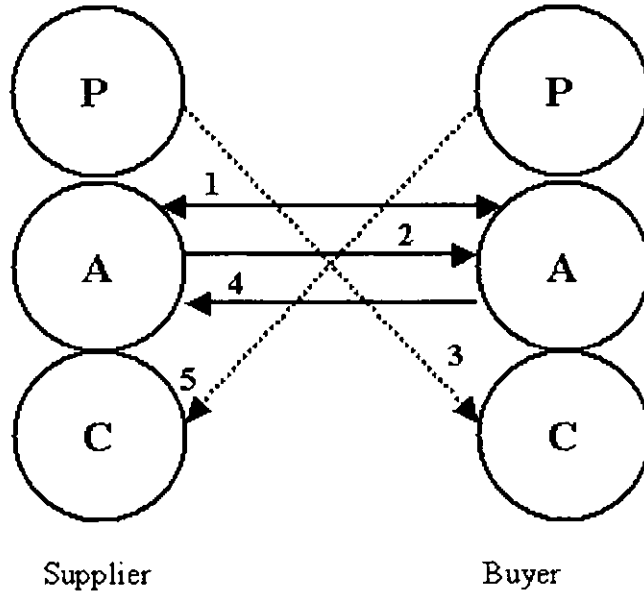


Figure 6.5 : you may be powerful, but.....

Drama Triangle Analysis

In this transaction, the buyer starts the transaction in a persecutor mode. The buyer exerts its power, and the supplier takes the role of the victim, wherein it is less powerful and has to abide with the buyer’s requirements. But as the transaction proceeds and the switch occurs when the supplier ramps up the price. The supplier knows that the buyer is completely dependent on it for the parts and is locked in the relationship, the supplier switches from the role of a victim to that of the persecutor. The buyer now occupies the role of the victim as it has to comply with the supplier’s requirements until it can create another switch to reverse roles.

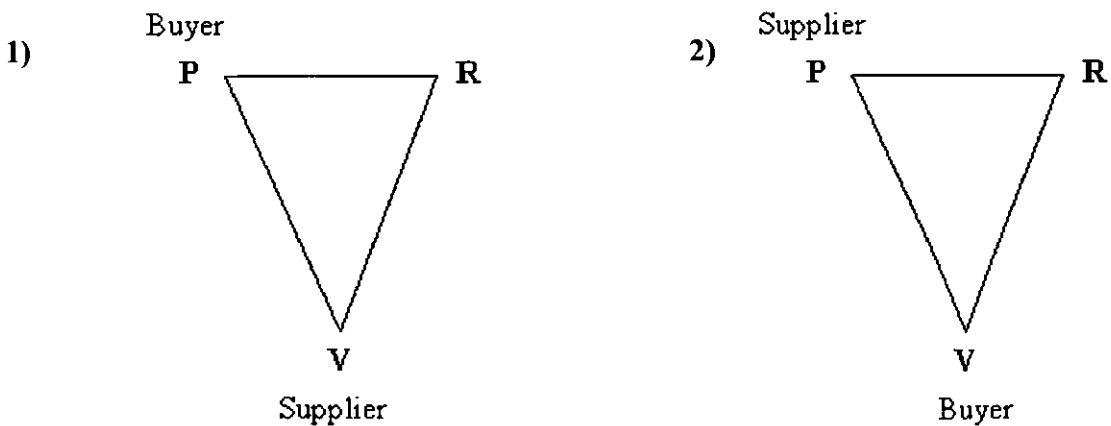


Figure 6.6 Drama Triangle analysis of transaction 3

The example demonstrates that the two companies use their perceived power to gain advantage. The game playing that was taking place was overall damaging to long-term relationships but maximized the benefit in the short term. The only solution seemed to expose the games and to encourage the two parties to act in a more interdependent style.

6.3.4 Transaction 4: Electronic reverse Auctions- The Loss Leader

Case Context: The respondent in this case was the purchasing manager of a large automotive company. The company is a manufacturer of automobiles in the UK. One of the principal investigators of the “Supply chain alignment” project described in chapter one had a meeting with the respondent. During this meeting the interviewer briefed the respondent about the project and asked the respondent whether it was suitable for him to talk to the interviewer about the relationship his company had with the automotive suppliers. The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The interviewer asked the respondent to describe his relationship as a buyer of a large automobile company. The respondent explained how the relationship was formed and that at the present time suppliers were given contracts through electronic reverse auctions. The interviewer then asked the respondent about any issues or problems encountered by the supplier in this relationship. The respondent explained there were some instances of game-like behaviour depicted when electronic reverse auctions were conducted. These behaviours have been explained below. The researcher has analysed this information using the relationship framework and Transactional Analysis.

Transaction synopsis: The electronic auction is an important new means of trading that has been made possible by the internet. It resembles a reverse bidding process where potential suppliers of goods or services compete with one another to offer the lowest price. A deadline on the bidding is imposed on suppliers all of whom can see each other’s bids on the internet. In many respects, electronic auctions change the rules of engagement in supplier to buyer relationships. The auction process apparently gives greater power to the purchaser, particularly enabling them to force down prices. However, in reality, suppliers develop new rules of engagement in order to find ways of exerting and developing their own power. Discussions were held with a number of buyers who do business by means of reverse auctions and they were asked to describe qualitatively how suppliers and

purchasers behave during the auction. Most of the auctions were conducted in a reasonable manner although they did not always realize the savings planned and they seemed to do little for longer-term trading partnerships. However, it does appear that suppliers do attempt to maximize their power in the relationship with the purchaser in order to maximize their own advantage. The situational strength in a reverse auction would appear to be strong in that the rules of engagement are defined and controlled by the purchaser and there is not much opportunity for supplier discretion other than deciding whether or not to bid and what price to bid. In discussions with a major producer of motor vehicles the following procedure was identified at the company:

1. The invitation to bid was issued and a pre-qualification process took place.
2. Only those capable of satisfying the quality and delivery requirements were invited to bid against a specification issued by the buyer.
3. The auction was limited in terms of time; generally the bidding was slow in the first half-hour but then speeded up as the time passed and the participants of the auction gained knowledge of the bid levels from the other participants.
4. As the deadline approached, the bidding accelerated, culminating in a frantic final 5 min as suppliers decide whether they are willing to reduce their price finally to win the contract.

The strategies adopted by the suppliers can be surprising and at first sight counter-intuitive. They are aimed at increasing their own power in relation to the other suppliers and/or the purchaser.

A variety of games have been observed, of which the Loss leader has been analysed below:

The Loss Leader : The supplier bids very low in the knowledge that, if it wins the order, the purchaser will be locked in and it will have to purchase spares and maintenance from the supplier. The supplier is making a strategic judgement about the value of the work based upon power acquired when the buyer's switching costs are high.

Analysis

Studying the information available for this case and using the relationship matrix, it is possible to ascertain that the relationship was in Quadrant I as the buyer was satisfied with the relationship and the supplier even though dissatisfied had agreed to the status quo. The buyer is a large automotive manufacturer, hence is powerful and can dictate the terms of the relationship. The buyer invites the supplier to an electronic reverse auction and the

supplier has to accept if it needs to keep the supply. During the auction the supplier realises that in order to gain a powerful position, first it will have to do something to get the contract. Hence, the supplier bids low (at a loss), and gets the contract. The relationship is still in Quadrant I, as the buyer is satisfied at getting the supply at such a low cost, and the supplier is dissatisfied as the supplier is making a loss. But in the long term, the supplier gets the powerful position, once the buyer is locked-in and the buyer now has to rely on the supplier for spares and maintenance. At this stage, the supplier is in a position to ramp up the price and make some profit. Hence, the relationship moves to Quadrant III. The buyer soon gets even with the supplier, when the buyer hosts another reverse E-auction and regains its powerful position.

Quadrant I>>>> Quadrant III>>>>>Quadrant I

Transactional analysis Modelling

A typical case that was modelled using TA for the loss leader is shown in Fig. 6.7. In this case the flow of information took place as follows:

1. The buyer opens the game by providing the opportunity for the supplier to bid for the work. Generally this was carried out as an adult-to-adult transaction, although in some instances, when the buyer exerted power, it was more parent- to- child. This is shown as transaction 1 in Fig. 6.7.
2. The buyer, which in this case had more power, specified the terms and conditions of the auction to gain maximum advantage. In that the buyer is setting the rules, this is shown as the parent-to-child transaction 2.
3. The supplier bids low primarily to win the order but with an ulterior motive of gaining control at a later stage when the buyer is locked into the supplier. At the social level the supplier responds from the less dominant position of child to parent, shown as transaction 3. However, there is an unspoken strategy in the supplier to gain some power at a future date.

4. If the game is played over a time period, then eventually the supplier will have some dominance due to the lock-in situation. If the supplier's strategy works, then it will at some future time gain power, enabling it to continue social communication as the adult-to adult transaction 4 while the ulterior unspoken message is parent-to-child transaction 5.

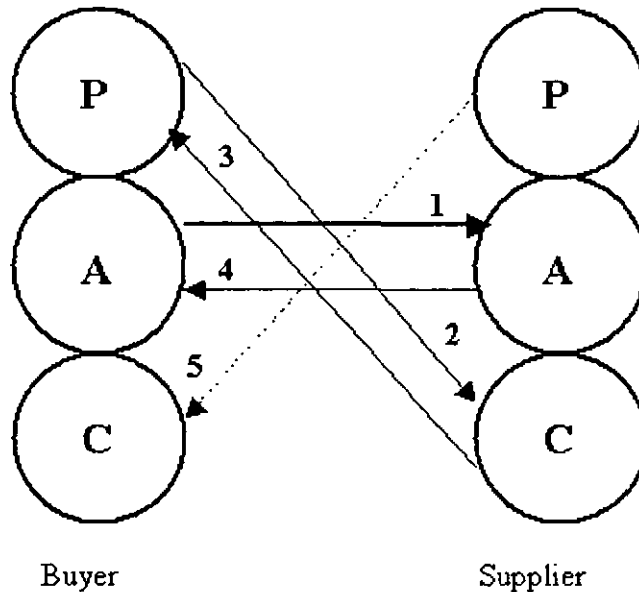


Figure 6.7: The Loss leader

Drama Triangle Analysis

In this transaction, the buyer first starts the transaction in a rescuer role for a brief period, wherein the buyer invites the supplier to bid in the auction. But very soon, the buyer turns persecutor, when the buyer exerts its power, and the supplier takes the role of the victim, wherein it is less powerful and has to abide with the buyer's requirements. The transaction proceeds with the supplier winning the auction by bidding low, as it wants to lock the buyer in the relationship. Later, when the buyer relies on the supplier for the spares and maintenance the switch occurs when the supplier dictates its terms and conditions and the buyer has to comply. The supplier switches from victim role to that of the persecutor. The buyer now occupies the role of the victim as it has to comply with the supplier's requirements until it can create another switch to reverse roles.

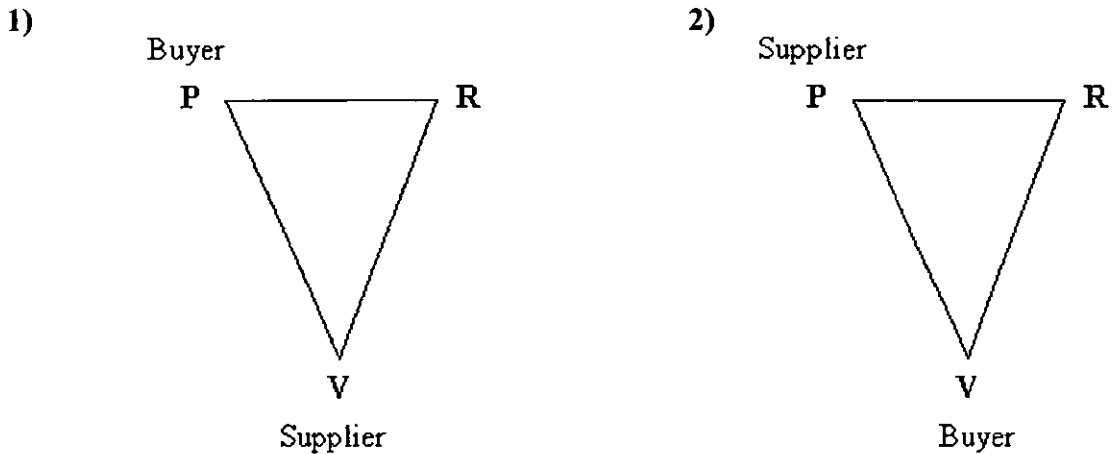


Figure 6.8 Drama Triangle analysis of transaction 4

These behavioural strategies are an attempt by the supplier and the buyer to maximize their benefit. However, it carries a risk for the supplier of miscalculation that could lead to a future loss of business and for the buyer the risk of increasing costs. Some form of strategic gamesmanship is inevitable in these situations and a code of conduct is needed to define what is an acceptable game and what is not. Such a code of conduct could be written into the ‘rules’ of the auction.

6.3.5 Transaction 5: searching for a quality problem

Case Context: The respondent in this case was the sales manager of a large food distribution company. The company distributes agricultural produce and other food ingredients to large food manufacturers in the UK. One of the researchers of the “Supply chain alignment” project described in chapter one had an interview with the respondent . During this meeting the interviewer briefed the respondent about the project and asked the respondent whether it was suitable for him to talk to the interviewer about the relationship his company had with the food manufacturers. The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The interviewer asked the respondent to describe their relationship as a supplier to a large food manufacturing company. The respondent explained how the relationship was formed and that the buyer being a large and powerful company controlled the supply operations. The interviewer then asked the respondent about any issues or problems encountered by the supplier in this relationship. The respondent explained there were some instances of game-like behaviour depicted when the buyer did not want a

consignment as there was decline in demand or if the buyer had overestimated demand. These behaviours have been explained below. The researcher has analysed this information using the relationship framework and Transactional Analysis.

Transaction synopsis: The supplier in the transaction described this scenario. The company supplies raw ingredients to a manufacturer of food products. To ensure that the buyer receives a consistent and regular supply of the material a call-off arrangement has been negotiated. The supplier produces and sends an ingredient to the buyer working to an agreed forecast of requirement plus or minus an amount depending upon the agreed tolerance.

Most of the transactions between buyer and supplier were factual and in TA terms adult to adult within a well-defined etiquette. Game-like behaviour to gain advantage was only evident in those relatively rare problem situations that arose between the buyer and the supplier. One particular problem that did occur was a case where the buyer received more product from the supplier than was actually needed in the period even though the amount supplied was still within the pre-agreed call-off tolerance. In terms of situation strength the buying company operated perfectly within the defined terms of contract and therefore at first sight seemed to demonstrate a strong situational strength. However, individual buyers did have some latitude to interpret the framework, leading to some ambiguity in decision making and thus in reality operating to a weak situational strength. Because of the contractual agreement they could reject any consignment supplied if they found a quality problem. The buyer used this clause to increase its power by searching very hard to find a quality problem of any sort to enable them to reject the consignment. Nearly every time they did find some quality issue on which to base a decision to reject the goods. The supplier did not readily accept the situation but, since the buyer was more powerful in the supply chain and the buyer threatened to look for other suppliers, they accepted the consignment back. In this situation the etiquette no longer applies and the transaction switches to a parent-to-child situation with the buyer playing a calculated game.

Analysis:

Studying the information available for this case and using the relationship matrix, it is possible to ascertain that the relationship was in Quadrant I as the buyer was satisfied with the relationship and the supplier even though dissatisfied had agreed to the status quo. The

buyer is a large company, hence is powerful and can dictate the terms of the relationship. When the buyer gets an excess of raw material due to their own fault of miscalculation, they do not want to bear stock holding expenses, hence they have to return the consignment back to the supplier. This is not possible on a general basis; hence the buyer takes the relationship to Quadrant II, where he shows dissatisfaction, by letting the supplier know that there is a quality problem in the consignment. Both the parties know that the consignment is perfectly all right and the buyer is simply exerting power. In this case, the buyer does not want to exit the relationship, but depicts it in that way to the supplier. The supplier has two options: to exit or to accept the buyer's powerful position and take back the consignment. Hence, the supplier decided to accept the consignment back, and the relationship moves to Quadrant I.

Quadrant I >>>> Quadrant II >>>> Quadrant I

Transactional Analysis Modelling

Although the transactions have to be estimated it is possible to plot out the interaction between supplier and buyer (from the buyer's perspective) using the TA terminology:

1. The initial transaction is as follows: a call-off instruction indicating the quantity required as per prearranged forecast was sent by the buyer to the supplier. This is modelled as the adult-to-adult transaction 1 in Fig. 6.9
2. The supplier responded by supplying the called-off quantity of goods. This is again modeled as an adult-to-adult response to the buyer as transaction 2.
3. The buyer had miscalculated the amount needed and there was a considerable over-supply. There was a significant number of transactions that took place inside the buyer organization between purchasing and senior management about what to do about the over-supply. This is shown as transactions 3 and 4. In transaction 3 there was an adult-to-parent message from the purchasing department to the dominant coalition in the business. The dominant coalition took a critical parental stance instigating the parent to-child transaction 4 to the purchasing department. The message from the dominant coalition was to find a means of rejecting the delivery. A search for a mechanism to reject the delivery was instigated and a convenient reason found.

4. A message was then sent to the supplier, indicating with reasons why the batch was being rejected. On the surface this was an adult-to-adult transaction, shown as transaction 5, but at the psychological level this was a powerful parental injunction and the underlying message was that this was the supplier fault and problem, shown as transaction 6.

5. The supplier, in a less powerful position, indicated that they would take back the consignment. Although they did not think it was justifiable, they took it back primarily to maintain the relationship. This is shown as transaction 7 while the underlying ulterior message is 8, in which the transaction is of child to parent, where the supplier accepts that it is less powerful and agrees to what the buyer is asking for.

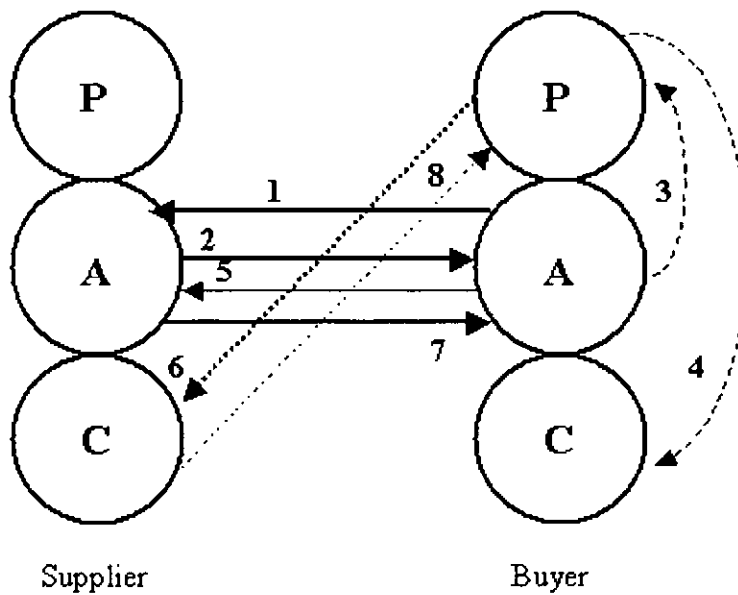


Figure 6.9 : searching for a quality problem

In this situation the buyer had the power and the supplier did not want to damage the business relationship. The problem with the behaviour was that it lowered trust and encouraged both parties to continue to seek opportunistic behaviour in the future. The framework and culture at the buyer company was encouraging the buyers in the purchasing department to adopt strategies to gain short-term advantage at the expense of longer-term benefit.

6.3.6 Transaction 6: “We can play the game too”.

Case Context: The respondent in this case was the owner of the company. The company is a SME supplying heat treated material and tooling to automotive companies in India. The researcher contacted the owner for an interview, which was held in the premises of the company at 8.00 p.m. after office hours. The names of the person involved in the interview and the organisations cannot be displayed here due to the sensitive nature of the information. The researcher explained the respondent that he was studying buyer- supplier relationships and asked the respondent to describe his relationship as a supplier to large automobile companies. The respondent explained that relationships were generally fine and operations were conducted as per the requirements of the buyers. The researcher then asked the respondent about any issues or problems encountered by them as a supplier in this relationship. The respondent explained that in the past small issues were always sorted out on a personal basis between the respondent and the purchasing representatives of the buyer company. He also said that payment was a constant issue as the buyer company never paid on time. The respondent did mention some instances when buying companies tended to conduct unethical behaviour or depict game-like behaviour when they had overestimated demand or their sales were declining. The information provided by the respondent has been analysed by the researcher below using the frameworks and Transactional analysis.

Transaction Synopsis: The supplier has discontinued supply to a major automotive manufacturer as it did not agree with the buyer’s style of working. It retained its position by finding other buyers. The buyer firm is a large automotive company in India, which is in a powerful position in the supply chain and can dictate supply terms and conditions to its suppliers. In this transaction, the supplier was not happy with the buyer’s style of working and when it was successful in finding another buyer, it exited from the supply relationship. During the duration of the relationship one of the recurrent situations the supplier had to face with the discontinued buyer is:

- 1) On many occasions the buyer gives wrong order or has surplus inventory as business drops, so the purchasing department of the buyer rejects material on quality grounds even though it is of good quality.

- 2) The supplier has to accept and even pay for transporting rejected material back to supplier works, as the buyer is powerful.
- 3) Sometimes the supplier gets even. The supplier takes back rejected consignment and holds it in stock because he knows that the buyer will have a shortfall in a couple of months and then when the buyer requires more quantity in a short time, the supplier sends rejected consignment and buyer has to accept the material.
- 4) In another case, the supplier keeps postponing getting back the material and when the buyer faces a shortfall, the buyer accepts rejected material and sends a letter saying that it is only this time that they will accept the rejected material due to a very small deviation, but will not accept at a later stage. This case repeats frequently.
- 5) In one more case, the supplier has contacts in the buyer firm and gets information when the actual shortfall will occur, so the supplier keeps rejected material locally near the buyer and when shortfall occurs sends it to the buyer at an inflated price.

Analysis : Studying the information available for this case and using the relationship matrix, it is possible to ascertain that the relationship was in Quadrant IV for a short time, and then the buyer resorts to shifting to quadrant I to exert power. This can be ascertained as the buyer and supplier were generally satisfied with the relationship and even though there was a certain amount of discontent on the part of the supplier, both the entities were happy about the relationship. This level of satisfaction and trust was broken when the buyer exerted power in order to reject the consignment, which made the supplier dissatisfied taking the relationship to quadrant I. When this happened the supplier firm tried to shift to quadrant III, which it was successful for a short time. As shown above in the transaction synopsis, the supplier uses various strategies to move to quadrant III . The ongoing fluctuation in the relationship of moving from quadrant to quadrant was not agreeable to the supplier and so the supplier finally decides to exit from the relationship, but this was done only after it had gained another buyer for its product. In this relationship, the supplier was completely aware that it could not stay in quadrant III for an extended time. If the supplier would not have been able to find the buyer for its product , it would have kept on the movements or decided to remaining in quadrant I and maintain it as status quo.

Quadrant IV>>>> Quadrant I>>>> Quadrant III>>>> Quadrant I>>>> Quadrant IV >>>>
Quadrant I>>>> Quadrant III

Another aspect of this relationship analysis is the use of situational strength. In this case, the buyer firm has a strong situational strength, wherein it has conveyed to its employees in the purchasing department that in cases of surplus inventory or the company losing sales, excess inventory should be returned to the supplier. The process of doing this is manifested on an individual level, by weakening the situation at the departmental level. In a previous case, earlier in the thesis, the readers have seen another manifestation of the same issue. In that case the consignment is rejected on quality grounds by the purchasing department of the buying firm, when the people in the buying firm know that it is a perfectly good consignment. Similarly, at the supplier end, the decisions to counter these situations are taken by the owner of the firm (as it is a small firm), the situational strength is weak for the owner and this brings out the innovations and ideas that the supplier firm uses to try and regain its power position.

Transactional Analysis Modelling

The game-like behaviour shown in this case continues after the behaviour depicted in the previous case.

1. The Buyer finds a quality problem and rejects the good consignment as it has miscalculated the demand for the parts. The buyer transacts in an adult to adult way (1), but the ulterior message (2) depicts its power and that the supplier has to abide by whatever the buyer requires. (see figure 6.10)

2. The supplier accepts the buyer's requirement and takes back the consignment (3). The supplier is not happy with the transaction. In transaction 4 there was an adult-to-parent message from the sales department to the dominant coalition in the business. The dominant coalition took a critical parental stance instigating the parent to-child transaction 5 to the sales department. The message from the dominant coalition was to find a means of delivering the same goods again, without scrapping them. A search for a mechanism to send delivery was instigated and a convenient reason found.

3. The Buyer finds a shortfall in supply to meet demand targets, and hence approaches the supplier for increased supply in a short time (6). The supplier is now in a powerful position and hence, tells the buyer that the only possible solution would be for the supplier to send the previously rejected consignment at a higher rate as it had incurred the costs of shipping and holding the inventory (7). The buyer and supplier both know that the consignment was of good quality and the buyer agrees. The supplier sends the ulterior message, “We can Play the game too” (8).

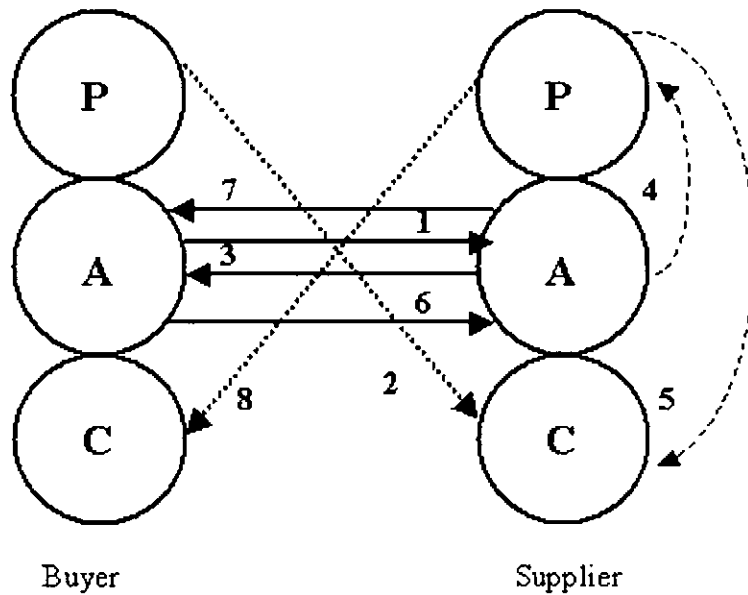


Figure 6.10: We can play the game too

Drama Triangle Analysis

In this transaction, the buyer starts the transaction in a persecutor mode, wherein the buyer exerts its power, and the supplier takes the role of the victim, wherein it is less powerful and has to abide with the buyer’s requirements. But as the transaction proceeds and the switch occurs when the supplier knows that the buyer is completely dependent on it for the extra consignment of parts, the supplier switches from victim role to that of the persecutor. The buyer now occupies the role of the victim as it has to comply with the supplier’s requirements until it can create another switch to reverse roles.

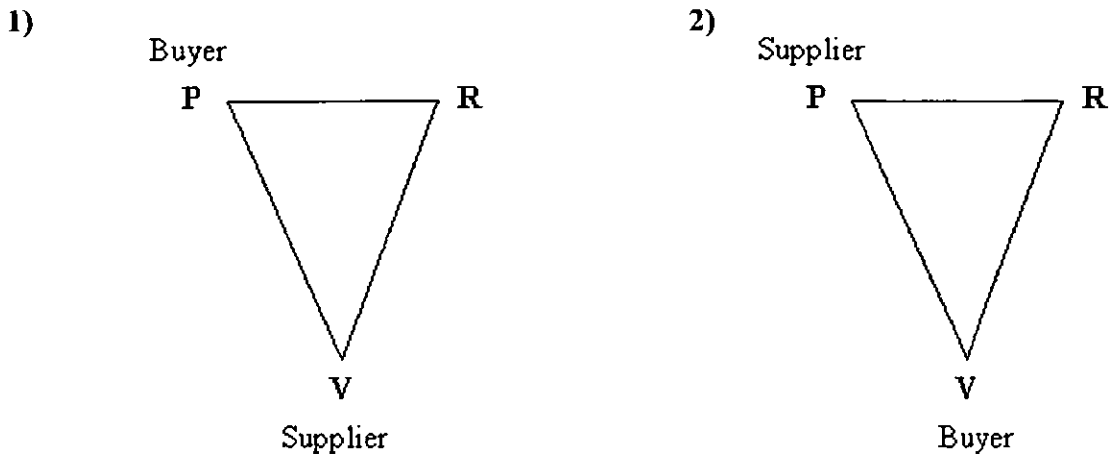


Figure 6.11 Drama Triangle analysis of transaction 6

6.4 Discussion

TA provides a very valuable tool for displaying the information transfer between partners in the supply chain. It can represent the ulterior messages at the same time as the psychological message and hence provide a rich picture about the transactions. In this research the concept of games has been used. The games, as developed in TA, are repeating patterns of transactions that occur between supply chain partners. TA was applied to organizations by Berne himself with the concepts of character, etiquette and technical culture matching to the child, parent and adult states. However, games in TA are generally carried out at an unconscious level and relate to learnt patterns of behaviour and to re-enforce beliefs about the self. Between organizations the games are often more conscious and planned actions corresponding to unspoken transaction strategies.

Rather than call these games it may be better to call these deliberate strategic manoeuvres. The information modelling capability of TA provides a rich picture about what is being verbally and non-verbally communicated. It is also possible to identify transactions inside the organization that match the parental judgements, the logical adult and the emotional child. One difficulty in using TA is the interpretation of which part of the ego state the messages are coming from. To a considerable extent the theoretical base of TA does provide guidance about recognizing whether it is a parent-to adult transaction or an adult-

to-adult transaction, etc., and it was judged that, as organizational practitioners gained more experience, it would become easier to identify clearly the patterns of transaction. From the field work in organizations it does seem likely that there are only a limited number of games that occur in supply-chain interactions. There would be considerable value if this could be verified and to determine what these patterns are. It would also be worthwhile to determine whether these organization games match the Berne games. An assumption of this research is that organizations can be modelled in a rather similar way to the individual in that there are parental, child-like and adult transactions. Whether you identify the organization in the same way as the individual or not it was clearly observed in this research that there were parental-type transactions, child-like transactions and adult-like transactions regularly taking place within any one organization. It is difficult to measure the patterns and match organisational games to games described in Transactional Analysis. The difficulty stems from the fact that in order to record the exact transaction and observe human behaviour during the transaction, the researcher should have permission from the respondents to be present during the transaction. Getting the permission to do so is in itself a difficult task as the human behaviour depicted during the transaction is sensitive information and a very personal experience. To record that experience needs the Humans in the transaction to be comfortable with the idea that someone is observing every move they make or every expression they show. Even though the humans give permission for the researcher to be present, it is not guaranteed that the respondents will show their true behaviour in those circumstances. They may alter their behaviour if they are not comfortable with someone observing them. Also, matching the game-like behaviour to Transactional analysis games needs some assumptions as described in chapter four.

An important question is: Once game-like behaviour is identified, what can be done about these rather negative game-like patterns? It is not even obvious that any company would actually choose to be up front and to eliminate these games particularly if it is gaining some strategic advantage and power from them. All the parties in the transactions have to see these games as being negative before any concerted action can take place to eliminate the game-like behaviour, only then the therapeutic methods of TA would be appropriate. Being aware of the game and having a deliberate strategy to interrupt the pattern of transactions once identified would end the games. Also using governance mechanisms similar to those defined by Sandy Jap to control the incidence of opportunistic behaviour could significantly reduce the likelihood of games. Finally, the research has shown the

importance of power in that the more powerful member generally sets the rules and controls the game-like behaviour. To eliminate games the use of power must be used wisely not to overwhelm the other in the transactions. Much of the transaction patterns appear to be a means of acquiring power in the transaction process, primarily to leverage the maximum value for the organization. Although by far the majority of the transactions observed were adult to adult, the incidence of game-like behaviour increased in problem situations. Where one party wanted to ensure that it did not suffer loss or alternatively wanted to gain advantage, gaming became obvious.

Now the three questions raised in chapter 4 are considered.

Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?

From the case studies the answer would appear to be 'yes'. Where a strong situational strength has been identified, then the transactions have primarily been at the adult-to-adult level. However, where the situational strength is weak, then gaming becomes more available with the dominant partner instigating parent-to-child type transactions. Interestingly, the longer-term 'ulterior' transactions were primarily instigated by the weaker partner to gain longer-term advantage.

Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?

Certainly, in the case studies investigated, it provides a very useful short-hand demonstration of the transactions taking place. It adds a new dimension to the understanding of transactions between organizations since it considers more than just information flows. It shows the relative strengths and weaknesses of the partners within a set of transactions, enabling partners to identify problem issues which would not be so apparent without the TA methodology.

If the games arise from the individual or the organization, is this contingent upon the strength of the situation?

From the case studies investigated, so far very little evidence was found that individuals instigated games on their own personal account. It is true that games were initiated by individuals but in all cases this was done to the supposed benefit of the employing company. Significant loyalty to the company was seen in many cases. However, where games were played, it was aimed primarily at short-term benefit for the individuals' company and not for long-term benefit of the partnership. Also, since it was difficult to collect personal information or actual behaviour through observation of the transaction, it is not possible to comment whether individuals played their own psychological games with each other.

6.5 Refining the Methodology

The methodology proposed previously in this chapter (fig. 6.1) has been used to do a retrospective evaluation of various cases as shown in section 6.3. The methodology has been useful in depicting the dynamics of the transactions and the subsequent results for the buyer-supplier relationship. The evaluation does present a nagging question, which is about the generic nature of the methodology. The methodology proposed presents only a part of the process that an individual or an organisation will conduct in order to study the transaction and use the resulting information for analysing their relationship with respective buyer or supplier. Also, another limitation of the methodology was that it did not highlight the effect of situational strength and the importance of the concept map in the general analysis of the case. The concept map has been identified in this research as an important tool for getting

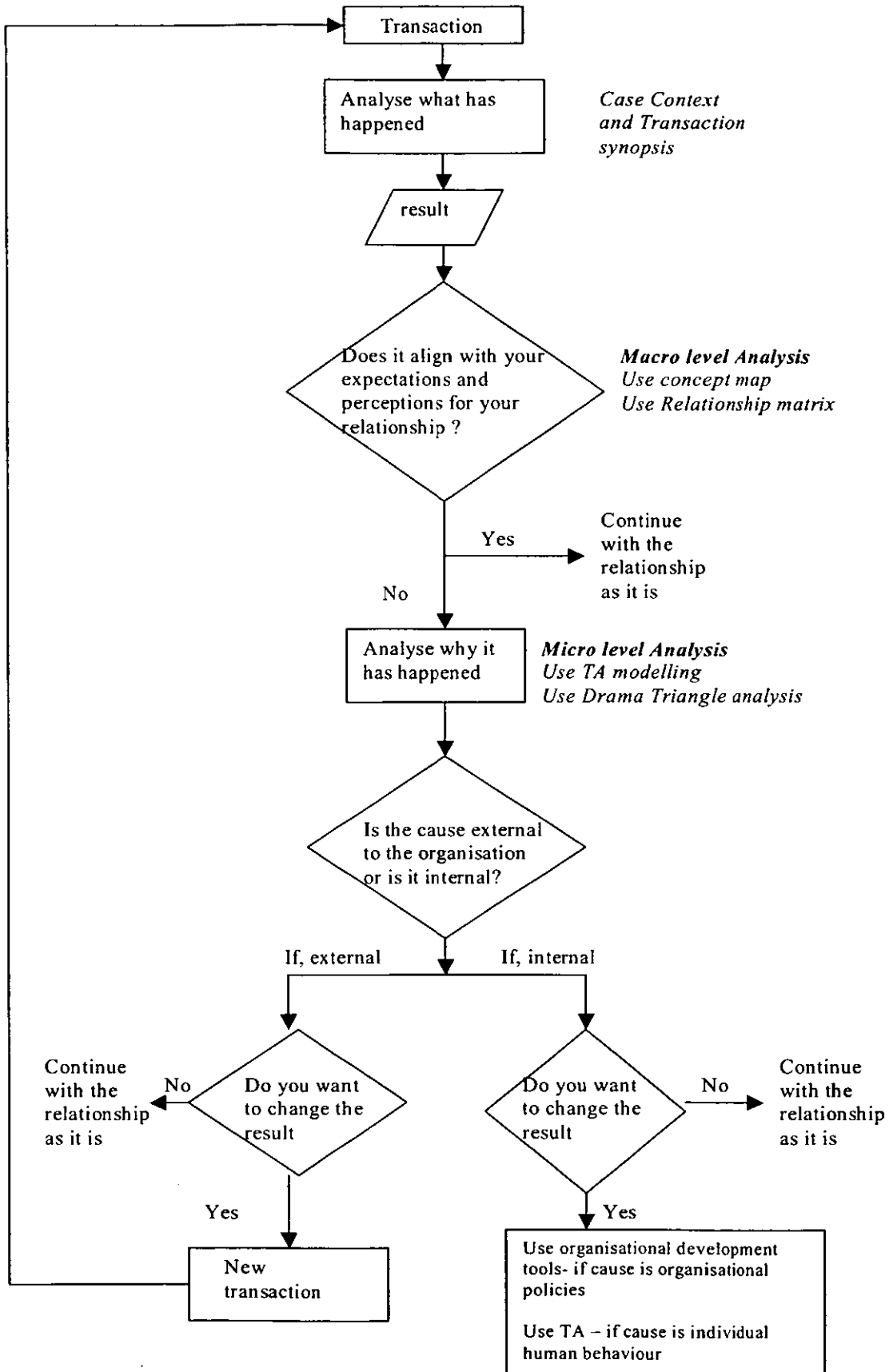


Fig. 6.12 Methodology for studying buyer-supplier relationships

a holistic view of the nature of buyer-supplier relationships and the different variables affecting the relationship. Focussing on the lessons that have been learnt through the use of the initial proposed methodology, the researcher has presented a methodology, which he feels incorporates the solutions to the limitations identified in the proposed methodology and presents it in a form so that it can be used in a generic format. The methodology is depicted in fig. 6.12.

To use the methodology, the user first identifies the transaction he/she needs to evaluate. The user then collects all relevant data for the transaction so that he/she has a detailed idea of what happened in the transaction and what was the result. The user then compares the result with the perceptions and expectations he/she has with the relationship. For this analysis the concept map and the relationship matrix are beneficial, as the concept map presents to the user the different factors, which are affecting the perceptions and expectations and the relationship matrix provides further insight into the relationship based on the levels of satisfaction and the strategic movements that occur due to a certain level of satisfaction. This aspect of comparing the result of the transaction to the inherent expectations in the relationship (Macro- level analysis) is an important step as it highlights the aspect of alignment and the importance alignment plays in the strategy of maintaining relationships. If the result and the expectations align, then the user decides to continue with the relationship as it is. If there is no alignment then the user analyses the transaction for the reasons of the result. For this analysis (Micro-level analysis), the user uses the techniques of Transactional analysis modelling and Drama Triangle analysis, which will help in depicting the dynamics of the transaction. This analysis will also provide insight whether the cause of the transaction and the subsequent result was due to an external source or an internal source. If the cause has been identified as internal, then it could either be at an organisational level or at an individual employee level (situational strength). The decision at this stage would be whether to try and the change the result. If the answer is no, then the user would continue with the relationship as it is. If the answer is yes, then the solution would depend upon whether it is at an organisational level or individual level. If the cause has been identified as an external source, then there is again the decision whether to try and change the result. If the answer is no, then the user would continue in the relationship as it is. If the answer is yes, then the user would conduct a new transaction in order to get a result that would align with his/her expectations from the relationship.

6.6 Conclusion

As seen above, the relationship matrix and Transactional analysis can be converted into a valid methodology to analyse the problems in relationships. The methodology is also useful if used as a tool for recommending a change in strategy or for pointing in the right direction for information in order to change the relationship strategy. The recommendations or suggestions provided for moving to quadrant IV (partnerships) are more to do with using existing research published regarding partnership theories and collaborative practices. Also, as the supply chain relationship research domain increases with new research published, this methodology will remain a basic tool, and the new research can be inculcated as a recommendation for strategy change. The above cases provide the reader some insight into the dynamics of the relationship. One might wonder whether this can be used only as a reactive tool to analyse situations already occurred, or whether it can be used in a proactive way to chart out a new strategy. At this juncture the researcher can suggest that the relationship matrix can be used to chart out the new strategy for the relationship in the similar way as the analysis of an earlier scenario is done. The only difference will be that whenever it is decided to move to a particular quadrant, the processes for that movement will have to be inculcated well in advance. Also, when using the matrix to decide the next strategy, the entities will have to consider the next series of steps, similar to a game of chess, as to how their move will affect the relationship and the subsequent moves the other transacting entity will make. Whether the matrix actually works as a strategy formulation tool can be decided if a company is willing to use it and document the results.

6.7 Summary

This chapter has provided the reader some information in the form of a few cases, regarding the use of the methodology and has suggested some further uses of it. The researcher also has presented in the analysis of the cases, the use of transactional analysis and the concepts introduced in chapter 4. The reader may now have an idea about the evolution of this research and the usefulness of it for studying buyer supplier relationships.

Chapter 7

The Research Experience

Aim: This chapter ends the discussion that was started at the start of this thesis. It presents a brief summary of what the researcher has tried to achieve by conducting this research. It also presents the limitations of this research from the researcher's perspective and gives some suggestions for future work.

7.1 Research Contribution

The validation for this research has been a formidable task. The sensitive nature of the information has been a major hurdle to get recorded interviews and validation from industry personnel regarding the game-like behaviour depicted by organisations and individuals. The researcher has thus to rely on the premise that Transactional Analysis is already a validated theory. Also, the additional validation for use of this theory in organisational applications, as shown by Hewson and Turner (1992); Jongeward (1976); Barker (1980); Goldhaber (1976); etc. can be used in the aspect of identifying game-like behaviours shown by individuals in the firms when transacting with their counterparts in the supply relationship. The fact of using transactional analysis to locate the existence of game-like behaviour shown by the organisation as a group takes its validation from Berne's "Theory of Dynamics of groups"(Berne,1963). The aspect of an organisation having scripts and culture strengthens the argument that the organisational culture could be used as a base for building up the theory of Transactional analysis for studying the game like behaviour shown by organisations. However some aspects of the use of Transactional Analysis in buyer-supplier settings may need validation, as Transactional Analysis was primarily designed for therapeutic use. Since this research has presented a transference of Transactional Analysis knowledge from therapeutic settings to buyer- supplier settings, one of the primary concerns raised by Transactional Analysis practitioners would be the validity of such an approach? The researcher at this point would like to comment that as this conceptual approach gains some recognition, the procedures for validation, which would gain credibility from Transactional Analysis practitioners and also give access to a willing data set for further analysis would be possible. Also, the assumptions used for this

research when transferring knowledge of Transactional Analysis Game behaviour to buyer supplier settings has been discussed in chapter four. Hence these assumptions when completely validated will lead greater credibility to this research.

The research has tried to present a new insight into the study of supply chain relationships. The premise for undertaking this study has been to look at the power issues and problems in relationship building as highlighted by various researchers, from a perspective, which looks at organisations as entities and the individual human being working in these organisations. This brings out the psychological aspect of the relationship and hence this research is appropriately titled “Exploring Transactions between Supply Chain Entities: A Psychological study of buyer-supplier relationships” .

This research has presented a collection of game-like behavioural scenarios, which depict the dynamics of the relationship and each scenario is presented with the procedures for ending the game-like behaviour. The processes are suggestions and these have not been actually validated. The only validation available is that the scenarios are modelled using the different games modelled by Berne and other researchers using transactional analysis for Human behaviour. The game-like behaviours modelled for organisational behaviour using transactional analysis are done by bringing out the similarity between the dynamics of the scenarios depicted in transactional analysis literature and actual scenarios available from literature and respondents. These could be validated in the future if respondents agree to study their relationships, highlight the game-like behaviours, and then use the processes depicted in this research to try and change the dynamics. For this the researcher can help by being an active participant by using the methods of action research.

To summarise,

1. The relationship is studied for repetitive patterns of behaviour, which bring out the negative pay-off, this could be feeling bad, feeling frustrated and angry and a certain antagonism for the other entity. In terms of situations where the organisations do not have a script of game play, but receive information from the other entity that such behaviour is being depicted, it would still be necessary for the organisation to study the relationship to locate any individual scenarios. The variables to consider and the actual process is described in chapter 5 and chapter 6.

2. The relationship matrix spells out the strategy the firm wants to employ for the relationship with its counterpart in the supply chain. Once the strategy is known, then the game-like behaviour associated with the change needs to be studied. Once the game-like behaviour scenarios or issues are located, the process to control or stop the game-like behaviour may be tried out. In many cases the identification of the scenario is sufficient to control it and no other steps are needed.
3. The processes differ for organisational level behaviour and individual level behaviour. For individual counselling, it is important to recruit people who have the qualification for using Transactional analysis in organisational applications.

What has been achieved ?

Phase I: The Literature review generated the research objectives for the first phase of research:

Objective 1: *To explore the nature of buyer- supplier transactions and the dynamics associated with these transactions particularly from the perspective of behaviours, and attitudes depicted by the transacting entities.*

Objective 2: *To explore the experience of buyer- supplier relationships from the perspectives of buyer and supplier representatives involved.*

Qualitative research using Phenomenological interviews focussing on critical incidents relevant to the buyer- supplier transactions was conducted. The analysis generated a research gap , or a set of themes to study further. The themes were represented as:

- Game-like behaviour
- Discretion , humans have in the relationship

Phase II: In the second phase of this research, the tools relevant for studying these themes were reviewed and a concept map was formulated, which incorporated a number of concepts relevant to the research focus. The concept map was based around studying the research questions identified in Phase II:

Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?

Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?

If the games arise from the individual or the organization, is this contingent upon the strength of the situation?

The research questions were further studied using the concept map, and subsequently developing a methodology using the concept map and applying the methodology to a number of case-studies depicted in chapter six.

7.2 Limitations of the research

There have been several limitations to this research:

1. Due to sensitive nature of the data, the data collected has not been vast and comprehensive.
2. Validation has not been possible, and the researcher has had to resort to explaining the research contribution by explaining the concepts through a few cases, which were a part of the initial data collection exercise.
3. The research has had to resort to assuming the validity of a few concepts at face value, as it was not in the realm of this research to try and prove the concepts used in this research.
4. The researcher has provided a comprehensive research contribution in the form of a methodology and has explained the use, but it has not been possible to convert the research into a tangible tool, which the industry may be able to use immediately to sort out the buyer-supplier relationships.

7.3 Could it have been done better - An After thought?

The research process has not been flawless, as the researcher struggled to get the right methods to conduct the research. As discussed earlier in this chapter, it was decided that the research had to be conducted using qualitative methods. The data collection methods

for the qualitative design had to be selected so that they could provide the necessary insights into the relationship issues. The best method would have been Action research (Miles and Huberman,1994; Robson, 2002; Denzin and Lincoln, 1994; Patton, 2002) , where the researcher would have been a part of the sample group and experience first hand the proceedings during buyer- supplier meetings or transactions. This would have given invaluable data in terms of actual behaviour shown by both parties, verbal data, written data, and their feedback about the transaction after the event. Also, this would have been an ongoing process, which would have given a more robust and reliable insight into buyer – supplier relationship issues. Although, it looks like the researcher had nailed the most appropriate methodology, it was one, which was not very practicable,

1. It was difficult for humans in the buyer-supplier relationships to function in front of an outsider during such delicate moments,
2. The researcher could not find a suitable respondent firm to collect relevant data, although the researcher did spend five months in one of the collaborating firms of the supply chain project, but it was difficult getting any data from direct involvement with the purchasing or sales teams. The researcher could however use some written data, available in the form of memos and letters sent between the firm and the buyer firms.

The above mentioned limitations made it easier to adopt the critical incidents technique for this research, as this is a method for coming close to direct observation but avoiding some of its hardships. The objective was to explore the dynamics of supply chain transactions from human perspective, hence the role of critical incidents within the transaction process and the reflection of the respondents on the incidents provided valuable insight into the conduct of buyer-supplier relationships. Whether that process would have been better, still cannot be said as the research area warrants secrecy in data collection. If the research was to be conducted again, the researcher would have followed up the initial phase of data collection, involving Literature review and qualitative interviews, with action research. The willingness of a firm to allow the researcher to be present in the firm and conduct research is still a major question? But if this was possible, valuable data in terms of non-verbal behaviour: expressions, body language; and verbal data could be collected for analysis, which would strengthen the research and provide more validation for this research. The non-verbal data and direct involvement in the transactions would have given

better validation for the use of Transactional Analysis for studying buyer- supplier relationships.

7.4 New Knowledge generated

In section 7.1, the researcher has presented the research contribution and whether the research objectives have been achieved. The research has been able to achieve the research objectives to a large extent. Whether the research has generated any new knowledge for increasing understanding of the research domain is also a separate issue? The researcher thinks that this research has sought to provide new knowledge in the subject of buyer-supplier relationships from the perspective of humans in the relationship. Hence, for this aim, the new knowledge generated has been :

1. The use of “Transactional Analysis” a tool used for therapeutic counselling, and for studying human behaviour and relationships in studying buyer- supplier behaviour and relationships. The knowledge generated has been more of studying the feasibility of this transferability of concepts, but validation has not been possible. The initial research has generated feasibility in applying “Transactional Analysis” to study buyer- supplier transactions and also to model the dynamics of the transactions, which helps in better understanding of human behaviour in the relationship and also the dynamics of the transactions itself.
2. The most important contribution of this research is the Alignment methodology that has been proposed for the study of buyer- supplier relationships. The research has generated various highlighting contributions to knowledge in different stages of the research. The first bit of knowledge created has been through the formulation of the concept map, which brings together various concepts in a cohesive format that provides a valuable insight into the dynamics of buyer- supplier transactions and the various factors thus affecting the relationship. The cor-relational analysis of the concept map was not in the realm of this research, but the concept map itself would provide a valuable starting point for anyone to undertake this task.

3. Another bit of knowledge creation has been the relationship matrix, which presents a strategic look at buyer- supplier relationships by using levels of satisfaction as a measure for a behaviour depicted by buyers and suppliers in their relationships. The two frameworks and the use of Transactional analysis has led to development of the methodology that can be used for supply chain alignment by focussing on studying buyer- supplier relationships. This alignment methodology complements the DNA framework (fig. 5. 5) as it presents the alignment methodology for the relationship strand of the DNA structure.

7.5 Conclusions and future work

The research has been successful in bringing to light a new criterion for studying buyer supplier relationships and identifying problems between them. The research also has been successful in introducing a concept from psychology, viz. Transactional analysis in a setting, which has previously looked at improving buyer supplier relationships using technology and economics.

Although, as discussed previously the research has primarily relied on published research in the domain of psychological transactions and some interview data, the introduction of interesting concepts viz. Transactional analysis, situational strength, exit-voice has made the research innovative. The absence of case-study data for validation has been a major limitation of the research, which has been overcome to some extent by using critical incidents. The researcher feels that as this type of research gets recognition respondents will be more at ease to permit the use of their relationships and premises for case-study analysis and action research. Until then, the research will provide more food for thought to the academic community.

The future work for this research area can be summarised as follows:

1. validating the processes depicted in chapter five. This will help to actually see the research used in an actual industrial setting.
2. creating a wider library of game- like behaviours through surveys and interviews. These game- like behaviours can then be matched with respective quadrant movements as depicted in the relationship matrix.

3. using the information as a variable for knowledge management in order to create better supply chain systems which incorporate this information to reduce supply chain issues.
4. need to test the dynamics of the variables in the concept map quantitatively.
5. need to modify data to suit information modelling capability. Significant insight and benefit can be developed by modelling supply chain interactions using TA and have been impressed by the diagnostic capabilities of TA and its capability as an information modelling tool. As supply chains become increasingly lean and agile, their overall performance becomes increasingly dependent on maintaining mutual beneficial power relationships. TA provides a means for this understanding and hence relationship management.

7.6 Summary

The researcher has presented his research in this thesis in a format, which lends to more discussion than results. The research has not depended on vast amounts of data to prove an idea, but has relied more on intuition and meanings derived from what respondents have described about their experiences. The data for analysis has been sought from published literature and a few interviews with respondents in buyer-supplier relationships. The strength of this research has been the depiction of a new conceptual approach to understanding buyer-supplier relationships and the dynamics occurring in these relationships. The conceptual approach at this moment does not give a definitive answer to buyer-supplier relationship issues, but does present some intuitive suggestions that buyers and suppliers can consider when evaluating their relationships and certain relationship issues or when deciding strategies for conducting the relationships.

The researcher has concluded the discussion with some insights into the research contribution of this research. Also, presented are a few suggestions for further work in this research area and some limitations of this research, which is beneficial to anyone willing to conduct further research in this field.

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Appendix 1: Document Summary Sheet

Document Summary Form

Done by: SAMIR DANI

Document Number: ③

Date summary done: SEPTEMBER 2002

Name and description of the document: "Supplier Squeeze" - article published in the online version of "Automotive Industries" www.Ai-online.com. March 2001

Significance of the document for the research:

This document presents insights into buyer-supplier relationships in the Automotive sector

Brief summary of the contents of the document:

The article presents perspectives from both sides (buyers & suppliers) on the decision taken by Automotive companies to ask their suppliers to cut prices of their supplied components.

Actual references to the contents: (quotes, direct observations, direct references, page numbers)

Page No	Salient points	Codes	Remarks
1	When an automaker is losing money, its standard operating procedure to whip the supply base to reduce costs.	Power	
1	Chrysler Group CEO sent the supplier community into a state of shock by announcing that effective immediately, his company was reducing purchase orders by 5% across board - no exceptions, no options. Under the rewritten contract, if the supplier ships product, it means it accepts new terms. But suppliers, already running on thin margins and lower projected sales, sent back a shock wave of their own. Nearly 70% gave a one word answer (No).	Power, Opportunistic Behaviour	
1	If suppliers cut cost just because the automaker tells them they have to do it, quality is going to take a huge hit.	Power	reduced trust
2	The current crisis mentality at DC means that they don't have time to be a partner. They just send out a fax and dictate a price decrease.	Power, Unethical Behaviour	Strong situation

Page No	Salient points	Codes	Remarks
2	"It really doesn't matter if an OE needs cost cuts immediately" he asserts because the arbitrary approach is a gaming approach and suppliers will learn to play faster than the OE. There are more suppliers to gang up on automakers and the program will become adversarial. Then everybody loses.		game-like behavior
2	The consensus is that the mega Tier 1s are going to agree to price cuts and then just force them down on their own suppliers.		Power in the chain
2	"There is zero partnership, zero trust. They just don't believe what we tell them. but it's ironic that it's only true for GM, Ford and Daimler Chrysler? Look at a contract with Toyota or Honda. It's just one sheet with an addendum page. Here's a Ford contract. It's 30 pages. The GM contract is 26 pages & DCS is 24. Most of it is legal speak, but it translates to why they don't trust you"		trust.
4	The inconsistencies and methodologies created by the OEs don't allow us to run our business properly. They change their initiatives every time they get into trouble. They force us to change to suit their needs and then if it doesn't have immediate cost impact, they fire the end of the initiative, take their money and move on to something else.		Power, opportunistic behaviour.
4	They don't hold themselves to the same metric as they do the supply base. We have to show results for these lean initiatives every month. It doesn't work that way internally.		
4	The fact that the OEs are driving improvement in this industry is not the issue. The issue is what tools they use to drive it & the primary tool is - <u>bullyism</u> .		Power.

Page No.

Salient points

Codes

Remarks

A

The OEM's say that they are easy to deal with. All the top-level guys say that and believe it. But it's inconsistent with what their people implement. The lower levels don't have the same balance and perspectives as the higher-ups.

But I would suggest that it is not unintentional. They have created a labyrinth that you can't get through.

Trying to do business with the rank and file is a nightmare.

- Human perspective.
- Strong situation
- Power.

5. The Tier 1's are not getting stronger as many people think. Their asset intensity that they have assumed for the OEMs has given the OEM even more leverage. Once the automakers get you in a situation where you have a couple billion dollars spread around the globe and you are a huge module supplier, you will do anything they say.

5. Legally they can't rewrite a contract, but who is going to sue an OEM? The day you file a lawsuit is the day you are announcing you are exiting the business. Yes, it's extortion - but they can get away with it.

Power dependency

Power, exit, unethical behavior

Document Summary Form

Done by: SAMIR DANI

Document Number: ⑦

Date summary done: NOV 2003

Name and description of the document: The Supermarkets Code of malpractice
— filed 28/11/2003, Money Supplement, Telegraph

Significance of the document for the research:

The article provides insight into relationships between the UK supermarkets and their suppliers.

Brief summary of the contents of the document:

The report document is a newspaper article commenting upon the relationship between UK supermarkets & their suppliers in the wake of the Competition Commission probe into the future of Sainsbury. It includes quotes from representatives of supermarkets & suppliers giving

Actual references to the contents: (quotes, direct observations, direct references, page numbers)

account of actual relationships

Page No	Salient points	Codes	Remarks
①	Bankham claims that Walmart acquisition of Asda has fundamentally changed the retailing sector. He says supermarkets are demanding upfront payments from their suppliers and "contribution" to promotional cost.	Power, Opportunistic behaviour	
①	Bankham adds that they manufacture "phantom bids" at online auctions to drive down prices paid to suppliers.		Unethical Behaviour Reduced Trust Game-like behaviour
①	the commission was told that supermarkets are dictating how suppliers should run their business. Suppliers, it is claimed, are ordered to use specific carriers to deliver goods to supermarkets and are instructed about which creative agencies can be employed to design packaging.	Power Strong situation	
①	"Carriers nominated in this way took advantage of the position by charging excessive freight rates in the knowledge that the supplier had no option," said Roger Housworth, a distributor and exporter of kitchenware and housewares.		

Page No	Salient points	Codes	Remarks
2	The commission also heard that fees charged by the design agencies specified by the supermarket chain were 10 times the market rate.		Opportunistic Behaviour
2	Another supplier told how on one occasion goods had been produced on request for promotional activities. The promotional activity did not go ahead, leaving the supplier with stock worth several hundred thousand pounds.		Reduced Trust Power Unethical Behaviour
2	The commission was told in no uncertain terms that the code of practice, which was designed to prevent supermarkets from abusing their hold over suppliers, is "ineffective and ignored".		
2	A supplier of own-label products told the commission that few companies would risk reporting a code transgression for fear of being punished by a supermarket for loss of future contracts.		Exit Power
2	Food producers were assured that it would end abuses that included forcing them to pay for out-price promotion, refusing to pay compensation for changes to transport or packaging requirements and requiring them to meet the cost of unsold products.		Power Control Unethical Behaviour Opportunistic Behaviour
3	the corporate affairs director at Tesco says, "We do try to be straight. How well you can buy is as well about shell as steel".		} Positive steps taken by Supermarkets to better relationships with their suppliers
3	a director at Asda, insists that his company works well with its suppliers. "There is no merit in messing suppliers about. If you start treating suppliers inappropriately, all you end up with is suppliers' problems."		
3	We have a belief in good relationships which we work to improve all the time. We do our own damn with suppliers, which we take seriously.		
3	the sausage maker, which fears that a takeover of Sainsbury by Morrison would lead to a price war.		competition between Sainsbury also leads to strained relations with suppliers

Appendix 2: Contact Summary Sheet

Company A

Contact Summary Sheet

Type of contact: Owner of the company.
 Person:
 Place: India (premises of the company).
 Date: 10/02/03
 Time: 6:00 pm

Relevance of the contact to the research:
 Supplier to a large automotive company.

Meeting details:
 Meeting to discuss buyer-supplier relationships.

Salient points from the meeting:

Salient Points

Themes/ aspects

① Owner explained how the business was set up around the requirements of the buyer.

↳ Supplier company supplied components to one buyer only.
 ↳ Supplier company was completely dependent upon buyer.

Power, dependency

↳ Supplier had made investments on a good scale as per requirements of buyer in order to create streamlined operations as per buyer's requirements.

— Power —

② The buyer was changing its supply strategy and this was a threat to the supplier's business and operations.

③ The buyer was consolidating its supply base into only two Tier 1 companies in which the buyer has a stake.

④ All suppliers would supply to these two companies, and the

Salient Points	Themes/ aspects
Supplier position would be decided by the two Tier 1 companies	
⑤ This was threat to the supplier company } reduced trust, as this would reduce its margins and } make running the business difficult. }	
⑥ The supplier decided to quit the exit. supply relationship, but it needed to find a different buyer to keep the business running.	
⑦ When the supplier found a new buyer, the supplier had about a few months of contact remaining before it signed the new contract.	
⑧ On finding that the buyer company was dependent on it for supply and that it was difficult for the buyer company to develop a supplier soon, the existing supplier increased the price by 10%. saying that it was not economical to supply at the lower prices.	Game-like behaviour opportunistic behaviour.
⑨ The buyer had to agree, but decided to exit the relationship and develop once a new supplier was developed.	Power, dependency
⑩ The supplier has found new buyers but problems with payments and credit terms and conditions still exists.	

Company (B)
①

Contact Summary Sheet

Type of contact: owner of the company
 Person:
 Place: India (premises of the company)
 Date: 8/10/03
 Time: 8:00 pm

Relevance of the contact to the research:

Supplier to automotive companies

Meeting details:

meeting to discuss buyer-supplier relationships

Salient points from the meeting:

Salient Points

Themes/ aspects

- ① Supplier company generally had good relationships with all its buyers, except one company.
- ② Owner said that small issues were always sorted out on a personal basis between them and purchasing representatives of the buyer company. Human involvement
personal trust.
- ③ Payments and credit terms were a constant issue with the buyer. Power, control.
- ④ The owner also remarked that there were some instances when buying companies overestimated demand or had decline in sales and tended to use their power or sometimes unethical behaviour.
- ⑤ The owner gave an example of this issue. ~~The~~ Their company had exited just recently from a relationship with a large automotive buyer. The buyer had a tendency to reject a good consignment on grounds of poor quality. Power
Unethical behaviour

Salient Points

Themes/ aspects

when it ~~is~~ overestimated demand and did not want to carry stock. Both the supplier and buyer knew that the consignment was of good quality, but since the buyer was more powerful and the supplier did not want to lose business, the supplier would take back the material. The supplier would have to pay the freight charges for returned material.

Unethical behaviour.

Power.

exit/voice

⑥ The supplier said that it could not accept this recurrent behaviour and used some ~~of~~ approaches to get back at the buyer.

reduced trust,

① supplier would take back rejected consignment and hold it in stock. The supplier was aware that the buyer would have a shortfall in a couple of months and when the buyer needed components in a short time, the supplier sent back the rejected consignment, which the buyer accepted.

Game-like Behaviour.

② Sometimes, the supplier delayed getting the rejected material back, and the buyer when faced with a shortfall, used up the consignment and sent a letter to the supplier saying that since there was a very small deviation in quality they had accepted the consignment, but would reject it at other times.

③ The supplier had his contact on the buyer firm who would provide him information when a shortfall occurred. The supplier would then send rejected material to the buyer at inflated prices, which the buyer accepted.

Game-like Behaviour

Opportunistic Behaviour

Appendix 3

"Application of Transactional Analysis in Supply Chain Networks: A Potential Holonic Mediating Tool" , *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture* , 218(B5) , May 2004, pp 571-580

Application of transactional analysis in supply chain networks: a potential holonic mediating tool

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Abstract: The aim of the research detailed in this paper is to model and ultimately to improve the relationships that occur between individuals transacting across organization boundaries in supply chain networks and/or virtual partnerships. Opportunistic behaviour and/or repetitive patterns of behavioural actions, resulting in gamesmanship, are explored to determine whether, under certain situations, the behaviours lead to win-lose situations and reduced trust. Transactional analysis (TA) is used to model games, which have been identified and observed in collaborating industrial partners. The experiments carried out to date have led to the formation of a preliminary relationship model which can be used, firstly, to identify correlations to the established library of TA games and hence, secondly, to investigate methods of mitigating the effect of some of the more negative form of games. It is proposed that this technique can be used as a mediating tool within holonic manufacturing systems or, at the ultimate, result in the establishment of relationship holons that could establish and maintain standardized co-operative patterns of behaviour between interacting partners, or holons, in the supply chain.

Keywords: transactional analysis, supply chain networks, organization boundaries, virtual partnerships, mediating tool, holonic manufacturing systems

1 INTRODUCTION

Within any supply chain network, individual interactions often suffer from the problem of 'local optimization' at the expense of overall system optimization. Within holonic manufacturing systems where supportive collaboration between interacting holons is a fundamental requirement, such 'local optimization' is clearly counterproductive. The research presented in this paper focuses on interactions at the individual level in order to determine the nature of the relationships between collaborating individuals who co-operate across company boundaries within networks of companies. It was hypothesized that the quality of the relationships between these individuals has a fundamental effect upon business success. This is based on the recognition that in these relationships there is a great potential for psychological behaviour to occur that can result in one business partner winning in a sensitive problem situation while another loses. The initial work concentrated on assessing whether this form of win-lose behaviour does

occur, under what particular circumstances, what influences it and whether the approach based on transactional analysis (TA) can be used as an effective tool for modelling and explaining the behaviour. The aim is to raise understanding of relationship issues in order, firstly, to aid management in managing relationships to achieve mutual benefit and, secondly, to suggest a route to the establishment of relationship holons whose function would be to establish and monitor behavioural patterns for business relationships [1, 2].

2 RESEARCH CONTEXT

All businesses have complex internal networks of relationships between individuals and groups and at different levels in the organization. They also have partnerships and relationships that extend beyond the boundaries of the company with regulatory agencies, employment agencies, customers, suppliers and partners. With many of the regulatory agencies the business has relatively little power and it has to abide by the rules that are defined. However, with other collaborators and sometimes with customers the business exercises power by defining the rules of partnership in its favour

The MS was received on 19 June 2003 and was accepted after revision for publication on 18 February 2004.

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and sometimes by controlling the purchasing behaviour of customers by, for example, a 'lock-in' strategy. The ultimate aim of the business is always to maximize power within the supply network.

2.1 Power in the supply network

The issue of power in supply networks has been explored by Cox [3], Cox *et al.* [4], Jablin *et al.* [5], Conrad [6] and Pfeffer [7], among many others. Dahl's [8] definition of power is the capacity of actor A to get actor B to do something that actor B would probably not do—if not influenced to do so. According to Cox, the buyer is dominant when the utility and scarcity of the buyer's resources relevant to the supplier are high. When this situation is reversed and the utility and scarcity of the supplier's resources relevant to the buyer are low, then the supplier takes a dominant role. In Cox's view, wielding power is not a negative process but an essential element of strategy and planning. All firms attempt to frame their relationships with outside bodies to their own advantage. This advantage is designed to maximize their own revenue and to keep competitors out. According to Teece [9], who describes the resource based view of business, power can be established if the business has some advantage that is difficult for others to imitate but is much in need. This could be access to a key resource or a competence in some technology [10]. Having and wielding power do not necessarily have negative connotations for others in the relationship. It is really about how the business uses its power. All companies exist in a variety of relationships some where they do have dominant power and many where they do not.

The issue of power is usually accepted as a natural element of collaboration and many companies accept reasonable rules and conditions applied by their more larger and powerful collaborator. However, the situation becomes difficult if power is applied in an inappropriate manner. In such circumstances, less dominant partners stand to lose a considerable amount if they cannot influence the situation. An example for the potential inappropriate application of power would be where a consignment of goods has been received but is now no longer required by the receiving company. If the receiving company is dominant in this relationship then it may be tempted to maximize its own position by transferring responsibility for over-supply to the supplier. Alternatively, it could blame the supplier for a quality or delivery fault. Thus, while power has value in that it enables a business to optimize strategically its relationship in favour of its preferred strategy, it can also be used inappropriately in a manner that causes damage to a relationship. It is obvious to any outside observer that the inappropriate application of power in such circumstances would result in long-term disadvantage to both parties. However, to the individuals concerned

in the transactions, the distracted long-term view may be difficult to maintain. Shorter-term considerations can become dominant, in which case inappropriate gamesmanship occurs based primarily on the balance of power in the supply network.

2.2 Opportunistic behaviour

In contrast to power relationships there also exists opportunistic behaviour within supply networks. This typically involves one partner having access to knowledge that the other partner does not have and then taking advantage of the knowledge asymmetry to gain a business advantage. Jap [11] has explored opportunistic behaviour. Her determinants of this behaviour are suspicion of opportunistic behaviour, asymmetrical knowledge (one party knowing more than the other) and poor distributive justice in the past. A variety of behaviours can occur between partners involving opportunistic jostling in order to change the power balance in the supply network or to achieve a one-off advantage. Similar to the inappropriate application of power discussed in the previous section, an injudicious approach to opportunistic jostling is likely to risk the demise of the long-term relationship [12].

Jap explored the mechanisms of governance that control opportunistic behaviour. According to Jap, the factors that tend to limit opportunistic behaviour between parties are trust, bilateral investments and shared goals. If the parties involved have established a trust relationship over a prolonged period of time, then this tends to limit opportunistic behaviour and to encourage more open communication. If they have bilateral and shared investments in the collaboration with shared goals, then this also limits opportunistic behaviour.

2.3 Exit or voice relationship

Whether dominant or less powerful, all parties in a supply network may be suspicious of both the inappropriate use of power and opportunistic behaviour. If either occurs and is identified, they are unlikely to accept this situation willingly. How they choose to respond depends upon a number of factors. It depends upon the nature of the relationship. If, as Hirschman [13] and Helper [14] say, the relationship is exit in type, i.e. the two companies in the relationship are not fundamentally dependent upon each other, then typically they will end the relationship—probably relatively quickly and easily. However, if there is a voice relationship, i.e. the companies are interdependent, then there is a strong incentive of self-interest to stay in the relationship and to attempt to resolve any problem issues. The exit relationship leads to rapid termination of the relationship but the voice relationship is likely to lead to interaction, the pattern of which will depend upon the characteristics of the relationship.

2.4 Behaviours in relationships and situational strengths

A network of interactions involves many relationships, some transitory and some more permanent, both inside the company and external to it. Many regular transactions take place at a factual and non-psychological level involving simple day-to-day transactions. However, others occur at a deeper level during negotiation or if there is an issue to be resolved. In such situations there is a strong potential for inappropriate use of power or opportunistic behaviour to emerge depending on how both parties in the relationship choose to behave. (In this sense, behaviour is defined as a sequence of actions that an individual within a company carries out in response to a situational stimulus.) The personal disposition of the individual and the constraints of the work situation combine to become fundamental to determining the behaviour in the relationship. The person will exhibit preferred personal ways of behaving which may be more evident in stressful situations involving problems or delicate negotiations. It is this factor that is fundamental in creating gamesmanship situations which, while appearing sensible to the individual concerned, are detrimental to long-term business-to-business relationships.

In addition, no matter what the individual predispositions are to behave in certain ways, the environment in which a person works will effect their response to a greater or lesser extent. The work situation is very different from, for example, the family relationship. At work, people are within a hierarchy of power relationships, people progress in the organization by meeting appraisal targets, the organization they work for is efficiency oriented and the individuals work to targets. They lack fundamental freedoms to determine their own actions.

To explain this restriction to freedom of action for the individual the concept of situational strength has value [15, 16]. In the strong situation the decision latitude available to the individual is small and behaviour is largely prescribed by organization policy or some rule set. This situation can be conceptualized as red traffic lights where everybody (most at least) knows the rules of the lights and obeys them—with sanctions if they do not (if they are caught). The ambiguity in decisions to be made is low and the rule set defining behaviour is high. Under these circumstances, people, no matter what their predisposition, tend to behave in a similar manner under the same stimulus. The opposite to the strong situation is the weak situation when there is high degree of latitude in decision making and the actual decisions that emerge depend more upon individuals' preferred ways of behaving.

However, it would be wrong to assume that the individual has no influence on the situation strength. There is a mutual interaction between situation strength and the individual disposition to behave in certain ways. One strategy for a manager may be to try to engineer the situation so that they personally have considerable

freedom in their decision making while they ensure that the situation is strong for their own subordinates.

A further issue is that of discretion which has been explored by Hambrick and Finkelstein [17]. The perception of the strength of a situation is related to the personality of the individuals and it is likely that certain people who prefer stronger situations will deliberately select positions where the discretion in decision making is largely controlled by company policies. In contrast, others may prefer weaker situations and they either engineer or choose the situation to suit their personality. Hambrick and Finkelstein identified that strong situations often correlate with older chief executive officers promoted from within, low executive remuneration, little use of incentive schemes, stable strategy and large firms. The person will follow prescribed behaviours when the situation dictates and these behaviours will have been learnt over a significant time period. They will involve an alignment of individual behaviours and the organization's proceduralized and preferred ways of behaving.

In the research described in this paper the commonly held view was accepted that, in a weak situation, individuals involved in transactions adopt patterns based upon their own predispositions, maximizing their own power, access to information or political influence and that, in a strong situation, the organization or group provide strong guidelines and will sanction people if they depart from the guidelines. In the strong situation the organization ensures that a certain behaviour results when a stimulus occurs. The organization may do this because it needs controlled and predictable responses for safety reasons, to minimize damage resulting from an adverse situation, or to guarantee particular performance levels.

In both strong and weak situations the interaction between an individual's predisposition for behaviour and the prescribed behaviours preferred by the organization is complex. People with certain trait patterns will seek to maximize their own situation regardless of the strength of the overall situation; others will prefer to work in environments having particular situation strengths and they will seek employment in companies offering these conditions. A model of these interactions between individuals in collaborating organizations is shown in Fig. 1. The figure depicts the process of two organizations transacting in a supply network relationship. The relative power between the two organizations and the effect of situation strength will influence the choice of game played and whether persons representing the organizations play their own game or play the organization's game.

2.5 Games

The behaviour between individuals in the organization, or when they are acting as proxy for the organization,

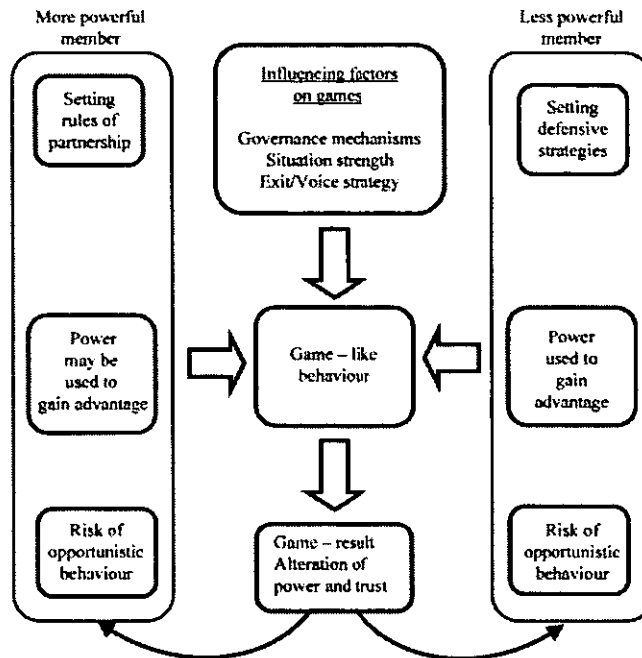


Fig. 1 Two organizations in a supply network relationship

involves transactions of primarily verbal and electronic communication. However, behind this communication there is a significant element of psychological message, e.g. when the communication becomes abusive and loaded with feeling. According to Jablin *et al.* [5], language games are used by organizational actors to disguise their political intentions, to mobilize support and to provide opposition. Various games were identified by Burawoy [18], such as 'making out' games to compensate for loss of control over the labour process. Such behaviour may appear to the detached observer as not being predetermined nor having objectives but it is rational to the actors with respect to the decisions that they make. For example, an individual may enter an organization with every intention of being productive but may be pressurized to behave in certain ways and to limit their work output. They may have to choose between a strategy of being productive and to risk group sanction or to join in the group game. These organizational games exist within all companies, between individuals and between groups. They also occur between collaborating organizations. Inherently, the complex issue of power is involved—power that may shift and move as the game is played so that an individual that started as the dominant partner may not be the dominant partner at the end of the game.

In the organization, a person exists in a complex network of games; sometimes they are the victim of the

game and sometimes they strategically manipulate the game to their own advantage. In many respects, how they progress within the organization and gain power depends upon their skill to manipulate strategically the games to their own advantage. Games can exist as surface phenomena, such as political games defining the frame of reference for the individual in the organization, e.g. networking to achieve empire building [19]. The games can be intra-organizational, between groups or between individuals and the dominant coalition, e.g. 'them-and-us' games, or the games can be deeply embedded inside the organization representing the social reality of the organization and not always within the conscious knowledge of the participants. They are designed to maintain power balances. A further discussion of these levels of games has been provided by Frost [20].

2.6 Transactional analysis

The belief in this research was that the techniques of TA could be used to model the interactions between communicating individuals. TA as originally developed by Berne [21, 22] applied to weak situations involving script messages coming from the *parent*, *adult* or *child* states of the individual. The parent applies injunctions and judgements. The adult is factual with absence of

feeling. The child is emotional and feeling. According to Berne, people can speak from a number of identifiable script positions related to where they perceive themselves to be in the parent, adult or child spectrum. In weak situations it is individual preferences about behaviour (and how others see them) that have the most significance and determine the response patterns.

In the strong situation, Berne recognized that the organization pathology will be dominant. The *etiquette*, i.e. organization procedures and rules, define the stages and verbal patterns of any transaction. The *etiquette* is the parent or traditional aspect of group culture: it enforces the social contract and provides form to the group process. Berne therefore extended TA theory to the organization and in the process defined the *etiquette* (corresponding to the parent), the *technical culture* (corresponding to the adult) and the *character* (corresponding to the child). The technical culture is the rational aspect and consists of whatever scientific/technical knowledge and skill is required to carry out the group activity. Character, the emotional part of the culture, consists of those behaviours permitted by the *etiquette*.

Fischer [23] described the job of the organizational *etiquette* to be that of setting policies and behavioural rules. It takes information from its external environment and internal systems and transforms it into policies and behavioural rules for the technical culture and character. This theory was also put forth by Blakeney [24] who proposed that organizations are open and social systems. They interact with the external environment, they take in energy inputs (stimuli, in TA terms) and use internal processes and structures (ego states) to transform them and to make energy outputs (responses). He also proposes that every system consists of subsystems each having ego states.

Most communications between buyers and sellers in networks will involve some directives from the company about how to behave, combined with response patterns determined and controlled by the transacting individuals. The organizational script and the individual script will interact depending upon respective powers and dispositions. No individual is going to accept completely the company injunction about behaviour, and in most cases the company would not want this. However, in some situations, and particularly in those of high risk, then the behaviour patterns in response to situational stimuli are strictly controlled by the organization and frequently rehearsed to ensure that they are correctly carried out. In these situations, ambiguity is removed as far as possible.

TA is a powerful tool for displaying and analysing transaction patterns. As its origins arose from the therapeutic counselling of couples, it has been shown to be highly effective in conflict resolution. At issue is how much modification of the TA theory is needed to

make it applicable and useful within the organizational context.

2.7 Organization games

There are many ways in which the individual interacts with his/her work organization and both attempt to manipulate each other to obtain what each desires. Early examination of these relationships has confirmed that opportunistic behaviour does take place particularly in situations where one party needs to win; this causes some form of game to take place. Rather than looking at these games from a mathematical sense as in game theory, the major interest is with the psychological transactions and whether the technique of TA can be used as a reasonable modelling tool to represent the pattern of transactions. In TA terms a game has a definite sequence of activity typically involving a pattern of transactions, a switch, for example, where the victim becomes the persecutor and a negative pay-off for one of the parties. In this sense a game may not involve all stages but may involve a regular pattern of interactions, some corresponding to the Berne games, some being collusive in nature and some simply being a regular repeating pattern of transactions that this person or organization frequently exhibits under the same stimulus.

2.8 The games

Games taking place in the organization as a consequence of either individual or organizational characteristics may gain short-term benefit for the more powerful partner but in the long term may lead to loss of trust and higher risk of relationship failure. Since honest collaboration is more desirable in maximizing long-term mutual performance, then the game-like behaviour has to be recognized and attempts made to change the unhelpful aspects of this behaviour. Returning to the concept of holons at this stage may prove useful. A fundamental aspect of a holonic system is that all the holons must operate in a co-operative environment in order to achieve whole system optimization. Unfortunately, for the theorists, this takes no account of the individuality of human nature. Individuals within holons, transacting across holonic boundaries, may develop personal games strategies which do not support, and may indeed damage, whole system optimization. Thus, at one level, managers need to be able to predict and identify non-beneficial games in order to 'defuse' them; at a second level the concept may lead to the potential development of a relationship holon which establishes and monitors mutually beneficial behavioural standards, or codes of conduct, during negotiations or problem resolution. Such systems can never remove the human element in the relationship but at least they

could define a standard approach in the business to conduct relationship behaviours.

3 CASE STUDIES

There are a number of questions that arise from the research that attempts are made to answer:

1. Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?
2. Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?
3. If the games arise from the individual or the organization, is this contingent upon the strength of the situation?

To gather data to answer these questions a qualitative study was carried out involving both semistructured and structured interviews with people involved in network relationships. The initial purpose was to determine whether the model proposed and shown in Fig. 1 was a reasonably accurate representation of transactions. If verified, it was then intended to identify whether specific company policies and communication patterns lead to repetitive patterns of behaviour among supply chain entities. Finally it was intended to provide managers with the resulting insight into games being played in order that they could better understand and thus manage the situation. Studies have taken place in organizations involved in:

- (a) electronic reverse auctions between buyers and suppliers,
- (b) supply chain interactions between food product suppliers and buyers and
- (c) supply chain interactions between automotive suppliers and buyers.

3.1 Case study 1: electronic auctions

The electronic auction is an important new means of trading that has been made possible by the internet. It resembles a reverse bidding process where potential suppliers of goods or services compete with one another to offer the lowest price. A deadline on the bidding is imposed on suppliers all of whom can see each other's bids on the internet. In many respects, electronic auctions change the rules of engagement in supplier to buyer relationships. The auction process apparently gives greater power to the purchaser, particularly enabling them to force down prices. However, in reality, suppliers develop new rules of engagement in order to find ways of exerting and developing their own power.

Discussions were held with a number of buyers who do business by means of reverse auctions and they were

asked to describe qualitatively how suppliers and purchasers behave during the auction. Most of the auctions were conducted in a reasonable manner although they did not always realize the savings planned and they seemed to do little for longer-term trading partnerships. However, it does appear that suppliers do attempt to maximize their power in the relationship with the purchaser in order to maximize their own advantage. The situational strength in a reverse auction would appear to be strong in that the rules of engagement are defined and controlled by the purchaser and there is not much opportunity for supplier discretion other than deciding whether or not to bid and what price to bid.

In discussions with a major producer of motor vehicles the following procedure was identified at the company:

1. The invitation to bid was issued and a pre-qualification process took place.
2. Only those capable of satisfying the quality and delivery requirements were invited to bid against a specification issued by the buyer.
3. The auction was limited in terms of time; generally the bidding was slow in the first half-hour but then speeded up as the time passed and the participants of the auction gained knowledge of the bid levels from the other participants.
4. As the deadline approached, the bidding accelerated, culminating in a frantic final 5 min as suppliers decide whether they are willing to reduce their price finally to win the contract.

The strategies adopted by the suppliers can be surprising and at first sight counter-intuitive. They are aimed at increasing their own power in relation to the other suppliers and/or the purchaser.

A variety of games have been observed:

1. *Collaboration.* Suppliers form a group that bids as one unit and then, when the work is awarded, they divide it up between themselves. By being a more unified entity the bargaining power of the suppliers is increased.
2. *Collusion.* The buyer implies to a favoured supplier that an aggressive approach to price reduction which forces other suppliers to reduce their bids could win future favour.
3. *Last leader.* The supplier bids very low in the knowledge that, if it wins the order, the purchaser will be locked in and it will have to purchase spares and maintenance from the supplier. The supplier is making a strategic judgement about the value of the work based upon power acquired when the buyer's switching costs are high.
4. *Jostling for advantage.* An incumbent long-term supplier may be under pressure to bid in an auction to retain its position as supplier. This is clearly a mechanism for the purchaser to exert power on the supplier. The supplier makes a calculated decision

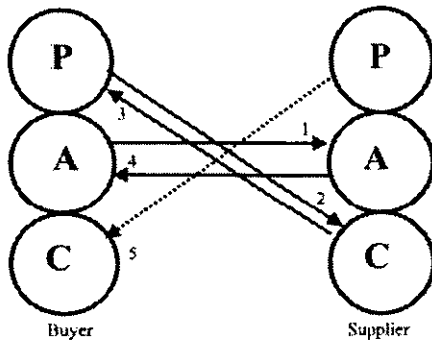


Fig. 2 TA for the electronic-auction loss leader

about the buyer's cost of switching and sometimes backs out of the auction just before it takes place. This can place significant pressure on the buyer since they may not, in reality, wish to switch supplier. Both parties participate in a complex jostling activity to gain advantage.

A typical case that was modelled using TA for the loss leader is shown in Fig. 2. In this case the flow of information took place as follows:

1. The buyer opens the game by providing the opportunity for the supplier to bid for the work. Generally this was carried out as an adult-to-adult transaction, although in some instances, when the buyer exerted power, it was more parent to child. This is shown as transaction 1 in Fig. 2.
2. The buyer, which in this case had more power, specified the terms and conditions of the auction to gain maximum advantage. In that the buyer is setting the rules, this is shown as the parent-to-child transaction 2.
3. The supplier bids low primarily to win the order but with an ulterior motive of gaining control at a later stage when the buyer is locked into the supplier. At the social level the supplier responds from the less dominant position of child to parent, shown as transaction 3. However, there is an unspoken strategy in the supplier to gain some power at a future date.
4. If the game is played over a time period, then eventually the supplier will have some dominance due to the lock-in situation. If the supplier's strategy works, then it will at some future time gain power, enabling it to continue social communication as the adult-to-adult transaction 4 while the ulterior unspoken message is parent-to-child transaction 5.

These behavioural strategies are an attempt by the supplier and the buyer to maximize their benefit. However, it carries a risk for the supplier of miscalculation that could lead to a future loss of business and for the buyer the risk of increasing costs. Some form of strategic

gamesmanship is inevitable in these situations and a code of conduct is needed to define what is an acceptable game and what is not. Such a code of conduct could be written into the 'rules' of the auction or indeed in holonic terms. In the case of the latter a standard relationship holon for the auction environment would be defined which would set the minimum standard for behaviour patterns and outcomes. The purpose of the holon would be to limit opportunistic behaviour and to build up trust. To be successful its benefits to all parties would have to be clearly recognizable.

3.2 Case study 2: searching for a quality problem

This scenario was described by the buyer in the transaction. One company supplied raw ingredients to a manufacturer of food products. To ensure that the buyer received a consistent and regular supply of the material a call-off arrangement had been negotiated. The supplier produces and sends an ingredient to the buyer working to an agreed forecast of requirement plus or minus an amount depending upon the agreed tolerance.

Most of the transactions between buyer and supplier were factual and in TA terms adult to adult within a well-defined etiquette. Game-like behaviour to gain advantage was only evident in those relatively rare problem situations that arose between the buyer and the supplier. One particular problem that did occur was a case where the buyer received more product from the supplier than was actually needed in the period even though the amount supplied was still within the pre-agreed call-off tolerance. In terms of situation strength the buying company operated perfectly within the defined terms of contract and therefore at first sight seemed to demonstrate a strong situational strength. However, individual buyers did have some latitude to interpret the framework, leading to some ambiguity in decision making and thus in reality operating to a weak situational strength.

Because of the contractual agreement they could reject any consignment supplied if they found a quality problem. The buyer used this clause to increase its power by searching very hard to find a quality problem of any sort to enable them to reject the consignment. Nearly every time they did find some quality issue on which to base a decision to reject the goods. The supplier did not readily accept the situation but, since the buyer was more powerful in the supply chain, they generally accepted the consignment back. In this situation the etiquette no longer applies and the transaction switches to a parent-to-child situation with the supplier playing a calculated game.

Although the transactions have to be estimated it is possible to plot out the interaction between supplier and buyer (from the buyer's perspective) using the TA terminology:

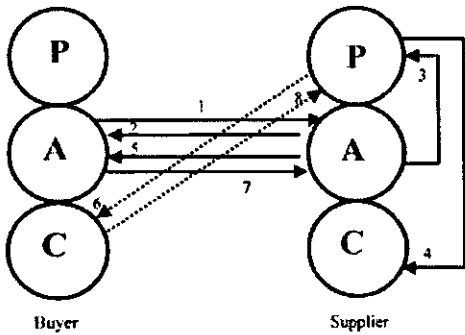


Fig. 3 Searching for a quality problem

1. The initial transaction is as follows: a call-off instruction indicating the quantity required as per pre-arranged forecast was sent by the buyer to the supplier. This is modelled as the adult-to-adult transaction 1 in Fig. 3.
2. The supplier responded by supplying the called-off quantity of goods. This is again modelled as an adult-to-adult response to the buyer as transaction 2.
3. The buyer had miscalculated the amount needed and there was a considerable over-supply. There was a significant number of transactions that took place inside the buyer organization between purchasing and senior management about what to do about the over-supply. This is shown as transactions 3 and 4. In transaction 3 there was an adult-to-parent message from the purchasing department to the dominant coalition in the business. The dominant coalition took a critical parental stance instigating the parent-to-child transaction 4 to the purchasing department. The message from the dominant coalition was to find a means of rejecting the delivery. A search for a mechanism to reject the delivery was instigated and a convenient reason found.
4. A message was then sent to the supplier, indicating with reasons why the batch was being rejected. On the surface this was an adult-to-adult transaction, shown as transaction 5, but at the psychological level this was a powerful parental injunction and the underlying message that this was the supplier fault and problem, shown as transaction 6.
5. The supplier, in a less powerful position, indicated that they would take back the consignment. Although they did not think it was justifiable, they took it back primarily to maintain the relationship. This is shown as transaction 7 while the underlying ulterior message is 8.

In this situation the buyer had the power and the supplier did not want to damage the business relationship. The problem with the behaviour was that it lowered long-term trust and encouraged both parties to continue to seek

opportunistic behaviour in the future. The framework and culture at the buyer company were encouraging the buyers in the purchasing department to adopt strategies to gain short-term advantage at the expense of longer-term benefit.

3.3 Case study 3: you may be powerful, but ...

While negotiating for the business, the supplier agreed to most of the terms and conditions set by the buyer and entered into a long-term partnership at agreed and negotiated prices. Some time after the business relationship had been established, a lock-in situation had developed which tended to give the supplier more power. The supplier used objective reasoning backed by tools such as activity-based costing to justify a pricing increase. In this situation the buyer agreed when presented with the facts.

The transactions took place over a significant time interval. The approximate sequence of transactions was as follows:

1. Initially power seemed to reside with the buyer and the supplier agreed to all the requirements of the business at a reduced price in order to win the contract. A series of transactions occurred, associated with the negotiation and establishment of the contract. These were conducted on primarily an adult-to-adult basis, shown as transaction 1 in Fig. 4.
2. After some time the supplier had become closely integrated into the buyer's product lines. The supplier considered that it was strong enough to ask for a price rise but it had to be based on some objective data. This is shown as the surface adult-to-adult transaction 2 with an ulterior message of 'now that we (the supplier) have more power, you have to pay more' shown as transaction 3.
3. A negotiation process took place and the buyer agreed to most of the price increase. On the surface this is the adult-to-adult transaction 4. However, at a later time it invited the supplier to take part in an

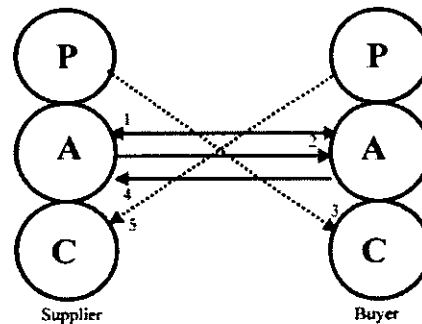


Fig. 4 You may be powerful, but ...

internet auction for the supply of the parts, but the ulterior message was 'we will get you later' and this is represented as transaction 5.

The example demonstrates that the two companies use their perceived power to gain advantage. The game playing that was taking place was overall damaging to long-term relationships but maximized the benefit in the short term. The only solution seemed to expose the games and to encourage the two parties to act in a more interdependent style.

4 DISCUSSION

TA provides a very valuable tool for displaying the information transfer between partners in the supply chain. It can represent the ulterior messages at the same time as the psychological message and hence provide a much richer picture about the transactions than conventional information modelling tools. In this research the concept of games has been used. The games, as developed in TA, are repeating patterns of transactions that occur between supply chain partners. TA was applied to organizations by Berne himself with the concepts of character, etiquette and technical culture matching to the child, parent and adult states. However, games in TA are generally carried out at an unconscious level and relate to learnt patterns of behaviour and to re-enforce beliefs about the self. Between organizations the games are often more conscious and planned actions corresponding to unspoken transaction strategies. Rather than call these games it may be better to call these deliberate strategic manoeuvres.

The information modelling capability of TA provides a much 'richer' picture about what is being verbally and non-verbally communicated than many other information modelling tools. It is also possible to identify transactions inside the organization that match the parental judgements, the logical adult and the emotional child. One difficulty in using TA is the interpretation of which part of the ego state the messages are coming from. To a considerable extent the theoretical base of TA does provide guidance about recognizing whether it is a parent-to-adult transaction or an adult-to-adult transaction, etc., and it was judged that, as organizational practitioners gained more experience, it would become easier to identify clearly the patterns of transaction. From the field work in organizations it does seem likely that there are only a limited number of games that occur in supply-chain interactions. There would be considerable value if this could be verified and to determine what these patterns are. It would also be worthwhile to determine whether these organization games match the Berne games. An assumption of this research is that organizations can be modelled in a rather similar way to the individual in that there are parental, child-like and adult transactions. Whether you

identify the organization in the same way as the individual or not it was clearly observed in this research that there were parental-type transactions, child-like transactions and adult-like transactions regularly taking place within any one organization.

An important question is, once game-like behaviour is identified, what can be done about these rather negative game-like patterns. It is not even obvious that any company would actually choose to be up front and to eliminate these games particularly if it is gaining some strategic advantage and power from them. All the parties in the transactions have to see these games as being negative before any concerted action can take place to eliminate the game-like behaviour; then the therapeutic methods of TA would be appropriate. Being aware of the game and having a deliberate strategy to interrupt the pattern of transactions once identified would end the games. Also using governance mechanisms similar to those defined by Sandy Jap to control the incidence of opportunistic behaviour could significantly reduce the likelihood of games. Finally, the research has shown the importance of power in that the more powerful member generally sets the rules and controls the game-like behaviour. To eliminate games the use of power must be used wisely not to overwhelm the other in the transactions. Much of the transaction patterns appear to be a means of acquiring power in the transaction process, primarily to leverage the maximum value for the organization. Although by far the majority of the transactions observed were adult to adult, the incidence of game-like behaviour increased in problem situations. Where one party wanted to ensure that it did not suffer loss or alternatively wanted to gain advantage, gaming became obvious.

Now the three questions raised in section 3 are considered.

Are transactions between individuals strongly influenced by the situational context and the power relations in the organizations?

From the case studies the answer would appear to be 'yes'. Where a strong situational strength has been identified, then the transactions have primarily been at the adult-to-adult level. However, where the situational strength is weak, then gaming becomes more available with the dominant partner instigating parent-to-child-type transactions. Interestingly, the longer-term 'ulterior' transactions were primarily instigated by the weaker partner to gain longer-term advantage.

Where the manipulation of power in the organization is realized as games, is TA a valid representation of these games?

Certainly, in the case studies investigated, it provides a very useful short-hand demonstration of the transactions taking place. It adds a new dimension to the understanding of transactions between organizations since it

considers more than just information flows. It shows the relative strengths and weaknesses of the partners within a set of transactions, enabling partners to identify problem issues which would not be so apparent without the TA methodology.

If the games arise from the individual or the organization, is this contingent upon the strength of the situation?

From the case studies investigated, so far very little evidence was found that individuals instigated games on their own personal account. It is true that games were initiated by individuals but in all cases this was done to the supposed benefit of the employing company. Significant loyalty to the company was seen in many cases. However, where games were played, it was aimed primarily at short-term benefit for the individuals' company and not for long-term benefit of the partnership.

5 CONCLUSION

In conclusion, the present authors are of the opinion that significant insight and benefit can be developed by modelling supply chain interactions using TA and have been impressed by the diagnostic capabilities of TA and its capability as an information modelling tool. As supply chains become increasingly lean and agile, their overall performance becomes increasingly dependent on maintaining mutual beneficial power relationships. The holonic concept of supply chains can only be established through co-operation, and co-operation is only ensured by understanding power relationships. TA provides a means for this understanding and hence relationship management.

ACKNOWLEDGEMENT

The authors would like gratefully to acknowledge the support that the Engineering and Physical Sciences Research Council, UK, has extended towards them for this work.

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Appendix 4

Author's Publications

Dani, S., Backhouse, C.J. and Burns, N.D. (2004) "Application of Transactional Analysis in Supply Chain Networks: A Potential Holonic Mediating Tool" , *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture* , 218(B5) , May , pp 571-580, ISSN 0954-4054 .

Dani, S., Backhouse, C.J. and Burns, N.D. (2005) "Buyer- Supplier Behaviour in Electronic reverse Auctions: A Relationships Perspective", *International Journal of Services and Operations Management*, Vol. 1, No. 1, pp 22-34

Dani, S. and Burns, N.D. (2001), "Logistics Research Network Conference" , *Proceedings of the Logistics Research Network 6th Annual Conference* , Heriot-Watt University, 13th September, pp 111-117, ISBN 1-870214-92-7 .

Dani, S. and Burns, N.D. (2001), "Developing a Framework Based on a Psychological Perspective for Studying Buyer-Supplier Relationships" , *Proceedings of SPIE Vol 4566, "Internet Based Enterprise Integration & Management"*, Paper 4566-04 , Boston, USA, October .

Dani, S., Burns, N.D. and Backhouse, C.J. (2002), "Modeling Voice and Exit Strategies within Industrial Network Relationships" , *Proceedings of the 2002 IEEE International Engineering Management Conference* , Cambridge, UK, 18th August, pp 264-269, ISBN 0-7803-7385-5 .

Dani, S., Burns, N.D. and Backhouse, C.J. (2003), "Human Aspects of Supply Chain Optimization" , *IEEE International Engineering Management Conference* , New York, USA, 2nd November, pp 350-353, ISBN 0-7803-8151-3 .

Dani, S. and Burns, N.D. (2001), "Supply Chain Relationships" , *Proceedings of the UK Symposium on Supply Chain Alignment* , Liverpool, UK, July 2001, pp 84-100 .

