

Tempest, Susan (2000) Ideas work: a study of learning in network contexts: the case of the UK television industry. PhD thesis, University of Nottingham.

Access from the University of Nottingham repository:

http://eprints.nottingham.ac.uk/29438/1/324117.pdf

Copyright and reuse:

The Nottingham ePrints service makes this work by researchers of the University of Nottingham available open access under the following conditions.

This article is made available under the University of Nottingham End User licence and may be reused according to the conditions of the licence. For more details see: http://eprints.nottingham.ac.uk/end_user_agreement.pdf

A note on versions:

The version presented here may differ from the published version or from the version of record. If you wish to cite this item you are advised to consult the publisher's version. Please see the repository url above for details on accessing the published version and note that access may require a subscription.

For more information, please contact eprints@nottingham.ac.uk

IDEAS WORK: A STUDY OF LEARNING IN NETWORK CONTEXTS: THE CASE OF THE UK TELEVISION INDUSTRY

by Susan Tempest, B.A, M.B.A



Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy, October 1999



Ethos - Thesis for digitisation

Thesis details: Tempest, Susan

Ideas Work: A Study of Learning in Network Contexts
The Case of the UK Television Industry

Please exclude the following sections/pages:

Pages: 15 (Table 2.1), 43 (Figure 2.3), 51 (Figure 3.1), 114 (Figure 5.1), 119 (Figure 5.2), 131 (Figure 5.4), 341 (Appendix H), 342 (Appendix I), 343 & 344 (Appendix J)

IDEAS WORK: A STUDY OF LEARNING IN NETWORK CONTEXTS: THE CASE OF THE UK TELEVISION INDUSTRY

TABLE OF CONTENTS

		Page
Abstr	e of Contents ract owledgements	i v vii
СНА	PTER ONE: Introduction	
1.1 1.2 1.3 1.4 1.5	Introduction Organisational Learning and Strategic Management Objectives of the Thesis The Research Context Outline of the Thesis	1 2 5 6 7
СНА	PTER TWO: Competitive Advantage from Learning	
2.1 2.2 2.3 2.4 2.5 2.6	Introduction Strategic Management as a Learning Process The Learning Organisation? Knowledge and Knowing Learning, Knowledge and the Resource-Based View of the Firm Facilitating Learning in Organisations 2.6.1 Structure and context 2.6.2 The role of managers in organisational learning 2.6.3 Architecture Conclusion	10 12 19 22 29 35 35 38 44
СНА	PTER THREE: Learning in Network Contexts	
3.1 3.2 3.3	Introduction Network Contexts and Learning Opportunities Relational Issues in Network Contexts 3.3.1 Communities of practice 3.3.2 Brokering knowledge 3.3.3 Social capital and unlocking knowledge	47 49 53 54 59

	3.3.4 Sharing knowledge	61
	3.3.5 Learning context	63
3.4	Key Issues	66
СНА	PTER FOUR: Research Methodology	
4.1	Introduction	69
4.2	Philosophical Perspective	70
4.3	Conceptual Framework	73
4.4	Why the Television Industry?	76
4.5	Description of Method	78
	4.5.1 Preliminary research	79
	4.5.2 Sample	81
4.6	Interviews as a Research Methodology	88
4.7	Data Collection and Data Analysis	91
4.8	Triangulation and Validity	97
4.9	Generalisability of Results	99
4.10	Conclusion	100
СНА	PTER FIVE: The UK Television Industry	
5.1	Introduction	101
5.2.	Public Service Ethos and Regulation	102
	5.2.1 From monopoly to duopoly	104
	5.2.2 Programme diversity: the publisher model	105
	5.2.3 Deregulation and global competition	107
	5.2.4 Cross-media ownership	112
5.3	The Structure of the Industry	113
	5.3.1 The broadcasters	114
	5.3.2 The centrality of the programmes	119
	5.3.3 Different modes of organising and levels of regulation	121
5.4	Efficient and Effective Programme Production	124
	5.4.1 The organisation of production via flexible networks	127
5.5	The Key Environmental Issues for Production Firms	133
	5.5.1 Uncertainty	134
	5.5.2 Competition	139
	5.5.3 Technology	143
	5.5.4 Regulation	145
_	5.5.5 Working practices	147
5.6	The Key Forces for Change in the UK Television Industry	150

CHAPTER SIX:	Relational Advantage for Leveraged Learning and Knowledge Marketing

6.1	Introduction	153
6.2	Strategic Management through Learning	154
6.3	Relational Advantage	160
	6.3.1 Customer relationships	163
	6.3.2 Talent relationships	182
	6.3.3 Partner relationships	187
	6.3.4 Viewer relationships	191
6.4	Conclusion	195
СНА	PTER SEVEN: The Knowledge Chain:	
	Knowledge Resources and Knowledge Brokering	
7.1	Introduction	196
7.2	The Knowledge Chain	196
7.3	Knowledge Resources	198
7.4	Knowledge Brokering	200
	7.4.1 Primary level network relationships	202
	7.4.2 Lower level network relationships	206
	7.4.3 Knowledge relevance	208
	7.4.4 Knowledge workers, knowledge options and knowledge hubs	213
	7.4.5 Freelancers, knowledge investments and attachments	220
	7.4.6 Knowledge brokering tasks	232
7.5	Conclusion	235
СНА	PTER EIGHT: The Knowledge Chain:	
	Effective Learning Contexts, Knowledge Outputs	
	and Knowledge Development Challenges	
8.1	Introduction	237
8.2	The Creative Process: Unlocking Knowledge and Experiential Learning	239
	8.2.1 Creative culture, people, and ideas generation	240
	8.2.2 Ideas evaluation, ideas marketing and ideas development	246
	8.2.3 Ideas realisation, ideas performance, and marking success	253
	8.2.4 Unlocking knowledge	259
	8.2.5 Experiential learning	261
0.2	8.2.6 Shadowing and intergenerational learning	271
8.3	Safe Space Learning	275
8.4	Knowledge Outputs Dividing Loaming Polytionships	282
8.5	Building Learning Relationships 8.5.1 The knowledge hub and learning context	291 294
	6.5.1 The knowledge had and learning context	474

8.6	Knowledge Marketing for Knowledge Reputation	296
8.7	Challenges of Knowledge Development under Flexible Production	298
	8.7.1 The costs of teaching	298
	8.7.2 Skills relevance	300
	8.7.3 Knowledge uncertainty	308
	8.7.4 Ideas theft	311
8.8	Conclusions	312
СНА	PTER NINE: Conclusion	
9.1	Introduction	313
9.2	Relational Issues of Learning in Network Contexts	314
9.3	Differentiating Knowledge Resources & the Knowledge Brokering Task	ks 315
9.4	The Importance of Learning Contexts	317
9.5	Assessment of the Study and Suggestions for Future Research	320
9.6	The Contribution of this Study to Theory Development	326
APPI	ENDICES:	
Appe	endix A: Letter to request interview	331
Appe	endix B: Interview Guide	332
	endix C: A chronology of the key developments in UK television	334
Appe	endix D: ITV contractors (1954)	337
Appe	endix E: The completed ITV federation (1962-67)	338
Appe	endix F: The ITV federation (1968-81)	339
Appe	endix G: The federation of ITV companies (1982-1992)	340
	endix H: Channel 3 Licences (1993)	341
Appe	endix I: Key performance indicators: BBC Value for Money Review	342
Appe	endix J: The Main Jobs in Television Production	343
Refer	rences:	345

ABSTRACT

A growing literature contends that organisational learning is a source of competitive advantage for firms seeking to adapt their strategies to rapidly changing environments. The 21st Century as the age of learning organisations and knowledge work is an inspiring vision. However, much of the existing organisational learning literature assumes that the locus for learning is within neatly bounded firms. Less appears to be known about the learning issues facing firms that are reliant on external relationships with mobile, contract labour, suppliers and customers.

This thesis focuses on learning and knowledge development in the UK television production industry. An industry where ideas realisation occurs across firm divides, in flexible production networks of core employees and freelance knowledge workers. A conceptual tool, *The Knowledge Chain*, is developed, herein, to highlight the key learning processes arising in such fluid, network production contexts.

It is contended, herein, that the network arrangements used to organise production in the UK television industry raise challenges for firms seeking the control of knowledge resources. Indeed, attempts to codify the wide array of knowledge, on which network production builds, may be a futile exercise that squanders scarce resources. However, this thesis suggests that firms operating across such networks can still profit from the learning of a wide array of external production partners by building strategic learning relationships and effective learning contexts that facilitate

knowledge sharing, application and development drawing on many more brains than a firm could afford to employ.

Facilitating learning relationships with external partners can bring strategic benefits including leveraged learning to outpace competitors, and insurance against strategic myopia and the intra-firm insularity of group-think. Nevertheless, when key workers are not internal employees and production defies firm boundaries, profiting from learning becomes a more complex relational and contextual challenge than much of the existing literature implies.

ACKNOWLEDGEMENTS

I would like to thank all those who supported me throughout the research. These include my family and my friends, in particular Mary Hartley and Beverley Lee for keeping me focused, and Chris Barnatt for providing a healthy injection of realism.

I also wish to thank Professor Ken Starkey for his guidance throughout the research process and all those managers who spared the time to share their insights into the key strategic issues facing the television industry.

Last, but not least, I would like to thank my son Adam for being so tolerant of a mother who for many of his formative years was distracted by "business".

CHAPTER ONE

INTRODUCTION

1.1 Introduction

"The UK's distinctive capabilities are not raw materials, land or cheap labour. They must be our knowledge, skills and creativity" (DTI, in Guardian, 17.12.98: 22).

A growing literature suggests that learning is central to achieving competitive advantage in the Information Age (Badaracco, 1991; Hamel and Prahalad, 1989; Spender and Grant, 1996). The environmental uncertainty resulting from rapid technological change, global competition and industry convergence has prompted not just policy makers, but also academics and individuals to consider how competitive advantage can be sustained in the Twenty-First Century. One key theme emerging, in both theory and practice, is the importance of learning to the competitive advantage of nations, firms and individuals if they are to adapt to a dynamic environment.

Maintaining relevant knowledge is a key issue making ongoing learning imperative. Nations, therefore, are encouraging lifelong learning to ensure their citizens have the knowledge and skills relevant to the changing needs of global firms (Reich, 1991; Drucker 1969). Individuals are anxious to update their skills and knowledge to ensure their employability in competitive labour markets. Firms faced with complex and dynamic environments, need to be able to adapt

their strategic direction as they learn from their shifting environment (Quinn, 1980; Senge, 1990).

1.2 Organisational Learning and Strategic Management

Learning, knowledge development and utilisation are being presented as increasingly important dimensions of strategic management. Concepts like the 'learning organisation' (Senge, 1990), and 'core competence' (Prahalad and Hamel, 1990) reflect the growing interest in learning and knowledge as the basis for evolving strategy and developing dynamic capabilities. The knowledge-based view of the firm stresses that given environmental uncertainty, competitive advantage on the basis of positioning within an industry will be both easier to replicate and harder to sustain. Sustainable success may be more securely rooted upon transferable knowledge that can be applied in innovations to products and processes across industries, or to integrate previously distinct sectors (Badaracco, 1991; Hamel, 1991).

Many firms are seeking to manage the link between relevant knowledge and performance. This is demonstrated by the rise of the company university at firms like Motorola, Disney or BT. Other firms are appointing senior managers to oversee organisational learning, with the first such appointment being the Director of Intellectual Capital at Skandia Assurance and Financial Services. Such initiatives send an explicit message to stakeholders and competitors that a business is being managed as a knowledge system.

Much of the existing theory on organisational learning focuses on the firm as the locus for learning (Powell, 1998). Such theory focuses on the role of senior managers, middle managers and employees in the process of organisational learning. Although, work by writers like Quinn (1980) highlights the learning that can be derived from the interface of the organisation and its environment, the key learning actors are still portrayed as internal to the firm. One of the criticisms that could be levelled at much of the organisational learning literature is that it builds from the assumption that firms directly employ key workers inhouse at a time when more firms are reliant on transient workers, and fluid networks for organising production (DTI, 1998).

Given the imperative of organisational learning, there is a growing interest by managers and management academics in the related issue of knowledge management (Davenport and Prusak, 1998). Knowledge management is concerned with developing methods to aid organisations in their quest to capture, share and utilise knowledge within their organisations. The tools and techniques of knowledge management that have been developed so far often rely on sophisticated communications and information technology to encode best practice approaches, lessons learned and knowledge maps of knowledge rich individuals. There are impressive examples of such techniques improving efficiency and quality of service in many sectors, including the insurance industry, oil exploration and pharmaceuticals industry (Davenport and Prusak, 1998). Many of these tools have been developed in large vertically integrated organisations or high technology organisations where explicit knowledge is codified in systems, measured in tangible performance outcomes and protected

by patents. However, to what extent such practices are transferable to more fluid industries where the key knowledge is more intangible is less clear.

Recent research reveals that behavioural issues are also important in organisational learning and knowledge management (Nonaka and Konno, 1998). However, the ways being advocated by commentators to influence behaviour again draw on firm-based solutions. For example, reward systems are advocated for employees that provide incentives for knowledge sharing, moving people around the organisation in different roles is advocated to aid mutual understanding and knowledge managers are seen as a way of keeping knowledge management high on the organisation's agenda. However, although such approaches to learning may be invaluable in multi-divisional, world class firms that are reliant on the brains of thousands of internal workers, it is unclear how transferable such theory is to the many firms that are reliant on transient workers brought together in network organisational forms to achieve their strategic objectives.

For managers seeking competitive advantage, the successful management of external relationships is becoming a key component of strategic management (Harrigan, 1985, 1988; Best, 1990). The short-term financial benefits of flexible production are well understood. Much has been written about the benefits of flexible network forms for numeric and functional flexibility (Miles and Snow, 1986). Network forms enable partners to focus on their core knowledge enabling diverse specialists to organise on a temporary basis bringing cost/quality advantages. The implications for learning, knowledge development and core

competence arising from flexible network production still remain relatively under researched.

1.3 Objectives of the Thesis

The aim of the research is to explore the strategic and organisational issues raised for firms operating in flexible network production contexts where learning, knowledge sharing and knowledge development occur across firm boundaries. The research presented in this thesis does this by examining the key learning processes and learning challenges arising in network production contexts drawing on the case of the UK television production industry.

The study seeks to contribute to the literature on organisational learning and knowledge development by providing an insight into how learning occurs in contexts where the firm is reliant upon external workers. The contribution of the study to the organisational learning literature builds upon the exploration of learning processes in messy, complex production networks that it could be argued are more reflective of the reality of the co-production arrangements faced by many firms as we approach the next Millennium.

In the UK, policy makers claim, our future competitiveness lies in the knowledge and skills of our workforce (DTI, 1998). However, what issues and challenges does flexible network production pose for knowledge and skills development? In the UK, this issue is particularly important because a large thrust of our economic development policy builds on the premise that the creative industries will provide much of our future wealth and employment

opportunities (DTI, 1998). Industries like fashion, design, architecture/construction, television, film, publishing, advertising and theatre rely on fluid network organisational forms and have done for many years. It is contended herein, that these industries may provide rich research contexts for expanding our understanding of what organisational learning means and the challenges it poses when learning crosses firm divides.

1.4 The Research Context

In deciding the setting for this research, an industry was sought that was experiencing the major structural changes associated with flexible production and dynamic collaborative network relationships, but that still offered growth potential for future prosperity.

The television production industry was chosen because flexible network production is an established organisational form in the television industry. The television industry is undergoing rapid structural change and faces considerable market and technological uncertainty that raises the complex organisational and management issues associated with learning in complex, dynamic environments.

The forces of convergence in the communications sector is bringing together TV, telecommunications and computing, and driving rapid growth in new channels and methods of delivery. These forces are changing both working practices and the modus operandi of the industry. Many of the organisational prototypes of tomorrow may be found in the television industry (Florida and Kenney, 1993). Global media empires (e.g. Rupert Murdoch's News

Corporation) co-exist with strategic alliances (e.g. Granada and Carlton's alliance to develop digital television), indigenous terrestrial broadcasters (e.g. BBC, Channels 3, 4, 5), independent production firms and thousands of freelance workers.

Another reason for choosing the television industry as the research setting to investigate learning and knowledge development is that television is an activity where the UK has a national competitive advantage (Porter, 1990: 492). The UK is the second largest national exporter of television programmes (Department of Trade and Industry, 1994: 109). Furthermore, the strategic importance of the programme production industry has increased as content becomes conceptualised as the "software" of the Information Age. The future market opportunities for content are considerable given the multiplying distribution capacity (Office of Science and Technology, 1995). The strategic potential of content is endorsed by global competitors like Viacom and News Corporation that have re-defined themselves as being in the software business of communications (Battelle, 1995).

1.5 Outline of the Thesis

Following this introduction, Chapter Two considers why organisational learning is contended to be so important in thinking about strategy, what is meant by organisational learning, the learning organisation and knowledge in the context of strategic management. Also outlined are some of the management challenges arising from the organisational learning literature.

In Chapter Three, given the learning imperative for firms, the learning issues and challenges facing managers that are operating in contexts of network production are identified drawing on the existing literature. Some of the key structural, relational and contextual issues raised by existent research into learning in flexible networks are discussed.

In Chapter Four the qualitative methodology employed in carrying out this study is discussed. Explanation is offered for the choice of industry context and the identification and interviewing of participants. The transcription process and the subsequent analysis of the interviews, with the aid of the NUD*IST software package, are also considered.

In Chapter Five the context for the research - the UK television industry is examined to highlight the key environmental forces shaping the industry at the time of the fieldwork. The pressures for efficiency and effectiveness that have driven greater emphasis on flexible network production arrangements for television production are examined. The key strategic challenges posed by the restructuring in the industry for firms engaged in network production are outlined.

In Chapter Six the difficulty of planned approaches to strategy for television production firms is highlighted. The concept of *relational advantage* is introduced to illustrate how production firms are using learning relationships with customers, talent, partners and viewers to leverage learning, and market

their knowledge base to key workers and potential customers to strengthen the knowledge reputation of the firm.

In Chapter Seven the key learning processes found under network production in the television industry are introduced using the framework of *The Knowledge Chain* that has been derived from the findings of this study. The strategic knowledge resources available to a television production firm are outlined. The range of knowledge brokering tasks undertaken by managers of television production firms are also highlighted in order to expand our understanding of how firms can learn and profit from the knowledge of external workers by forging a range of mutually beneficial learning relationships.

In Chapter Eight, it is highlighted how the management of the creative process and the learning environment offered by a production firm is instrumental to strategic learning in network settings. The challenges of knowledge development in network settings are also explored to remind managers of the practical difficulties of learning in network settings.

Chapter Nine summarises the key findings of the study. An assessment of the research is made and suggestions made for future research. The conclusion outlines how this study contributes to the existent literature on organisational learning.

CHAPTER TWO

COMPETITIVE ADVANTAGE FROM LEARNING

2.1 Introduction

"The ability to learn faster than your competitors may be the only sustainable competitive advantage" (Arie de Geus, former Head of Planning for Royal Dutch Shell in Senge, 1990: 4).

There is a growing literature that conceptualises strategic management as a process of organisational learning. The premise being that in circumstances of environmental uncertainty the ability of an organisation to adapt to changing customer needs or competitor activity is vital. Learning is important because it can help alert organisations to emerging external opportunities and threats, and internal strengths and weaknesses before the competition. As John Browne CEO of BP (in Prokesch, 1997) notes learning enables a company to adapt to a rapidly changing environment. Firms need continual improvement in both products and processes to meet rising customer expectations and to beat off rivals. Such learning might be focused on bench-marking industry best practice, or carving out new competitive space through innovative ideas for new products or markets.

Learning, it is argued, facilitates and enhances the quality of strategic thinking. In this chapter, the theoretical context for the thesis is explained drawing on some of the key contributions on organisational learning, some of which build on the resource-based view of the firm. In compiling this literature review, it has been necessary to be discriminatory given the sheer volume of organisational learning material emerging, in the 1990s, in the field of strategic management. The aim being, in this chapter, is to provide an insight into the rationale for a dynamic view of strategic management as a learning process, why such a view is considered particularly timely as we approach the Twenty-First Century, and to discuss some of the organisational issues this learning based conceptualisation of strategy raises for firms.

In section 2.2 the organisational learning literature is introduced. Section 2.3 considers what is meant by a learning organisation. Section 2.4 considers what knowledge means in the context of strategic management. Section 2.5 discusses how the organisational learning literature contributes to the broader debate in strategy about whether the resource-based view of the firm provides a securer foundation for strategy in a world of converging and shifting industry boundaries. Finally, the organisational implications arising from organisational learning are explored.

This thesis argues that in some industries the notion of the neatly bounded firm populated by in-house employees is largely redundant. Consequently, in Chapter Three the implications for network based production from this emphasis on the contribution of effective learning processes to effective strategic management will be discussed.

2.2 Strategic Management as a Learning Process

Krogh, Roos and Slocum (1994) contend that firms have to meet both survival and advancement needs. Survival is about the management of the input-output relationship between the firm and the environment. Current output tends to be the focus of managers. The manager of the small firm is often concerned with survival, whilst the manager of the larger firm is increasingly preoccupied with short-term shareholder value. Advancement captures the longer term issues of developing competencies, norms and knowledge for future success. Given the significance of unique competencies and knowledge to competitive advantage, effective advancement through learning may be a pre-requisite for firm survival.

It is not what you know, but how quickly you can learn and unlearn that is key to the resilience of firms in dynamic, uncertain competitive environments where strategically relevant knowledge is constantly changing (Hedberg, 1981; Leonard-Barton, 1992). Firms wishing to learn from suppliers, customers, and competitors need *absorptive capacity*: the capacity of individuals, and thereby firms, to absorb ideas, skills and techniques from external production partners and harness that new knowledge for competitive advantage (Cohen and Levinthal, 1990). Research suggests that absorptive capacity may be a key source of competitive advantage (Szulanski, 1996).

Firms can also facilitate internal knowledge sharing and exchange between employees and managers. Here Garud and Nayyar's (1994) concept of transformative capacity as the ability of a firm to make inter-temporal knowledge transfer is important in situations where the maintenance and

synthesis of knowledge is key to the realisation of market opportunities. Effective learning processes that link external and internal knowledge workers can bring time based advantages.

It is the importance of ongoing learning that is at the heart of the organisational learning literature. Easterby-Smith, Snell and Gherardi (1998) argue that three external factors can explain the rise in interest in organisational learning: the speed of technological change; the advance of globalisation; and growing competition. These factors together result in rapid product development, new processes of communication and production, and increased uncertainty about future markets. Rapid product development means that organisations need to be alert to new developments in terms of product offerings and customer expectations. New forms of communication allow the global dissemination of information and new forms of communication within firms and with external stakeholders. In uncertain competitive environments, firms must remain alert to changing customer expectations, changing technical possibilities and changing competitor capabilities and flexible in their response.

Strategic management has always been about trying to seize external opportunities and develop internal strengths, whilst reducing the firm's weaknesses and avoiding threats. However, in the 1990s, more commentators are arguing that the ability to develop effective learning processes may be vital to strategic agility and organisational adaptation in the dynamic and complex environments faced by many firms. Organisational learning is about the capability of a firm to adapt to its environment (Hedberg, 1981). Teece, Pisano

and Schuen (1991: 20) contend that "the ability of an organisation to learn, adapt, change and renew over time" constitutes a dynamic capability that can enable organisations to outpace the competition. In a commercial world characterised by firm de-layering and downsizing, only by a better understanding of how organisational learning processes work in practice can managers confidently restructure and collaborate with external partners without inadvertently damaging existent learning relationships and jeopardising future knowledge bases.

Despite the rapid growth of interest in organisational learning, during the 1990s, by both academics and practitioners, confusion prevails about the language of organisational learning. Easterby-Smith et al. (1998) contend that this is in part because organisational learning draws on a broad range of disciplinary and methodological backgrounds. Easterby-Smith et al. (1998) argue that disciplinary diversity exits over four key issues: teleology, ontology, epistemology and technology.

Teleology raises questions about the purpose of organisational learning in terms of what the theories aim to do and whose purposes they serve. For example the psychology literature is concerned with human development, whereas strategy theory is more concerned with issues of firm competitiveness arising from learning.

Ontology is concerned with what is the essence of organisational learning and where does it takes place? Argyris and Schon (1978) argue that views on the

nature of organisational learning will depend on what one considers to be the essence of the organisation. Easterby-Smith et al. (1998) identified 6 distinct disciplinary clusters within the organisational learning literature each with a distinct ontological base as illustrated in Table 2.1 below.

Table 2.1 Disciplines of Organisational Learning

This framework is helpful in understanding and delineating the wide range of contributions to the organisational learning literature. However, in thinking about strategy, whilst the focus is competitiveness, without consideration of other organisational factors such as human development, social structures and meaning systems organisational learning may flounder. Easterby-Smith et al. (1998) acknowledge that managers have to deal with practice, where issues do not respect disciplinary delineation, and thus, the linking and integration of work that crosses disciplines may be of real practical help to practitioners. This thesis focuses on the strategic and organisational issues of learning.

One key ontological debate is about whether organisational learning is better understood as an individual/cognitive construct or as a social/cultural process. For example, Argyris and Schon (1978) argue that individual learning is a prerequisite to organisational learning because individuals are the agents of learning. Taking a more social/cultural perspective, Cook and Yanow (1993: 449) argue that learning is based on the social interaction of the group and changing of "inter-subjective meanings".

Another ontological debate is whether organisational learning is an objective, technical process, or a subjective issue based on socially negotiated meanings where power and politics influence the learning process. The former approach leads to learning solutions based on technical intervention to improve communication and decision making. This is the realm of technical solutions to facilitate learning based on information and communications technology such as intranets, video-conferencing, Internet and software solutions, such as Lotus Notes. Socio-political perspectives on learning lead to more behavioural or interpersonal and inter-group methods of facilitation that explore emotions, values

and group identity. Techniques such as play, drama and theatre may be helpful in facilitating knowledge sharing behaviour (Quinn, 1992; Coopey, 1998).

The third area of debate between disciplines is over the issue of epistemology; that is the preferred methodologies for investigating organisational learning. Here the debate is between positivist methods based on measurement as the method of enquiry and qualitative methods that use stories, quotes and text to construct meaning (Easterby-Smith et al., 1998). The methodology for this thesis is discussed in Chapter Four.

Finally, technology is about the most appropriate ways of developing organisational learning capabilities (Easterby-Smith et al., 1998). The debate centres on whether revolutionary or more evolutionary approaches to knowledge development are more beneficial. Large external environmental shocks can make old knowledge unusable in such circumstances revolutionary changes in relevant knowledge are required. For example, Argyris and Schon (1978) argue that a new perception of the environment necessitates fundamental modifications of organisational policies and objectives.

Other commentators see learning as a more incremental, evolutionary process of knowledge development (for example, Levinthal and March, 1993). There are those that argue that both revolutionary and evolutionary knowledge development can be of value (Miner and Mezias, 1996). This takes learning into the realm of contingency theory where the most appropriate approach depends on the environmental circumstances faced by the organisation. Discontinuous

change in the external environment warranting revolutionary changes in the knowledge base of the organisation. More stable environments, may only warrant incremental knowledge refinement building on the existing knowledge base.

Different types or levels of learning can be linked to the degree of environmental change. For example, Snell and Chak (1998) drawing on work by Argyris and Schon on single and double-loop learning, and Bateson's level 1, 2, and deutero-learning discuss the distinction between single, double and triple (deutero learning). Single-loop learning involves adding to the firm's knowledge and competency base without the need to alter its policies or challenge its members' mental maps of the competitive arena. An example of single-loop learning might be product refinement building on the feedback of customers. For example, Toshiba uses this form of market learning to refine its computer product offerings.

Double-loop learning is about transforming mental maps, changing knowledge bases, and modifying policies. Double-loop learning is based on the detection of error in our assumptions about the environment (Argyris and Schon, 1978). The slump in the sale of denim jeans in the late 1990s may warrant double-loop learning by brand players, like Levi, who relied on creating a well known brand to sell jeans to successive generations of consumers. The declining sales of jeans to Generation X raises issues about how to develop brands across generations.

Triple-loop or deutero learning is about inventing new processes for generating mental maps and producing new strategies and structures for learning. An example of triple-loop learning might be Shell's introduction of scenario planning techniques in the 1970s, that enabled the organisation to challenge widely held assumptions about the stability of the oil industry. The distinction between single, double and triple loop learning is akin to Senge's (1990) distinction between: reactive explanations where plans are changed in response to events; patterns of behaviour based on identifying underlying trends; and generative learning where the underlying systems are explored to question the strategic assumptions that influence strategic decisions.

2.3 The Learning Organisation?

Given that organisational learning is important for adaptation and renewal, some commentators have tried to identify the key dimensions of an organisation that successfully facilitates learning. The theoretical roots of the learning organisation is in the socio-technical systems view of organisations as living things founded in 1950s systems thinking. Cyert and March (1963) described firms as adaptive learning systems. Peters and Waterman (1984) identified the excellent companies in their study of successful US companies as learning organisations and they emphasised the softer, inter-personal qualities of such organisations.

Senge (1990) developed the concept of the learning organisation and characterised it as an organisation built on five principles: adopt systems thinking to see the big picture; encourage personal mastery of one's own

learning, bring prevailing mental models to the surface and challenge them, build shared vision, and facilitate team learning.

Pedler, Burgoyne, and Boydall (1991: 1) offer a useful definition of a learning company as "an organisation that facilitates the learning of all its members and continuously transforms itself." This definition of organisational learning does not require the organisation to actually learn (an area of fierce philosophical debate), but does require the organisation to adapt itself based on the insights gained by its members.

Pedler et al. (1991: 18-23) identify from their research for the Manpower Services Commission, in the 1980s, 11 dimensions of a learning company as shown in Table 2.2.

Table 2.2 Dimensions of a Learning Company

ī	A learning approach to strategy (exploratory approach where formation and implementation come together).
2	Participative policy-making (involving debate with stakeholders for diversity for better ideas and creative solutions).
3	Informating (new ways of using IT that support processes for making things by informing and empowering people).
4	Formative accounting and control (accounting and budgeting systems that meet the needs of internal clients and foster the self-responsibility of individuals and groups).
5	Internal exchange (internal departments/units relate to each other as internal customers and suppliers to foster collaboration for learning).
6	Reward flexibility (flexibility in types of rewards used).
7	Enabling structures (temporary/flexible structures that can respond to future changes).
8	Boundary workers as environmental scanners (at all levels).
9	Inter-company learning (with suppliers, customers, competitors, bench-marking).
10	Learning climate (to facilitate learning based on a questioning frame of mind, tolerance of experiments and mistakes, diversity of views and ongoing improvement).
11	Self-development opportunities for all (resources made available to help people take responsibility for own development and learning).

These 11 dimensions of this learning organisation model cuts across the discipline fault lines discussed by Easterby-Smith et al. (1998). One question that arises is to what extent such a learning company applies in contexts of network production given its assumptions that the development of employees feeds the collective learning of firms?

Making space for reflection is a key issue for individual learning (Kolb, 1984). Pedler et al. (1991: 103-104) contend that space for individuals to think can be facilitated in various ways including de-layering to provide more freedom for experimentation and offering individuals secondments to help them to gain fresh perspectives. This suggests that greater flexibility in organisational membership can be conducive to learning.

One of the key challenges for the knowledge-based economy is that firms will be reliant on a greater proportion of knowledge workers who earn their living primarily from their knowledge rather than their labour (Drucker, 1969). Knowledge workers will have power based on the relevance of their knowledge base to market needs, and the scarcity of such knowledge and skills. Having cut back on staff development, in the 1980s, many firms, in a variety of industries, from computing to television claim that skill shortages threaten commercial development. This suggests that in certain sectors appropriately skilled individuals will be in powerful positions raising the threat of wage inflation for firms. However, these individuals only have value whilst their skills and knowledge are relevant.

In flexible labour markets, the status of 'expert' may bring work, but to retain the relevance of their knowledge base, such individuals are likely to seek ongoing opportunities for development. Access to opportunities for ongoing development, combined with genuine profit participation, are what are important to knowledge workers. This is supported by empirical evidence in the UK where the 'Millenium Generation' (those entering the workforce in the year 2000) are reported to place a high value on ongoing training and development and are more likely to seek opportunities for self-employment than previous post-war generations. The implications for organisational learning from an increase in network production based on flexible working practices requires more investigation. This thesis makes a contribution to this issue.

2.4 Knowledge and Knowing

The organisational learning literature explores how an organisation adapts to the changing environment by renewing knowledge. Nonaka and Takeuchi (1995) contend that how we conceptualise knowledge is crucial to what is relevant in understanding learning processes. This section considers what is meant by knowledge in the context of strategic management.

Nonaka and Takeuchi (1995) in their analysis of how Japanese firms like Canon, NEC and Sony have managed to develop and deploy knowledge for competitive advantage contrast Western and Eastern views of knowledge in organisations. Western scientific traditions of management conceptualise knowledge as formal hard data and universal procedures. The role of the organisation being that of an

information processing machine for efficiency, lower cost and improved return on investment. They trace our Western perspective on knowledge to the Cartesian Split between rationalism and empiricism. Rationalism being based on a view of knowledge developed from deductive reasoning (for example, Descartes "I think therefore I am"). Empiricism argues that knowledge is developed from sensory experience that in turn leads to inductive reasoning (for example, Aristotle, John Locke). In the West, attempts to integrate these approaches come from Kant for whom logical thought was based on rationalism and experience.

Nonaka and Takeuchi (1995) contend that top down scientific approaches to strategic management ignore the creativity of people and the active role that people at all levels of a firm have in creating new knowledge. Nonaka (1991) argues that it is not the stockpiling of information, but the process of knowledge creation built on a more holistic, Eastern view of the firm as a living organism of social processes that is key to the knowledge-based advantage of Sony and Honda. Human interaction is key to knowledge creation based on tapping the insights and intuition of employees to change perceptions and behaviour.

The role of social interaction in knowledge development is becoming a concern to Western managers. A study of 431 US and European organisations, conducted in 1997, investigated what firms were doing in terms of knowledge management (Ruggles, 1998). Managers that were surveyed reported that a lot of work was already being done on technical solutions such as creating an intranet, data warehousing or knowledge repositories that employees/managers could access,

decision support tools using computer software, and implementing group-ware to support collaboration through anytime, anywhere collaboration spaces (e.g. Lotus Notes, Ernst & Young Knowledge Web, Arthur Andersen Knowledge Xchange). Behavioural changes such as creating networks of knowledge workers and establishing new knowledge roles for managers were areas that managers felt needed more work. This thesis provides some insight into the development and functioning of knowledge networks and suggests some of the roles that managers might take in facilitating learning in organisations. These issues are discussed in Chapters Six, Seven and Eight.

One way of defining knowledge is to think of a hierarchy from data to knowledge. This helps ameliorate the danger of thinking of knowledge as information that can be readily captured, controlled and relayed via information systems. Davenport and Prusak (1998: 1) argue that "the assumption that technology can replace human knowledge or create its equivalent has proven false time and again." They make the distinction between data as "a set of discrete, objective facts about events" (Davenport and Prusak 1998: 2) and information as "a message, usually in the form of a document or an audible or visible communication" (Davenport and Prusak, 1998: 3). Thus, information is data in a useful form. Whereas "knowledge is a fluid mix of framed experiences." values, contextual information, and expert insight that provides a framework for evaluation and incorporating new experiences and information. It originates and is applied in the minds of knowers" (Davenport and Prusak, 1998: 4). Knowledge has contextual meaning and therein lies its value. Stewart (1997: 70) argues that "knowledge assets like money or equipment are worth cultivating

only in the context of strategy". Human interaction is essential in establishing what knowledge is relevant and meaningful to competitive success in different organisational and environmental contexts.

Large global firms can use knowledge management techniques to avoid duplication of learning efforts and ensure that knowledge is put to work by helping firms map and manage knowledge exchange. Such systems act as directories or communication pipelines. The information they carry helps build awareness of changes and may stimulate individuals into having ideas for new ways of achieving competitive advantage. However, for knowledge to be put to work for competitive advantage many suggest that behavioural and organisational change must accompany technological tools for knowledge management and learning. For information to become knowledge you need people interacting (Davenport and Prusak, 1998). It is only people who can make a judgement about the appropriateness and usefulness of knowledge in assisting the firm to cope or shape the environment in its favour. Consequently, some commentators conceptualise knowledge as a process of knowing where action and context meet.

Leif Edvinsson (1997: 372), Director of Intellectual Capital at Skandia, describes intellectual capital as a "search for relationships among people, ideas and knowledge." Intellectual capital is a relationship issue. Such a view cautions firms from an over reliance on technical solutions for learning. "What we must remember is that this new information technology is only the pipeline and storage system for knowledge exchange" (Davenport and Prusak, 1998: 18).

O'Dell and Grayson (1998) note that IT acts as the pointer system to knowledge rich individuals.

Thus knowing can be described as a process. Mary Parker Follett, writing in the 1920s, discussed the importance of knowing. She has been described by Drucker (1994: 1) as the *Prophet of Management* and influenced major figures such as Drucker (1994), Mintzberg (1994), and Kanter (1994). The interest in Follett's work in Japan suggests that her insights on effective learning remain internationally relevant today. Follett contends that it is not helpful to focus on knowledge as a noun or thing. Knowledge is better described as an activity or a process. Thus, for Follett the verb of *knowing* captures the process of knowledge development based on both the knower and the known.

Nevertheless, knowledge is still used as a noun in much of the knowledge literature in strategic management. Until recently, research has focused on high tech industries where knowledge is approximated to the number of patents as an attempt to crudely quantify knowledge production. Only recently have more process based insights into knowledge development emerged (Schendel, 1996). This thesis seeks to contribute to this process perspective on knowing.

Graham (1994) parallels the work of Follett to that of 1980s general system theory. Pascale's (1990) work on fit and split could be likened to Follett's concept of *constructive conflict*. Constructive conflict captures the inevitable diversity of views in organisations. Follett's preferred way of channelling conflict is *integration*. Integration requires being open about differences, taking

the demands of both sides and breaking them up into constituent parts, and inventiveness to identify creative solutions. Follett sees the power of integration being the interweaving of knowledge through a process of knowing. This suggests that it is the unique combination of people and their knowledge that is key to effective knowledge development and transfer.

Recent research suggests that innovation comes from an appropriate combination of cohesiveness (shared language, ideas, and context) and diversity that produces "creative abrasion" (Leonard, 1998). Creative abrasion captures the value of individuals negotiating their differences and thereby generating new ideas through the synthesise of different cognitive approaches (Leonard, 1998). It may be that creative abrasion is more likely in network contexts where people come together from diverse organisational and life experiences than in organisations with unified corporate cultures where socialisation risks the stagnation of group-think where individuals share the same mental maps.

Given that face to face human interaction is a key part of knowledge exchange, several commentators place a high emphasis on the importance of a physical place to come together within organisations for knowledge development. Davenport and Prusak (1998) note the informal learning that happens around the 'water cooler' in many firms. The virtual office threatens this face to face interaction and consequently, Japanese firms have 'talk rooms' set aside for informal gathering. So learning is not just about the velocity of knowledge transfer, but also, the viscosity or richness of knowledge transfer (Davenport and

Prusak, 1998). So organisational learning is an integral part of knowledge management.

Learning helps shift a firm's shared understanding of the internal and external environments. Reflection and dialogue contribute to the process of knowledge development. Argyris and Schon (1978) advocate that managers should scrutinise for error in the content of knowledge and the processes of knowing that generate, move and leverage knowledge throughout the firm. Learning can help create strategies for the future facilitated by techniques such as scenario planning where alternative futures can be explored.

Nonaka and Takeuchi (1995) provide a theory of knowledge creation within firms that builds on the knowledge of employees to create new knowledge. They draw on Polanyi's (1962) distinction between tacit and explicit knowledge. Tacit knowledge cannot be readily written down, communicated or shared (Polanyi, 1962). For example, how to ride a bicycle is tacit knowledge that cannot be readily captured in words so that another person can learn how to do it. Tacit knowledge is the basis of capability and is about know-how within a specific context (Nonaka, 1991). Tacit knowledge is akin to intuition and goes beyond conscious knowledge. This contrasts to explicit knowledge that can be written down and shared by the transfer of information.

Organisations can facilitate the sharing of tacit and explicit knowledge through four modes of knowledge conversion (Nonaka, 1991). Socialisation involves the conversion of the tacit knowledge of one individual or group to the tacit knowledge of others by sharing experiences (e.g. brainstorming, apprenticeships, interaction with customers). Externalisation involves the conversion of tacit knowledge to explicit knowledge by dialogue and collective reflection using metaphor and analogy. Combination involves converting explicit knowledge to explicit knowledge through the systemisation of concepts by combining knowledge. Finally, internalisation involves converting explicit knowledge into tacit knowledge. This process of knowledge development is facilitated by learning by doing, or learning from stories. The work of Nonaka and Takeuchi (1995) integrates across the ontologies discussed by Easterby-Smith et al. (1998). However, the theory has been developed from Japanese firms with employee stability. Do similar issues apply in situations of network production?

To stay ahead in an environment where learning is key requires knowledge analysis, that is thinking about knowledge relevance, whether the distinct knowledge will offer leadership potential, whether there are any knowledge gaps that need plugging, and how effectively knowledge is being used for outpacing competitors (Drucker, 1964). Section 2.5 explores how knowledge can support competitive advantage.

2.5 Learning, Knowledge and the Resource-Based View of the Firm

The debate about organisational learning is part of a more fundamental debate within strategic management about how managers can build resilient organisations as we make the transition to an information society (Mintzberg, Ahlstrand and Lampel 1998; Prahalad and Hamel, 1994; Mockler, 1995; Drucker, 1993). Industry transformation fuelled by technological discontinuities,

global competition, deregulation and changing customer expectations is challenging the dominance of structural models of strategic management as exemplified by the work of Andrews (1971), Ansoff (1965) and Porter (1980, 1985) that see the choice of industry and market positioning as key to success. The resource-based view of strategy emerged in the 1980s, in reaction to problems of environmental uncertainty that highlighted the external, environment bias of the competitive strategy paradigm reflected in the work of Michael Porter (1980, 1985). The positioning approach to strategy was criticised for focusing on the product-market, and ignoring the strategic relevance of the firm's resources (Barney, 1986; Teece et al., 1991). A key stream of literature to emerge from this paradigm debate is the work being done on the resource-based view of the firm (Wernerfelt, 1984) and organisational capabilities (Prahalad and Hamel, 1990).

It is too early to say if the resource-based approach to strategy will support sustained competitive advantage in the information age. However, Schendel (1996: 4) notes that "Complex assets, hard to describe and measure objectively, may be what gives this stream of research more potential to explain performance outcomes than its primary theory rival: relative position and market power." From a resource-based perspective, strategy should be idiosyncratic rather than generic, building on the unique core competencies of the firm (Prahalad and Hamel, 1990). Firms like Canon, Coca Cola, 3M and Motorola bring the knowledge and skills of their workers together in unique ways to derive competitive advantage (Hamel and Prahalad, 1994). Thus, strategy is about exploiting uniqueness to shape competitive environments. The case for making

resources and capabilities the basis of a firm's long-term strategy is derived from two premises: internal resources and capabilities can provide a coherent direction for a firm's strategy; and resources and capabilities are the primary source of profit for the firm (Grant, 1991).

Spender (1996) argues that knowledge as the basis of a dynamic theory of the firm has its roots in the epistemological problems raised by Simon's (1947) critique of rational economic man, Penrose's (1959) theory of the growth of the firm based on leveraging resources, and Selznick's (1957) notion of distinctive competence. The resource-based view of the firm leads to a knowledge-based view of the firm, theories of organisational learning and the strategic management of the knowledge that learning produces.

Resources are inputs into the production process. The resource-based view of the firm recognises resources in their widest sense to include assets, processes, attributes, knowledge, and information. Barney (1991) classifies firm resources into physical capital resources (e.g. technology, plant and equipment, location, access to raw materials), human capital resources (e.g. training, experience, relationships, insight, judgement) and organisational capital resources (e.g. structure, planning processes, control and co-ordination systems, informal internal and external relationships). Resources being the basis for capabilities and capabilities the basis of competitive advantage. Nanda (1996) argues that in order for a firm to profit from resources they must be scarce, have restricted mobility and the firm must have advantageous access to the resources. This does

not necessitate ownership of resources but does imply, in the absence of ownership, effective relationships being key to resource access.

Capabilities are "the capacity for a team of resources to perform some task or activity" (Grant, 1991: 119). Grant (1991) conceptualises capability as organisational routine. Nelson and Winter (1982) see organisational routines as the skills of the organisation that are path-dependent, idiosyncratic and experience-based. Firms are historically and socially constructed realities and so their utilisation of a given capability is likely to be unique (Ansoff, 1965; Berger and Luckmann, 1966). Firms vary in their social architecture of values, cultures and managerial relationships which cannot be readily replicated (Dierickx and Cool, 1989).

Capabilities are the foundations of core competencies. Roos and Von Krogh (1996: 425) contend that competence is not an asset which can be stock-piled rather it is a relational process because "competence simply means the intersection between a particular task and the knowledge (and skill) of the person or the team doing it". In other words, competence can be thought of as a capability realised through the effective interaction of individuals and the environment surrounding a particular project. This implies a learning process. Indeed, Prahalad and Hamel (1990: 82) define core competence as "the collective learning of the organisation." Core competence is something which can be applied to many products and services, significantly increases customer value and is difficult to imitate. These are not capabilities set apart from the demands of the market, but are focused on building a class of customer benefits.

For example, Sony excels in the application of miniaturisation to consumer electronics and Federal Express in logistics management.

Several commentators now argue that effective learning processes may be the route to strategic innovation through the development of new products and markets building on intangible organisational capabilities. Such capabilities are hard to replicate and embedded in complex organisational routines making metoo copy-cat strategies by competitors hard in practice.

Even the best capabilities and knowledge will lose value as the environment changes. In dynamic environments, core competencies built on the firm's knowledge base must evolve if the firm's unique capabilities are to remain relevant to customers. Ongoing learning is a key issue. Schendel (1996: 3) contends that "...it is not so much individuals and what they learn, but what the collective learning process used by the organisation is like and what it can do with the learning that really matters in the creation of assets."

Firms can have a competency in two types of knowledge development. Firstly, refinement competency is the ability of an organisation to accumulate a competency incrementally through learning by doing (Nanda, 1996). The degree of complexity surrounding a capability is contributory to sustainability of competitive advantage (Grant, 1991). Barriers to replication of resource advantage are higher if the resources are tacit or diffused through the systems, processes or psyche of an organisation (Godfrey and Hill, 1995). From the resource-based perspective advantage can be derived from tacit knowledge

because such knowledge has rarity value, imperfect mobility, imperfect imitation, and imperfect substitutability making it hard for outsiders to imitate or copy (Ambrosini and Bowman, 1998).

Nevertheless, an organisation that focuses purely on refinement may become strategically vulnerable as its competencies become too specific to a particular context. If change occurs it will find it hard to respond. This is captured by Leonard-Barton's (1992: 11) notion of "core rigidities" whereby over time core competencies can become dysfunctional to performance. Renewal competency is the ability of an organisation to discover a new production function leading to new market/product opportunities (Nanda, 1996). Renewal builds on Schumpeter's (1950) notion of creative destruction that involves depreciating existing resources by redefining what is relevant and useful to success. Intel's shift to microprocessor technology or IBM's redefinition of computers with its 360 system are examples of renewal. The process of creative destruction symbolises the radical shift in relevant knowledge during periods of discontinuous change.

Periods of discontinuity change the organisation of work and redefine industries (Drucker, 1969; Piore and Sabel, 1984; Wickstrom and Normann, 1994). In the 1990s, technological innovation is resulting in discontinuous change in many sectors including financial services, retailing, communications, and the media industry for which structural tools of strategic management only provide limited insight (Von Krogh, Roos and Slocum, 1994). Innovation as the application of new technologies and ideas to products and processes is generating new

products, new sources of supply, new markets and converging previously disparate industries into uncharted competitive sectors. The advantage of a learning organisation according to its advocates is that it is adaptive at coping with changing circumstances and generative in creating new solutions and thus it combines both refinement and renewal capabilities. A learning organisation enables its members to let go of competencies that are no longer relevant and to embrace new skills and techniques offering flexibility to its knowledge base.

2.6 Facilitating Learning in Organisations

Finally this chapter raises some of the organisational issues arising for firms seeking to profit from learning. Organisational learning theory implies that managers can facilitate learning for competitive advantage. The features of a learning organisation were outlined in section 2.3. This section focuses specifically on the issues of structure, context, management roles and architecture in facilitating learning.

2.6.1 Structure and context

In a knowledge economy, a firm is concerned with its ability to create, transfer, integrate and utilise knowledge. The organisational form may impact on organisational learning. Thus, in thinking about organisational forms "the boundaries of the firm, and future integration and outsourcing opportunities, must clearly be made with reference to learning and knowledge issues as well as transaction cost economics" (Teece, 1998: 76).

So how do commentators suggest a learning organisation be structured? The hypertext organisation is advocated by Nonaka and Takeuchi (1995). This form of organisation combines the hierarchy of Weber's bureaucracy for knowledge combination and internalisation with the flexibility of the task-force for socialisation and externalisation. This organisational form has three key interconnected layers: the knowledge base (corporate vision, organisational culture, technology, databases); the business system layer (that performs the operations) and the project team layer (collaboration among project teams to promote knowledge creation). Nonaka and Takeuchi (1995: 169) argue that the hypertext organisation gets away from the dichotomy of either scale and scope for efficiency, or local flexibility by permitting the combination of three different contexts within the same organisation. Network contexts of production may permit firms to forge hypertext networks that extend beyond the boundaries of the firm? If so do such extra-organisational structures enable firms to combine efficiency and effectiveness without internal scale? An advantage particularly beneficial to growing small firms.

However, organisations are not just structures, they are also contexts for work to be done. Firms can proactively encourage a climate for learning and knowledge sharing or reinforce paranoia and knowledge hoarding. Towards the completion of this study, literature emerged on the importance of context to knowledge development and creativity (Cohen, 1998: 31). Context derives from the Latin *texere*, to weave and means literally woven together. Cohen (1998: 31) suggests that the value of knowledge lies in discovering relationships between distinctive ideas. Cohen (1998: 38) argues that effective knowledge contexts are "holistic,"

complex, dynamic and flexible." "Dynamic" and "flexible" it could be argued describes network forms of organisation rather than traditional bureaucratic organisational forms (Miles and Snow, 1986). Thus, research into network-based production may provide considerable insights into effective learning processes for all types of organisation.

Nonaka and Konno (1998) use the concept of "ba" to explain an enabling context. Ba means a shared space for emerging relationships for knowledge creation. This can be physical, virtual or mental space or a combination of these. Tacit to tacit knowledge exchange is facilitated by "originating ba" based on love connection, trust and commitment. "Interacting ba" is where tacit knowledge becomes explicit based on discussion and analysis for common understanding of ideas and concepts. "Cyber ba" is the place where explicit knowledge is combined and is organised, shared and stored throughout the organisation. This is where IT in the form of group-ware, databases and intranets can be helpful. Finally "exercising ba" is where explicit knowledge is converted to tacit knowledge through mentoring and learning through doing. Thus, different forms of knowledge conversion draw on different contextual elements.

There is evidence to suggest that high-care situations based on a propensity to help, reciprocity, lenience by accepting error, accessibility of managers and attentive inquiry are more innovative than low-care situations based on knowledge hoarding and seizing (von Krogh, 1998). Creating contexts of care that are also fun and playful may be essential to learning contends Arie de Geus (1997: 80) drawing on his experiences of learning within Shell. However, a first

step in knowledge sharing by adults may involve undoing the learning in school that to share knowledge is to cheat (Millenium Group, 1998). Individualistic perspectives on learning may be being reinforced beyond the playground by flexible, competitive labour markets where 'knowledge is power'.

Knowledge hoarding may be rational for individuals forging portfolio careers built on their knowledge base. The 'knowledge is power' mentality may act as a brake on social knowledge development and learning. Some commentators have pointed to the need to offer incentives that reward knowledge sharing to counteract competitive knowledge hoarding (Leonard, 1998).

2.6.2 The role of managers in organisational learning

Another potential inhibitor of organisational learning are managers who become myopic, valuing too highly information from the current period, local situation or past success (Argyris and Schon, 1978; Levinthal and March, 1993). Leonard (1998) contends that a continuously renewing organisation is characterised by not just an enthusiasm for knowledge, but also leaders who themselves learn. Senior managers have a key role to play in forging a learning environment.

The traditional role of the manager was seen as planning, organising, executing, measuring. This was the basis of Taylor's scientific management based on standardised mass production and the workers doing whilst the managers think. Mintzberg (1973) challenged the notion that managers were rational planners noting their key interpersonal, informational and decisional roles. Knowledge work is built more on professional lines and around the self-managing team.

This redefines the role of managers in firms and the way work and organisations are organised. Quinn, Anderson and Finklestein (1996) envisage more inverted organisations where professionals manage themselves and the hierarchy ceases to be an instrument of control and becomes the support structure. The manager's role in such inverted organisations becomes more one of leader or facilitator establishing the values, purpose and vision of the organisation and facilitating learning to stay competitively ahead (Senge, 1990). This involves three key roles for senior managers as designer and steward of the vision and teacher of the need to change by making individuals aware of changing environmental conditions. The task of management as Sveiby (1997: 63) notes is to "provide professionals with the conditions in which they can be creative." The focus of management becomes managing competence, and work contexts.

Spender and Grant (1996: 9) argue that knowledge based competition makes the manager's role "..a more agricultural notion of management as the intervention in and husbandry of the natural knowledge-creating processes of both individuals and collectivities,...." This quote captures the facilitating role of managers in building learning relationships. These relationships might be with customers, competitors, or suppliers to gain knowledge to put to use in new products and processes.

The development of new knowledge is a creative process involving either the combination of existing knowledge in a novel way or the combination of new knowledge with old. This process of 'bisociation' (Koestler, 1964) requires combining knowledge from both inside and outside the organisation. Tushman

and Nadler (1986) highlight the critical roles for managers in the innovation process as gatekeepers or boundary spanners keeping an ear to the external environment.

Another challenge for managers and other key stakeholders is measuring knowledge value within an organisation. Stewart (1997: 60) notes the intangibility of intellectual assets: "Like electrons in a cloud chamber, knowledge assets leave only ghostly images in corporate ledgers." For investors, this creates the problem of trying to capture the true value of a firm when many of its assets are not captured by accounting convention. Many firms have a market capitalisation that exceeds greatly the balance sheet assets and this difference is increasingly accounted for by intellectual assets claim managers like Leif Edvinsson, Skandia Insurance's Director of Intellectual Capital. Glazer (1998) contends that the value of knowledge can be conceptualised in terms of the meaning it provides to the knower and the use they make of it. This implies that knowledge has subjective value or unique value in the hands of different firms depending on their existing position and knowledge base. Consequently, it may be better to try and focus on the outcomes from knowledge in terms of measuring the changes in rates of innovation, changes in profitability, and efficiency that come from knowledge efforts than trying to measure knowledge per se.

Managers have a key role in managing people. In the knowledge economy, personnel can be viewed as *knowledge workers*, these being workers that provide novel ideas or solutions to firms, rather than being simply costly,

interchangeable units of labour to be automated out of the value creation process where possible (Drucker, 1955). The management of tacit knowledge, involves understanding the un-understood and this creates problems for management (Schendel, 1996). Causal ambiguity is a source of imperfect imitability making a strategy hard for competitors to copy (Barney, 1991). This ambiguity can be heightened by tacitness whereby the competency is not codified, complexity of processes and technologies, or the specificity of the competencies to a firm's internal transactions (Reed and DeFillippi 1990). But such ambiguous sources of strategic advantage, some suggest are hard for even managers within firms to diagnose. Thus management decisions and actions can inadvertently destroy learning contexts and capabilities (Ambrosini and Bowman, 1998).

Firms that internally develop and promote workers and that can offer some degree of job security for employees can make a virtue out of the inimitability and appropriability of tacit capabilities. However, difficult challenges may be posed for firms reliant on more transient labour or subject to restructuring. Recent problems of corporate memory loss associated with downsizing have highlighted that, in an age where work is more brain intensive, people are not an interchangeable unit of production that can be readily replaced for a cheaper, younger model. Rather, human capital is the embodiment of a unique set of experiences and knowledge (Lorenz, 1995). The strategic management literature since the 1980s, has acknowledged the key role of staff in the strategy process (Peters and Waterman 1984; Pascale 1990). In the 1990s, more attention is being paid to the value human capital can provide. Leif Edvinsson of Skandia argues that intellectual capital is built from the knowledge of employees (human

capital) combined with the organisation's structural capital (Stewart, 1997: x). Assessing the performance of the knowledge worker is complex and subjective. Knowledge based work, unlike more task based work cannot be meaningfully assessed in terms of volume. For example, the number of reports produced or the number of patents gives no indication of their contributions to product offerings, process improvements or managerial effectiveness. Other methods such as peer assessment or customer satisfaction may be helpful here.

Flexible labour practices have become widespread in the 1990s. Firms have to decide what workers to keep in-house and what to contract out and this should be based on knowledge considerations. Stewart (1997) provides a useful framework for thinking about the management of human capital in terms of what to invest in, what to contract out, what to replace by machines and what to capitalise on and this is captured in Figure 2.3

Stewart (1997) argues that the most valuable human capital is both difficult to replace and provides high value added because this is the source of the firm's proprietary knowledge. People can add value by their own knowledge or by acting as knowledge hunters seeking out new ideas and practices by their connections with the external environment (Wickstrom and Normann, 1994). This places all workers, not just senior managers, in an important environmental scanning role. Firms needs to try and retain knowledge rich workers by providing a sense of belonging. Incentives and stock ownership can help. For example, Microsoft went public to act as a vehicle for share ownership of the employees and thereby lock in the key code writing talent (Stewart, 1997). The

equity stakes of Microsoft workers are such that if all members were to leave simultaneously it has been estimated it would cost the firm \$24bn.

Drawing on the work of Zuboff (1988), Stewart (1997) argues that firms can 'informate' and thereby enrich the work of difficult to replace workers that provide low value added so that their work adds more value. For example, administrators can be given more active roles in customer service by sharing their systems knowledge with those charged with service development. Easy to replace human capital with low value added can be automated where possible. Many low level clerical functions fall into this category. Finally, where workers provide high value added, but their work is easy to replicate, it is possible to outsource that function from external markets or to try to differentiate that work to sell that solution to others (Stewart, 1997).

Figure 2.3 Human Capital

Managers also have responsibility for the development of structural capital. Structural capital is developed from the systematic management of knowledge by building up encoded knowledge that remains when the workers have gone home at night (for example via intranets, corporate yellow pages, lessons learned, competitive intelligence). Structural capital enables the organisation to exploit human capital because it enables individual know-how to be converted into the property of the organisation (Stewart, 1994: 31).

2.6.3 Architecture

As organisational forms become less hierarchical and more diverse to include autonomous work teams, alliances, spin-outs, and networks, alternative methods are emerging for the facilitating interaction necessary for organisational learning. Architecture is about building effective relationships. Kay (1993) argues that building architecture can facilitate the development of organisational knowledge. The value of architecture being "the capacity of organisations that create it to create organisational knowledge and routines, to respond flexibly to changing circumstances, and to achieve easy and open exchanges of information" (Kay, 1993: 66).

Kay (1993: 14) argues that architecture is "a system of relationships within the firm, or between the firm and its suppliers and customers or both". Nadler (1992: 3) describes organisational architecture as the "modus operandi" comprising of organisational structure, management processes, technologies, strategies, informal operating systems and processes for selection, socialisation

and development of people. It is the interaction element of architecture that appears particularly relevant to organisational learning; "..organisational architecture can be a source of competitive advantage to the degree that it motivates, facilitates or enables individuals or groups to interact effectively with customers, the work and each other" (Nadler, 1992: 4). Architecture provides an alternative to hierarchy as a key means of communication and interaction.

The value of architecture according to Kay (1993) is that it enables ordinary workers to perform extra-ordinarily and he cites the previous successes of IBM and Marks and Spencer in developing broader value systems with suppliers and customers as examples of effective architecture in action. Architecture can facilitate organisational knowledge development, establish a co-operative ethic and implement routines (Kay, 1993). Nonaka and Konno (1998: 53) have also highlighted the role of architecture in learning by arguing that their concept of 'ba' draws on "spatial design." They point to the construction of urgent project teams at Sharp as an example of how managers can facilitate learning through architecture to envisage effective interpersonal combinations. Architects design and build, they define spatial dimensions and the linking of space through form. in this case the project team. This suggests important links between organisational architecture, organisational context and organisational learning and a proactive role for managers in facilitating learning as architects that conceptualise the parameters and components of learning environments.

2.7 Conclusion

The literature reviewed in this chapter suggests that organisational learning and knowledge creation are key strategic issues for firms seeking to achieve competitive advantage in dynamic and discontinuous environments. The attributes of a learning organisation have been discussed. It has been illustrated how the organisational learning literature is part of the broader paradigm debate currently occurring in the strategic management literature between the resource-based view of the firm and a view of strategy based on market positioning. Finally some of the ways that managers might facilitate learning have been considered in terms of structure, context, the roles of managers in managing people and architecture.

Neither knowledge nor learning are sufficient if the resultant insights cannot be put to work by firms for competitive advantage by the development of new strategies and innovations. Knowledge utilisation is a collaborative process. Miles, Miles, Perrone and Edvinsson (1998: 281) argue that more research is required if firms in the Twenty-First Century are to deal with three key related issues: "conceptualising knowledge as the central organisational asset, incorporating knowledge capital into the strategic management process, and designing organisations to facilitate knowledge utilization." They anticipate that the future is based on firms owned by members and built around network partnerships of knowledge workers. However, the role of the firm in facilitating learning in contexts of network production remains poorly understood. In Chapter Three the key issues for firms trying to learn in network contexts are examined.

CHAPTER THREE

LEARNING IN NETWORK CONTEXTS

3.1 Introduction

"When uncertainty is high, organisations interact more, not less, with external parties in order to access both knowledge and resources. Hence the locus of innovation is found in networks of learning rather than individual firms" (Powell, 1998: 229).

In this chapter the implications arising from the increased emphasis being placed on effective learning processes, within the field of strategic management, are explored for firms reliant upon network based production. Much of the existing literature on organisational learning focuses on the firm as the key unit for learning. However, firms are becoming more reliant on external workers and firms for co-production of products and services. The successful management of collaborative production is becoming a key component of strategic management (Harrigan, 1985, 1988; Best, 1990). Global competition and rapid technological innovation has led to downsizing, restructuring and increased inter-firm collaboration (Harrigan, 1985; Porter, 1986). Cooperative strategy has led to "restructuring without hierarchy", the delayering of firms, and the externalisation and outsourcing of more activities (Best, 1990: 207).

Drucker (1993) contends that we are currently in a transition period of change to a knowledge society. In isolating the period 1960-2010 as a *divide* his work

supports the work of Piore and Sabel (1984) who see current commercial environments reflecting a period of discontinuous change to what they term the Second Industrial Divide based on human creativity, rather than mass production. This in some ways represents a return to the organisational forms of the Nineteenth Century. Piore and Sabel's (1984) flexible specialisation thesis provides some insight into the nature of this restructuring. They contend that we are witnessing a move away from mass production with the possibility of a return to a craft paradigm. The crossing of an "industrial divide", based on the inter-relationship between social and economic factors which challenge the previous organisational logic of mass production and vertical integration. For example, the rationale of the large vertically integrated firm as the building block of the economy acting in autonomous exchange and hierarchical relationships some argue is becoming redundant (Kanter, 1995). What is required in organisational terms is a reconciliation of competition and cooperation through networks of smaller scale production units which can adapt quickly to changing markets (Piore and Sabel, 1984: 275).

At the micro-level, the drive for competitive advantage by firms has resulted in organisational change to achieve flexibility across a range of value chain activities (Ohmae, 1989; Murray and Mahon, 1993). This 'downscoping' results in interfirm networks as a key way of organising (Hoskisson and Hitt, 1994). Industries where such practices have already been reported as being important are automotive, electronics, retailing, film, financial services, software production and construction (Sydow and Windeler, 1998).

Given the significance now being given to knowledge, in both the theory and practice of strategic management, it is important that different forms of network production are understood not just in terms of their transaction costs (Williamson, 1975; 1985), but also in terms of their knowledge development and learning implications. It has been argued that one key dimension of competitiveness is the effectiveness of the learning processes of firms and different modes of organising are likely to impact on this issue.

In section 3.2 the learning opportunities arising in network contexts are discussed. In section 3.3 the relational issues of learning arising in fluid production contexts in terms of communities of practice, brokering knowledge, unlocking knowledge, sharing knowledge and creating learning contexts are considered drawing on the existing literature to identify the key issues warranting further investigation.

3.2 Network Contexts and Learning Opportunities

Before considering the learning issues in network contexts, it is necessary to briefly outline the rationale behind the rise in the network organisational form. It has been argued in Chapter Two that firms increasingly face high levels of uncertainty and dynamism in the environment. Burns and Stalker (1961) argued that the "mechanistic" model of organisational theory was based on a stable environment whereby careful planning of hierarchical organisational structures and strategy was logical and efficient. However, when the environment is changing there is constant need for organisational learning and restructuring and

organisations develop in a more "organic" way (Burns and Stalker, 1961). Consequently, firms are focusing on their core competencies, working in partnership with other organisations and keeping core staff to a minimum (Hamel and Prahalad, 1994).

The information revolution has reduced the magnitude of control and coordination transaction costs making externalising many transactions viable, but at the same time these developments raise learning challenges (Bettis and Hitt, 1995). The ability to use electronic data exchange, teleconferencing, and computer networks to co-ordinate with external, production partners has made greater specialisation in organisations possible. Powell (1998) argues, drawing on research into the biotechnology and pharmaceutical industries, that it is not the transactional issues so much as the process issues that matter in facilitating learning from network production.

Network organisational forms have been discussed by various commentators (see for example Thorelli, 1986; Jarillo, 1988; Powell, 1990). Miles and Snow (1986) argue that from the mid 1980s, evidence has been emerging of a new organisational form the "dynamic network" as illustrated in Figure 3.1. This is a unique combination of strategy, structure and management process and is characterized by vertical disaggregation, brokers to bring together groups to perform functions combined with the market mechanisms of contractual relationships. Vertical disaggregation is where functions of the business system traditionally undertaken by several organisations are undertaken by various independent partners. Market mechanisms are used to hold the major functions

together through contracts and payments by results. Each partner in the network pursues its particular distinctive competence.

FIGURE 3.1 A DYNAMIC NETWORK

Proponents of the dynamic network claim that it can accommodate a vast amount of complexity and make effective use of human resources by allowing specialised competence without carrying this specialism permanently on the payroll. Thus, the practice of leasing entire workforces, as happens in the construction industry and the television industry, is a feature of network production for numeric and functional flexibility. Such arrangements enable the technical specialisation of the functional structure and the market responsiveness of the divisional structure.

Typically the structural form and associated governance challenges have been the focus of the literature on network organisations (Sydow and Windeler, 1998). However, commentators have now begun to focus on the learning implications of network forms of organisation. For example, Quinn (1992) advocates network based organisational forms as arrangements that improve rates of learning. Quinn argues that 'intelligent enterprises' are simpler and flatter, and more responsive to the customer through their strategic flexibility.

Similarly, Hedlund (1994) advocates the N-form of organisation as the form of organisation most appropriate for learning and knowledge development in fluid environments. The N-form is based on temporary networks, lateral communication, and a catalytic role for senior managers in facilitating strategies for knowledge development. The focus of the N-form being knowledge combination in contrast to the knowledge isolation associated with the multi-divisionalised organisational form where expertise may become trapped within divisional silos. The N-form of organisation may facilitate knowledge sharing across products and markets.

If core competence increasingly resides in dynamic networks of interacting workers, Hamel, Doz and Prahalad (1989) argue that the real issue is whether a firm can use collaboration to replenish it core competencies faster than it is surrendering them. Production networks offer scale, flexibility and access to knowledge. Development networks provide the prospect of developing new competence faster, cheaper or at a higher level. The notion of reciprocal and synchronous value creation within value constellations is being developed in the collaboration literature (Badaracco, 1991). This implies moving away from fixations about ownership, control and inwardly focused strategies to longer-

term learning partnerships as the basis of strategy (Quinn, 1992). In particular it underlies the importance of creative expertise applied to value creation to realise new product and new market opportunities building on both internal and external resources.

But if knowledge is "highly dynamic, personal, contextual, emotion-driven, future-orientated and value-laden" (von Krogh and Roos, 1996: 425) what does this mean for firms dipping into a changing pool of individuals, production contexts and values? Lincoln, Ahmadjian, and Mason (1998) suggest that firms have to decide whether external relationships are about using network learning to develop in-house knowledge and skill or to get the job done efficiently without the burden of that skills base. These are key considerations. If it is the latter, the critical capability of the firm is their ability to find and leverage other's resources to reduce learning costs. If it is the former, this involves the creative use of knowledge, synthesis and distillation to establish the key strategic issues and ensure that knowledge acquisition is focused on areas that enhance the organisation's internal capabilities. Managing for core competence and knowledge development whilst maintaining operational flexibility is one of the central challenges for management today. In practice, many firms face both cost and differentiation imperatives and therefore, may try to combine cost efficient outsourcing with knowledge development relevant to their internal capabilities.

3.3 Relational Issues in Network Contexts

The value of networks increases in line with their human interconnections.

Relational issues are crucial to learning in network contexts. For example, in the

biotechnology industry small firms have created capabilities out of all proportion to their size by using learning relationships to gain access to knowledge, resources and skills (Powell, 1998). One of the key relational domains for learning is the community of practice (Brown and Duguid, 1991).

3.3.1 Communities of practice

Brown and Duguid (1998) note that many key relationships within firms are not based on market relationships, but complex inter-personal networks of practitioners that they term *communities of practice*. These networks of practitioners are self-forming and within a large organisation may be largely invisible to senior managers. Hence managers need to be careful in restructuring the firm not to inadvertently destroy learning communities.

Brown and Duguid (1991) argue that working, learning and innovating are interrelated and they advocate the benefits of learning through practice. Brown and Duguid (1991) make the distinction between espoused practice which they term *canonical practice* and actual practice which includes non-canonical practice. A work group may be non-canonical, emergent and not recognised by the organisation. These emergent communities can be a positive force for innovation and so require detection and support. This suggests that learning is not best achieved by didactic approaches which separate the learner from their work community. They suggest that learners need to observe experienced practitioners, but from the periphery of practice. Learning-in-working enhances practice through learning through action involving collaboration and social construction (Brown and Duguid, 1991; 44).

At the organisational level, the ability to reconceive the organisation as a community of communities of practice is an important part of managing the learning of the firm. They argue that if an organisation disrupts its communities-of-practice, it threatens its own survival in two ways: "It will not only threaten to destroy the very working and learning practices by which it, knowingly or unknowingly, survives. It will also cut itself off from a major source of potential innovation that inevitably arises in the course of that working and learning," (Brown and Duguid, 1991: 53). The ability to synthesise knowledge across communities of practice may be a valuable organisational capability if one views the firm as a community of communities.

But do these communities have to be held within the organisation? Research suggests that knowledge often travels easier between organisations than it does within them (Brown and Duguid, 1998). This suggests that it is the context for the work, rather than the delineation of the organisational boundary, that is key to knowledge sharing and development. Indeed, knowledge and understanding are constructed out of a wide range of materials that include "ambient social and physical circumstances and the histories and social relations of the people involved" (Brown and Duguid, 1991: 47).

Fluid organisational forms with shifting members may be more conducive to learning given that a potential danger of insular communities of practice is that they become stuck on proven solutions, and cling to existing competencies creating problems of core rigidities (Leonard-Barton, 1992). The example of the

rigid delineation of subject disciplines found on many University campuses at a time when practitioners seek tools to help deal with knowledge convergence across disciplines and industries highlights the problems of communities of practice ring-fencing knowledge to the detriment of synergistic learning. Organisations, divisions or functions can become similarly ossified in their thinking. Organisational architecture, as outlined in Chapter Two, may be a way of building network communities that extend beyond firm divides.

The advantage of network production for learning may be the unique knowledge that individual members can bring to the table that straddles firm divides. Thus the advantage of the network form of organisation is that it enables multi-discipline knowledge combination, or in the case of firms it enables diverse agents to synthesise their learning for the development of innovative new products, strategies and processes.

Richter (1998) argues that the current organisational learning literature fails to explore the linkages between individual and organisational learning. The cognitive epistemology of learning focuses on individual levels of learning with learning based on a system of information acquisition, storage, retrieval and knowledge transfer. The social constructivist view of learning is that of Brown and Duguid (1991); Lave and Wenger (1991); Orr (1990); and Weick (1983) that organisations are interpretative systems and that products and markets are developed out of this collective sense making. Learning in this constructionist perspective is about learning to behave as community members or "becoming a practitioner" (Brown and Duguid, 1991: 48). The practitioner that has worked

within a community of shared norms knows what to do, how and to what standard. A work community normally develops shared expectations about the final product and the processes for delivering that work.

However, one of the limitations of the social constructivist view as applied to network contexts is that individuals united in such a setting do not share one common community of practice. Indeed, in contexts of network production it could be argued that the members of the immediate work community are actually multi-community participants. In such network contexts, individual knowledge may be both unique and at the same time socially constructed because individual workers have knowledge that is forged from experience both within and across specific network communities. In network production contexts learning may be both individual and social, individual in that an individual's work history is based on a unique range of project experiences built from working in specific communities of practice that leads to a unique knowledge base, social in the sense that for a given network project a shared contextual understanding will develop about specific product features or markets to be targeted or performance criteria to be achieved. For example, a network may have a fairly informal approach to working together, with flexible hours but very high product specifications, whilst another network may have a more formal working relationship, with regular progress checks. Neither is necessarily better or worse, but the different contexts require a different approach to practice.

Networks may thus provide a richer learning environment as there is the potential trust of the shared network context, but the potential knowledge

leverage of multiple community learning possessed by each network agent. Such diversity of experience is unlikely to develop from working within one organisation because the core values and norms that bound the work are constant. Araujo (1998: 317) challenges the view of organisations as "the containers of knowledge and a locale of learning." Araujo (1998) argues that Bowland and Tenkasi's (1995) conceptualisation of organisations as open systems based on communities of knowing with overlapping and differentiated membership across divisions, groups, committees, functions, specialist areas is more helpful in fluid network contexts. So from this perspective "we see the world as replete with episodes of learning resulting from the committed participation of knowledgeable and reflexive agents in interaction and relationships forged within and across conventional organizational boundaries," (Araujo, 1998: 327).

For industries based on network production, learning occurs across firm divides. This begs the question: in what sense is organisational learning helpful or meaningful as a concept in fluid network settings? Araujo (1998: 30) argues that in such settings, the organisation is better conceptualised as "a set of interlocking, differentiated and shifting sets of relationships between communities of knowing that extend beyond the nexus of contracts and property rights that define the formal, legalistic boundary of the organization." From his analysis, organisational learning is about mediating heterogeneous networks to dis-embed and re-embed knowledge, the key difference between Araujo's argument compared to that of Brown and Duguid (1991) is that the key agents

holding the knowledge do not necessarily have an ongoing employee relationship with the firm (Araujo: 98: 328).

3.3.2 Brokering knowledge

The literature on networks suggests that brokers provide key connections across and between network members and are, therefore, likely to be knowledge rich individuals. The broker as represented in Figure 3.1 brings together those needed to provide a particular service and thus has a central role in forging network connections (Miles and Snow, 1986). Brokers benefit from communication and socialisation with a range of workers. Hargadon (1998) argues that knowledge brokering is about transferring knowledge and ideas from where they are known to where they are not. Knowledge brokering is about informal conversations and tapping into personal networks. Hargadon developed case studies of eight knowledge brokering organisations and found that movement between different teams and projects not only provided individuals with a range of experiences, it also provides exposure to the skills and capabilities of others. Knowledge brokers practice in several communities and thereby develop meta-knowledge of what they know and an understanding of the degree to which information is context dependent as opposed to generic (Glazer, 1998).

3.3.3 Social capital and unlocking knowledge

However, it is not just brokers that have a key role in forging and maintaining effective inter-personal relationships in network production. All network participants have a role in network performance. The importance of the interpersonal dimension of network relationships for unlocking knowledge is noted

by those commentators developing the concept of 'social capital' (Nahapiet and Ghoshal, 1998). Social capital is the assets that may be mobilised through a network. The ability to mobilise these resources is rooted in forging effective relationships. Social capital is relationally embedded (Granovetter, 1992) and so cannot be readily traded. Nahapiet and Ghoshal (1998) argue that social capital can increase efficiency by reducing transactions costs and facilitate innovation through new forms of association. So social capital may facilitate both cost and differentiation advantages for firms (Porter, 1985). Social capital facilitates the development of intellectual capital by its impact on knowledge combination and exchange.

Research suggests the relational dimension is particularly important to effective collaboration across firm divides (Ring and Van de Ven 1994, Starbuck, 1992). There are structural (network ties and connections), cognitive (shared language and narratives), and relational dimensions (trust, norms, obligations etc.) to social capital (Nahapiet and Ghoshal, 1998). This suggests that it is not just creating the connection, but also managing the ongoing network relationship that is important for unlocking knowledge of production partners. Badaracco (1991) notes that developing and unlocking tacit knowledge often depends on specific inter-personal relationships that take time to evolve because they are built on trust.

Social networks are reliable sources of information and thus are essential to efficient organisational learning (Leibeskind et al., 1996). Thus organisations whose employees are well connected will learn more effectively than those that

are not. Research from the investment banking, publishing and biotechnology industries suggests that extending network ties beyond the firm provides learning gains (Liebeskind et al., 1996). In fluid production contexts, it may be the leveraging of social capital through external network ties that takes the network organisation to an outpacing position for organisational learning. Relationships with external actors not only widen the learning net, but also counter the threat of relying exclusively on internally created social capital that will de-value overtime as the external environment shifts. To base strategic thinking solely on internal knowledge runs the risk of calcifying strategic thinking over time. Nahapiet and Ghoshal (1998: 256) argue that the coevolution of social and intellectual capital is the basis of learning advantage for organisations. The work on social capital to date does not explore exploitation of social capital, issues that this thesis begins to explore (Nahapiet and Ghoshal, 1998).

3.3.4 Sharing knowledge

One of the challenges in network contexts is getting individuals to share knowledge, given that knowledge is power. Drucker (1993) highlights the important interdependence in contexts of flexible production between mobile knowledge workers (who own the means of production) and organisations (which are the tools of production). As firms and individuals straddle learning communities, the power relationships between individuals and firms becomes more complex than the dichotomous employer/employee power struggle peddled by many industrial relations commentators implies. Indeed in the Information

Age, some knowledge rich workers may be extremely powerful and some knowledge poor management teams may be extremely weak.

The complexities of sharing tacit and explicit knowledge within organisations are discussed in Chapter Two. Within organisations the work of Nonaka (1991: 104) suggests a key role for middle managers as 'knowledge engineers' who facilitate learning between the corporate managers and the front-line workers by synthesising the tacit knowledge of employees and senior managers and making it explicit thereby enabling it to be incorporated into new products and services. Management thus becomes neither top down nor bottom up, but 'middle-up-down' with middle managers retaining a valid and vital role in information filtration and synthesis.

However, when workers straddle organisational divides, even with effective middle managers, there may be practical problems of different languages, or values, or perceptions preventing the shared understanding necessary for knowledge exchange. Brown and Duguid (1998: 103) contend that to spread knowledge between communities may require some individuals to act as "translators" who "frame the interests of one community in terms of another's perspective". The translator needs to understand both communities and is reliant on trust to achieve results. Such individuals would normally be third party mediators.

Goodman and Goodman (1976: 494) discuss knowledge sharing in "temporary systems"; these being "a set of diversely skilled people working together on a

complex task over a limited period of time". Such organisational forms they argue have existed since antiquity and are temporary, only lasting the duration of the project. Temporary systems tend to include members who have never worked together before and may never work together again. Secondly, they bring together a diversity of functions or skills. Goodman and Goodman studied temporary systems used in the theatre for productions and found that the first stage of work was characterised by blurred role definition to create the conditions for team building, problem solution, professional growth and increased interaction to establish a group concept of the production. This was the stage of learning the group concept of the production. The second stage was characterised by role clarity to help achieve the accomplishment of the task. The work of Goodman and Goodman (1976) suggests that fluid and ambiguous network roles may facilitate learning in the early stages of coming together as a team, but that clear task definition may be necessary as the project unfolds to achieve efficiency and quality standards. However, the issues of knowledge sharing in network contexts remains relatively under-researched.

3.3.5 Learning contexts

Much of the existing organisational learning literature focuses on the level of learning and debates about whether learning occurs at the individual or social level. This chapter has provided evidence that suggests that both elements are important and interrelated in network contexts. Spender (1996: 51) argues that attempts to distinguish between individual and collective forms of knowledge tell us little about "how the firm becomes a context especially favourable to the interaction of knowledge creation and knowledge application processes." In

Chapter Two the growing importance attributed to developing effective learning contexts in more recent literature was noted. This work appears especially pertinent in network contexts where it has been argued that knowledge ownership and control are more complex, ambiguous and problematic.

Spender (1996) contends that knowledge management in such contexts is essentially about how managers shape knowledge systems. So the role of the strategist is more about providing "nodes of imaginative leadership and influence in the complex of heterogeneous emotionally and politically charged knowledge systems which comprise our socially constructed reality" (Spender, 1996: 60). This may be important not just for firms that are learning to outpace industry competitors, but also to workers trying to learn faster than their labour market rivals.

Kanter (1995) suggests that as people move from being employed to being employable companies will be judged by their ability to provide learning opportunities. World class companies are entrepreneurial and encourage employee ideas, learning orientated and collaborative built on teamwork and alliances (Kanter, 1995). Quinn (1992: 259) argues that organisational intellect is "ephemeral and organic". Firms have a choice they can either challenge individuals, groups and organisations to continue learning and to put that learning to use or individuals will become stale and leave in the case of employees or not participate in network relationships in more dynamic production contexts.

Learning context will in part be influenced by organisational climate as expressed in the social and psychological environments of the firm. The organisation can be divided into local climates influenced by the local manager. The security to make mistakes within a given local climate may be an important factor in supporting knowledge generation and renewal (Wickstrom and Normann, 1994). But to what extent can mistakes be permitted in time and resource pressured network environments?

Consistency between the core values, business strategy and the actual work environment is a shared feature of firms managing for core competencies for competitive advantage (Graham and Pizzo, 1996). A shared focus for an organisation supports learning and reinforces strategic management. But to what extent is this shared understanding possible and practical in network contexts?

Another important question is whether physical proximity is important to network relationships in the Information Age. The concentration of industrial expertise in certain geographic regions is seen by some commentators as evidence that digital networks are not enough (Lash and Urry (1987); Piore and Sabel (1984). Cohen (1998) claims that despite the increased use of virtual electronic communities effective learning partnerships depend on a degree of physical proximity necessary to preserving face to face relationships. Such relationships are the key to tacit knowledge exchange.

The importance of place raises issues for firms in terms of their location decisions and for local government charged with economic development. Localities seeking to develop a reputation in a particular industry face the challenge of nurturing core capabilities, increasing business to business collaboration, and new models of civic engagement and leadership development. For cities seeking inward investment Castells (1989) advocates the reconstruction of place-based meaning to attract expertise and develop environments conducive to learning. Evidence of such an approach can be seen in the UK, for example Leeds has successfully developed its professional financial and legal services sectors and the revitilisation of London around the media, design and finance industries illustrates how cities can foster learning communities. Learning communities built on knowledge sharing between the private and public sector

3.4 Key Issues

It could be argued, from the literature outlined herein, that a network organisation potentially offers conditions more akin to the learning company that Pedler et al. (1991) outline than a neatly bounded organisation built on internal employees could hope to do. Contexts of network production may be more conducive to learning as they combine less rigid organisational boundaries with less calcified organisational routines. Relational and contextual issues may be more important than structural or ownership issues. However, there may be practical challenges for managers trying to develop learning processes in network contexts. These challenges do not exist in the same way for managers responsible for individuals employed permanently within the confines of a

clearly delineated firm. For example, the shared values, goals or beliefs that usually help tie an effective organisation together may be harder to establish across a more fluid and transient network organisation. Network members may come from very different starting points, their values shaped by a medley of work experiences. An absence of such common purpose may impact on the effectiveness of learning processes that develop within networks.

Increasingly projects and people straddle formal organisational boundaries. This altered operational context faced by firms in some industries poses a number of important questions. For example, how do firms reliant on the tacit expertise of individuals ensure access to the capabilities that they need? Is it possible or practical for knowledge to be embedded in the firm when the relationships on which the firm relies are external and in some cases transient? Can firms faced with flexible production building on external relationships develop their strategy for the future around an internally embedded core competence? It is these sorts of questions that remain relatively under-researched.

Much work has already been conducted into learning processes in the product field (Nonaka and Takeuchi, 1995; Hamel and Prahalad, 1994) for neatly bounded firms where knowledge lends itself more readily to explicit reproduction. Procedures manuals, product prototypes, patents and detailed production data enable knowledge to be codified. Given the increase in network based production, more work is required in industries where the combination of an intangible product with tacit knowledge tied up in network relationships, know-how, and diverse work experiences compounds the complexity of

understanding knowledge development (Edvinsson and Sullivan, 1996). This thesis tries to explore some of these issues from the perspective of managers faced with such strategic challenges in the context of the UK television industry. The rationale for studying the television industry and the methodology employed are discussed in Chapter Four.

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

Zuboff argues that: "Behind every researcher lies a belief" (Zuboff, 1988: 423). The broad beliefs which shaped the research design were developed from an undergraduate background in the social sciences, and experience in a business support role where both positivist and more interpretive methods were employed to varying degrees of effectiveness, depending on underlying research question being explored.

A number of leading social scientists have argued for the need for more qualitative research in strategic management (Summer et al., 1990: 369). The methodology for this study adopts qualitative techniques because they offer the possibility of obtaining a rich description of action and meaning in the context of the research setting (Van Maanen, 1979). A qualitative approach appeared particularly relevant to this study because it is exploratory in nature; trying to understand and identify the key learning issues for managers operating in network contexts.

This chapter seeks to explain the methodology for the research. It begins with the philosophical perspective guiding the work, in section 4.3 the conceptual framework is outlined. In section 4.4 the rationale for focusing the research on the television production industry is discussed. Section 4.5 discusses the research methods to demonstrate that the methodology employed was

appropriate to the aim of the study. Section 4.6 explores the use of interviews as research method. In section 4.7 the methods of data collection and analysis are explained. Finally issues of triangulation, validity and generalisability are discussed to demonstrate the extent to which these issues have been addressed in developing the methodology for this study.

4.2 Philosophical Perspective

Social science is concerned with debates about appropriate epistemologies. A researcher is inevitably influenced in their choice of method by their perspective of the social world. The positivist approach to social science holds that the world is knowable and that a stock of knowledge can be developed around universal laws uncovered by quantitative methods. An interpretive approach views meaning as being socially constructed by individuals and groups. From this perspective methods geared to understanding must uncover different contextual meanings to get to the essence of issues. However, given that people have both biological make-up and social dimensions the key research challenge is not to perpetuate the dichotomy between qualitative and quantitative methods, but to explain the complexity of the empirical world using appropriate methodologies (Bacharach, 1989: 512-3). The appropriateness of the methodology depends on the nature of the problem under investigation. As Miles and Huberman, (1994: 5) state:

"The paradigms for conducting social research seem to be shifting beneath our feet, and an increasing number of researchers now see the world with more pragmatic, ecumenical eyes." Nowhere is this more so than in strategic management research. Strategic management is multi-discipline in origin. Effective strategy requires creatively linking human ideas and innovation to action. The strategy process is usually managed in the context of the firm - itself a socially constructed phenomenon (Berger and Luckmann, 1966). It is people and their interaction which create social structures (Giddens, 1984). Today this interaction may be within relatively stable structures, or short-term virtual organisations. From the interpretivist view "knowledge is a social and historical product", (Miles and Huberman, 1994: 4). Believing that the subjective, meanings, norms and values are at the centre of organisations it is appropriate to adopt qualitative approaches for the study of learning processes and knowledge development for core competence to understand such complex human processes and their dynamics.

The study of knowledge development and learning, under flexible production, requires asking managers about their perceptions of what changes are occurring in the processes of production and strategic management. This is the method of verstehen where the subjective experience of social actors is reconstructed to illuminate motives, rationales, feelings and perceptions. Comparing and contrasting the stories of different actors provides the interpretative detail of context that is lacking in quantitative approaches. This has its roots in Weber's methodological ideas on the social sciences where the interpretative understanding of social action is crucial for explanation (Giddens, 1981: 146).

Interpreting how modern managers are responding to complexity and uncertainty, and seeking to reconcile theory and practice, explanation and causes

through the subjective experience of human consciousness gives the research a phenomenological perspective. There are practical limits on the ability of strategic management researchers to work towards a progressive, linear development of knowledge because managers and workers have choices, however limited, and those choices are made frequently in unpredictable ways. The issues of unpredictability within strategic management were highlighted in Chapter Two. This unpredictability extends to the wider commercial environment and creates problems in managing a firm for future success. Strategic management research is trying to respond to this unpredictably. The study of strategic management is in a state of flux where it lacks a guiding paradigm (Prahalad and Hamel, 1994: 5). This flux prompted by environmental catalysts like deregulation, global competition, technological discontinuities are challenging existing theory and creating research opportunities. As von Krogh, Roos and Slocum (1994: 54) state;

"our management practices and theories, need to be discarded, altered and reinvented in order to give adequate descriptions and provide appropriate heuristics that can guide managers in the new knowledge-intensive era."

Van de Ven (1992: 169) argues that strategy process research is by its nature too diverse to be contained in a single paradigm.

Firms have both "survival" and "advancement" needs (von Krogh, Roos and Slocum, 1994: 64-65). Survival has tended to be the focus of strategic management and managing the input-output relationship between the firm and

the environment. Advancement is increasingly about developing core competence, norms and knowledge development within the organisation. The research of such issues calls for data collection techniques which draw directly on the experiences of practitioners. As suggested by von Krogh, Roos and Slocum, 1994: 65:

"New perspectives and solutions to managerial problems will emerge, which are concerned with subjective knowledge as opposed to objective truth; with unrepeatable and unique experiences rather than reoccurring, general lessons; with intertextual relations instead of temporal causality; with richly personal complexity over inert impersonal simplification."

Management research should help practitioners by identifying patterns, consistencies or paradoxes (Mintzberg, 1979). All theories abstract from the world they describe but as Mintzberg (1979: 584) notes:

"Our choice, then, is not between true and false theories so much as between more or less useful theories."

This exploratory study seeks to contribute to our understanding of learning processes in messy network contexts building on the experiences of those individuals that are charged with delivering competitive results in such settings.

4.3 Conceptual Framework

The conceptual framework for this study seeks to integrate the growing literature on the role of organisational learning and knowledge development in strategic management with the complexities of practice for managers operating in environments of network production. The objective being to explore the key learning issues and implications for managers of firms reliant on flexible production drawing on external workers and the broader policy implications for those concerned with knowledge based national competitive advantage.

The study is not grounded theory in its pure sense because some of the concepts and theorising, from the review of the literature, influenced the design of the fieldwork. Weick (1989) describes theorising as "disciplined imagination" based on problem statements, thought trials and selection criteria. It is contended herein that it is almost impossible for a researcher to decide on a methodological framework, without some form of prior conceptualisation. This is particularly so with qualitative methods which have a number of associated challenges including: laborious data collection, data overload, and lack of well formulated methods of analysis. However, the methodology can be described as grounded in the sense that the story of the key findings are derived from the field data whereby data informs ideas and this in turn encourages further data collection (Glaser and Strauss, 1967: 108).

The conceptual framework guiding this research was pre-structured to the extent that there was a framework guiding the development of the research questions, but this was sufficiently fluid to allow for emergent concepts, questions and ideas. The actual focus of the study on learning issues emerged from preliminary fieldwork drawing on the issues raised by practitioners from the television industry.

Existing research it has been argued in Chapters Two and Three tells us little about how network production impacts on the organisational learning of firms. For smaller firms which are seeking to grow, an important potential source of leverage, in the absence of external finance, is their capacity to maximise their strategic capability. The literature suggests that knowledge development focused on core capabilities may offer an effective mechanism for development. But what is the impact of flexible production on such processes? In-depth interviews with managers coping with these production contexts were used to explore the issues surrounding organisational learning and knowledge development under collaborative network production.

Collaboration here is defined in broad terms to mean two or more partners working interdependently and committing resources to a common project. Collaboration is usually discussed between firms where it can be achieved through loose arrangements, contractually based, or equity stakes which fall short of acquisition (Lewis, 1990). However, increasingly it has been shown firms are also collaborating with networks of knowledge rich workers and customers. Collaboration is based on the notion of mutual advantage rather than equal gain. Implicit is a voluntary relationship where independence is maintained, although the linkage may be formalised in the short-term by a contract of employment.

Findings from the research under the ESRC initiative into the competitiveness and regeneration of British industry between 1985-1991, pointed to the

importance of co-operation between firms (Francis, 1992). However, given the importance of organisational learning from all sources, equally important may be developing an understanding of a firm's complex learning relationships with key external knowledge rich workers on whom it has been shown firms in some industries are becoming increasingly reliant.

The spanning of the input/output and process issues in strategic management research is a key issue (Prahalad and Hamel, 1994). The literature reviewed in Chapter Two suggests that understanding organisational learning processes in a range of organisational contexts may provide insight to enduring sources of long-term advancement. Sustaining excellence remains an ongoing challenge for firms (Pascale, 1990; Collins and Porras, 1996). This study begins to explore the reality of network relationships for those managers faced with uncertainty and complexity within the context of the television industry.

4.4 Why the Television Industry?

In narrowing the choice of industry for this research the objective was to find an industry which demonstrated competitive advantage for the UK in the global arena; had a potentially bright future in terms of market potential despite emerging global competitors; and one that was experiencing major change. An industry was required that offered the necessary complexity to make the research relevant to policy makers and management practice. The television industry offers the conditions for the study of hybrid organisational forms because it is undergoing rapid structural change which raises the organisational, strategic and

management issues associated with network based collaboration, organisational learning and competitive advantage.

The television industry is a source of national competitive advantage. National governments are concerned to increase the wealth of the nation, and that means identifying clusters of expertise in the economy and encouraging their development. The communications industry, developing from the convergence of broadcasting, telecommunications, computers and mail services, has been identified as one of the fastest growing sectors in the world. In the UK, Porter (1990: 492), identifies entertainment/leisure as a cluster of national expertise and this includes television programme production. The Government endorses this view:

"We have key assets in the quality and creativeness of UK programme makers-the BBC, the ITV companies, and over 800 independent production companies. ..Opportunities exist for the UK industry to do more overseas" (Department of Trade and Industry, 1994: 109).

Furthermore, the television industry brings together many of the "new" organisational forms such as the flexible firm, network collaboration and global media conglomerates. It has been argued that the organisational prototypes of tomorrow may be found in the television industry (Florida and Kenney, 1993). The UK has a national competitive advantage in programme production which is being carried out on a flexible basis via production networks (Barnatt and

Starkey, 1994). A fuller discussion of the industry context for the research is given in Chapter Five.

The viability of flexible production rests on a healthy production sector not just in terms of the number of competing firms, or margins achieved but also in terms of their capacity to grow core competencies for future creative achievement. Programme content can be conceptualised as part of the "software" of the Information Age. The home information revolution will need more than technology, it will need content, and lots of it, to fill the growing distribution capacity. The television industry provides the opportunity to analyse learning issues under collaborative network production.

4.5 Description of Method

The purpose of the study is to represent the viewpoint of managers on the learning and knowledge development issues and challenges associated with network production in the UK television industry. The reason for selecting managers as the target informants for the research, rather than a mix of workers in the industry, was that managers are responsible for performance and strategy. Other actors clearly feed into the process, but managers ultimately have to find practices that work for their organisation.

The research was exploratory and developed from the preliminary, more general question of how flexible production in television programme production impacts on strategic management? The results of several informal interviews and secondary sources led to a focusing of the research around issues of learning and

knowledge development for competitive capability in the television industry. An examination of the history of the industry revealed the central role of ongoing innovation and creative solutions to the UK's competitive advantage in programme production. Preliminary fieldwork highlighted the centrality of ongoing learning and knowledge development to sustaining innovation and creativity for commercial success in UK television production.

The methodology was qualitative, thereby reducing the dangers of reductionism in strategy research whereby results can skate over the demands of operational complexity, the very issues that most managers are grappling with. A more organic, grounded approach enables emergent issues to be incorporated into the study. However, there needs to be clarity of methodology for qualitative research. Qualitative researchers need to be explicit in terms of the methods employed, the difficulties faced and the process of analysis (Eisenhardt, 1991; Wolcott, 1990). The next section outlines how the research was focused in the preliminary stages around strategic learning issues.

4.5.1 Preliminary research

The initial research questions for the study arose from a broad research interest in the strategic issues arising from network production. An initial review of the theoretical literature on collaboration, competitive advantage and restructuring and the key forces affecting the television industry was undertaken. This preliminary literature review resulted in the formulation of two competing working hypotheses designed to begin to focus the research rather than rigidly

bind the methodology. These working hypotheses are outlined below. The first is at the level of the industry, the second at the national level.

- 1. Flexible programme production in television drawing on independent production offers strategic opportunities for smaller specialist firms and the development of a responsive and competitive content industry.
- 2. Flexible programme production based on dynamic networks minimising unit costs is undermining competitive advantage in programme production in the UK and producing small firms which cannot sustain the investment necessary to be viable in the longer term.

However, informal interviews and discussions with several senior production executives, combined with a reconstruction of the history of the television industry in the UK from the 1930s until the early 1990s, revealed that a simplistic hypothesis driven approach to the research would not have reflected the diversity of issues faced by firms in the industry. Given the range of forces facing the industry (see Chapter Five) including organisational, regulatory, and competitive it became clear that it would be necessary to focus the research further to achieve a manageable and meaningful study.

Attendance at a television industry conference, the Digital Access Conference organised by Nottingham City Council and attended by representatives from the BBC, the independent television companies, the Independent Television

Commission (ITC) and the industry training agency Skillset in Nottingham, in November 1995 provided the catalyst for this refocusing around learning issues. Here the challenge of maintaining relevant knowledge for ongoing competitive advantage in television production for UK production firms was stressed. This challenge was confirmed by informal discussions with industry representatives during and after the conference. The refocusing of the research around a learning theme necessitated a review of the organisational learning literature and its links to the resource-based paradigm of strategic management. This has been an ongoing task given the rapid proliferation of such literature over the period of the study.

4.5.2 Sample

The fieldwork is based on interviews with managers and relevant third parties concerned with television production or its performance outcomes. The data collected from the interviews provides the focus for the analysis, however other forms of data were also important to the study. Considerable time was spent exploring data and secondary sources on the industry at the ITC library in London and at various university libraries around the UK. The time spent sitting at the offices or facilities of production firms waiting to interview people also provided considerable opportunities to observe television workers, at all levels, in action. These informal, unplanned observations provided useful insights into the functioning and atmosphere of different production companies.

The aim was to use "conceptually driven sequential sampling" (Miles and Huberman, 1994: 27) whereby those interviewed and events observed unfold

with the emerging concepts and ideas. Initially, the informants were sought from the Midlands (East and West) television area. However, given the dominance of London as the media capital of the UK, it became clear that it was also necessary to seek informants from London based firms to reflect the range of production contexts (for a fuller discussion of different production contexts see Chapter Five). This increased the cost and time of the research considerably as interviews had to be juggled around time-tabled teaching commitments. By the conclusion of the study, informants based in the Midlands (East and West), London, and the North West had been interviewed, their productions being regional, national and global in reach.

Rather than probability sampling, the aim of the study was to maximise the range; to explore the variation of issues across the sample (Weiss, 1994). This approach is concerned with maximising heterogeneity and considering a-typical cases. A smaller sampling frame is thus usually associated with this research. Weiss (1994) suggests 30 interviews, rather than the 60 plus associated with probability samples.

In this study, possible informants were sought from firms recognised from their programme output to be particularly innovative or creative in their programme production and that were achieving commercial success by attracting buyers and viewers for their programmes. To locate these companies and the informants within them various television industry directories were consulted (including: British Film Institute, 1995; Producers Alliance for Cinema and Television (PACT) 1996) and other industry literature. In addition to the interview data,

further information was sought on the firms sampled in terms of their range and scale of activities. As the fieldwork progressed, a snowball technique of asking informants who else in the industry was particularly worth talking to was selectively employed. Only those individuals or companies that were recurrently suggested as useful future leads being pursued.

Informants were sought from both the independent production companies that supply the publisher-broadcasters, the larger television companies that both supply and buy programming to fill their schedules and relevant third parties that have a regulatory or human resource development role within the industry. A fuller explanation of the structure of the industry is provided in Chapter Five. The more individuals that were interviewed, the more the industry appeared like a village community containing many characters and perspectives, but certain shared challenges.

At the independent production companies informants were sought at the level of managing director, director or senior partner. Such individuals played a key strategic role in the establishment and/or development of the firm. These individuals frequently retained key hands on executive producer or director roles on productions enabling them to offer both strategic and more practical, operational insights on the issues surrounding network production in practice.

In the larger television companies, interviews were conducted at the level of executive producer or above. In such organisations informants were drawn from various levels and functions including senior executive, director of programmes, commissioning editor, executive producer or senior human resource manager. Senior executives are concerned with firm strategy. Directors of programmes are concerned with programme strategy. Commissioning editors are charged with commissioning programmes to fulfil programming strategy for particular genres (drama, comedy and light entertainment, factual programming etc.). Executive producers oversee the management of a production. Given the significance of workers to innovation, interviews with representatives from the human resource function were felt appropriate in some larger organisations where such dedicated functions existed. At the time of the research, a number of industrial relations issues were arising from the greater use of outsourced workers, however, these issues are not developed herein because they lie beyond the scope of this thesis and are being developed by the research of others (see for example Campling and Michelson, 1997).

In some organisations interviews were conducted with several representatives. Multiple informants can be useful in corroborating or illuminating emerging issues. However, given the limited resources for PhD research it was not possible to pursue multiple informants in many firms. A more expedient way of comparing different types of firms in the industry was to draw on individuals' multiple work experiences. For example, many informants from the independent production firms had worked previously in the larger television companies and they brought that wider experience to the interview discussions. Informants frequently used prior experience to make comparisons across different parts of the television industry.

Letters were sent out to specific individuals requesting an interview. These were customised to highlight why specific firms and informants had been included in the sample to achieve a higher response rate. A copy of the basic letter is illustrated in Appendix A. Confidentiality has been respected by using illustrative quotes in the thesis that omit the names of informants, their colleagues and the firms in which they were based. This has on occasion meant that interesting material could not be used as to do so would have revealed the source or to edit out all the contextual references would have left the material bereft of meaning. In such situations an attempt has been made to use examples or a summary of the relevant finding rather than specific quotes.

Usually a follow-up phone call would be made to the secretary or PA to arrange an interview appointment. Sometimes it was necessary to make several calls or fax a copy of the original letter. If the initial contact was unavailable, or had moved on, an alternative representative at a similar level was sought if appropriate. This was more of an issue in the larger television companies that were experiencing considerable restructuring during the period of the research. In some instances, it was not considered appropriate to interview an alternative informant because the specific experience of the original individual was sought.

The television industry is frenetic and research access requires persistence. Approximately, fifty percent of those approached for interview agreed and were available during the period of data collection. Given the demands of tight production schedules, it was not uncommon to have to reschedule an

appointment several times. In some instances, it was necessary to book an interview six months ahead making managing the research process an administrative challenge.

Table 4.1 Informants

BROADCASTERS	INDEPENDENT PRODUCTION FIRM	OTHER
Senior Manager	Managing Director	Senior manager national training
	Managing Director	organisation
Senior Manager	Managing Director	
	Managing Director	Regional representative of
Managing Director - cable	Managing Director	regulator
company	Managing Director	
	Managing Director	Regional representative of
Senior Manager	Managing Director	regulator
	Managing Director	
Executive Producer	Managing Director	Senior manager regional training
	Chief Executive	and support organisation
Executive Producer	Director	
	Finance Manager	Representative regional arts
Senior personnel manager	Executive Producer	organisation
	Senior Manager	
Senior human resource manager	Senior Manager	Chairman of organisation
	Partner	representing facilities houses
	Personnel Director	

The formal interviews were conducted between April 1996 and November 1997 and varied in length from between one to two hours depending on the

availability of informants on the day. The aim was to conduct between 20-30 formal interviews. Interviews were continued until the law of diminishing returns applied. In other words, there came a point where the time and cost of each additional interview provided fewer and fewer fresh insights or ideas. In fact interviews with 32 informants were undertaken. This covered informants from two of the three large independent television companies, a large publisher broadcaster, 17 independent production firms and various third party organisations central to the development and regulation of the industry. Table 4.1 provides some information on the type of organisation and level from which informants were drawn. The large number of informants from the independent production firms was considered important because independent firms, that are managing to succeed commercially, in this fluid environment, are leading the way in the effective management of network production. The independent firms also represent a relatively under-researched part of the television industry, despite some organisations being global firms with multi-million pound turnovers. A full explanation of the different types of organisation in the UK television industry is given in Chapter Five.

Informal interviews and conversations were also conducted with various industry representatives whenever the opportunity presented itself, for example, over lunch or coffee at conferences or on the telephone. These were useful in focusing the study in the preliminary stages and corroborating or triangulating initial findings.

4.6 Interviews as a Research Methodology

Interviews are an established qualitative research method in the social sciences. Indeed, Weiss (1994) argues that much of the fundamental work in the social sciences has come from this approach and that the best way of finding out about someone's activities was to ask them. The previous work experience of the researcher in a large business service organisation supports this practitioner centred philosophy to research. The interview enables the researcher to draw on the expertise and experience of the respondent and as such provides a vehicle for mutual understanding (Harre and Second, 1972).

"It is the willingness to treat individuals as the heroes of their own drama, as valuable sources of particular information, which is the base of the resurgence of interest in varying interview procedures. For it is only when the researcher and the respondent have the possibility of communicating directly with each other that the subtleties of mutual understanding of the two parties are harnessed." (Brenner, Brown, and Canter, 1985: 3)

The advantages of interviews as method is that they permit an extensive collection of data across a range of issues, any misunderstanding can be checked at the time (in contrast to a questionnaire) and they allow for immediate follow-up (Brenner, Brown and Canter, 1985). Interviews are particularly appropriate to complex situations with multi-dimensional perspectives, as found in this study (Brown and Canter, 1985). Thus the interview as a method appeared entirely appropriate to this study. Early interviews reinforced this perspective. Several times during the fieldwork tales were told of the limitations of previous research

questionnaires used by consultants or other academics. These stories provided some comfort when a transcript took several days to complete or an interview took months to arrange.

Interviews do have limitations. One of the criticisms of interview techniques is that they are anecdotal. Indeed, bias may be introduced to the interview process in a number of ways. The informant may consciously or unconsciously underreport events due to memory decay or the sensitivity of the issue involved. To some extent the authenticity of an account can be checked for internal consistency by the degree to which the informant gives contradictory, inconsistent or paradoxical information (Brown and Canter, 1985). When analysing the tapes close attention was paid to the transcripts for inconsistencies. Corroboration can also be used with secondary sources. Multiple accounts within an industry can provide a more complete picture for understanding and explanation, a technique this study sought to adopt.

The interviewer can also reduce bias in the methods of data collection and analysis. Open questions can be used to make minimise directional encouragement. Clarifying probes can be used to check meaning during the interview. A technique of asking "let me just see if I have got this right?" was found to be helpful in testing meaning and avoiding misunderstanding between the interviewer and informant. Exploratory probes can be employed to ensure that nothing key is being omitted during the interview (Evans, Hearn, Uhlemann and Ivey, 1979). This avoids the interview becoming too interviewer driven. The "anything else?" question was used throughout this study for this purpose.

An interview guide was used to assist in this exploratory study as recommended by various qualitative researchers (Brenner, 1985, Weiss, 1994). The guide is not a schedule, but a facilitator for information retrieval. The benefit of a guide is that it identifies the issues to be covered thereby helping the researcher to stay on track, but provides the freedom to go with the flow of the interview if interesting data is emerging.

A copy of the basic guide used in this research is found in Appendix B. The guide was developed from exploratory interviews and the literature review. Some tailoring of the guide was necessary depending on whether the informant was from a smaller firm or a large television company, or whether the informant was concerned with the buying or selling of programmes. Using the guide effectively was quite a challenge initially. However, as one's experience of interviewing for research purposes increased it became easier to judge when to probe, when to move on to the next question, when to follow a new avenue and when it was time to wind up.

The interview method can be used as a collaborative process to promote understanding. In an active interview, an attempt is made to draw out the multiplicity of the informant's roles (Holstein and Gubrium, 1995). In this study, some informants performed a multiplicity of roles. Such roles might include: production expert, employer, entrepreneur, teacher and manager. The research was conducted to try and explore these multiple roles wherever possible. An

active interview also requires being sensitive to contradictions and ambiguities which may require further probing.

There is a fine line between exploring issues and dictating the research agenda. Early transcripts were read closely to check for this problem and to develop interviewing techniques directed more by the informant than the interviewer. This approach seemed to lead to richer data and clearer insights.

4.7 Data Collection and Data Analysis

Tape recording interviews is advocated for providing a richer account of the data (Yin, 1989; Silverman, 1994). Use of a tape recorder also frees the researcher to listen and monitor the conversation (Weiss, 1994). Consequently, the interviews were taped where possible. However, to some informants a tape recorder may feel intrusive and in such situations it may be better not to tape the interview. For example, one informant rather reluctantly agreed to allow the taping of an interview, however on reflection it appeared that the taping process affected the richness of the data as once the tape was off the informant spoke much more freely. If taping was not possible full notes were taken and the interview typed up as soon as possible after the interview. In addition to taping, notes of key issues were also taken to: provide a focus for probing, note any off tape issues such as body language which may be relevant, highlight any new issues or inconsistencies for further research and as a back-up in the event of technical failure of the recording equipment. Notes of the researcher's thoughts, perspectives, and ideas were also kept during the period of the research.

The tapes were fully transcribed by the interviewer. Although at times this seemed a slow, laborious task - a one hour interview could take several days to transcribe - it did bring benefits for the research process. Firstly, this closeness to the data enabled a constant review of how the interview process was being managed to ensure the informants were not being over led in their responses. Listening to the verbal emphasis given to parts of the tapes by informants helped start identifying the key research themes. It was also surprising to note that even typing from a tape verbatim, the words and phraseology of the interviewer sometimes seemed to slip subconsciously into the draft transcript. Doing both the interviewing and the transcribing enabled the wording to be readily checked against the tape, preventing unintentional transcription error creeping into the data.

After each interview had been transcribed, the transcript was read carefully several times to identify the key themes and issues arising from each encounter. Ideas, themes and categories were recorded on an interview summary sheet (as advocated by Miles and Huberman, 1994). However, the process of inductive analysis was ongoing. In qualitative research analysis, data collection and analysis occur simultaneously as iterative processes that are carried out in parallel (Burgess, 1984; Hammersley and Atkinson, 1983). Richards and Richards (1994) argue that to provide theory from data researchers must stay open to ideas, concepts, and categories that may emerge during the process of making data. So the links between the processes of data analysis and collection must be used to enable the researcher to flexibly explore ideas and connections.

In this study key issues and new perspectives or ideas were used to develop linkages, core categories and concepts and fed back into the data collection process. For example, several emergent themes and ideas were explored with new informants. This enabled ideas to be refined and developed.

The analysis process involves two dimensions: firstly, making the data manageable and secondly, doing creative work on the product of the first. In practice these activities occur concurrently (Mason, 1994). The data was searched for themes to develop analytic categories and to index the data this being the foundation of qualitative techniques (Glaser and Strauss, 1967; Miles and Huberman, 1984). Analytical categories were developed using descriptive codes (the keywords/concepts from the transcripts). Deciding when someone is talking about a topic is an interpretative task as the informants will vary in their discourse and thus more general themes are developed which Miles and Huberman (1994) refer to as interpretive codes. In addition the mapping of concepts and ideas was found to be a useful way of defining, refining, theorising and developing understanding. This process was largely completed by perseverance, focusing on themes, and detail in the transcripts-in short it required much reading, listening and thinking to craft the results from the data.

A particular example of the analysis process used for this research in practice is now outlined, to illustrate how the data obtained for this study informed the researcher's evolving ideas and lead to the development of various concepts presented in the results chapters of this thesis. Several informants, early on in the study, discussed how they learnt from certain key individuals who they knew.

This suggested that relationships might be central to learning in network contexts. Consequently, relationships were explored in more detail as mechanisms for learning with subsequent informants.

As the interviews progressed, reading and re-reading the transcripts and the interview summaries revealed that informants appeared to particularly emphasise four key types of relationship as valuable to learning about the competitive environment and external opportunities and threats. The repeated association between learning and certain types of relationships, by informants, began to suggest that a typology of learning relationships may exist for television production firms. Having identified the key types of learning relationships from the interviews as being relationships with: customers - programme buyers; talent-front of camera and production; collaborative business partners, and viewers, as discussed more fully in Chapter Six, it was necessary to capture the strategic importance of these learning relationships as they emerged as a key research finding. The term 'relational advantage' was coined by the researcher as the study progressed to represent the association by informants of effective learning relationships with a competitive, learning advantage.

Computer software was also used to help analyse the taped interviews. Computer software such as NUD*IST (Non-Numerical Unstructured Data Indexing, Searching and Theorising) is now available to aid data indexing and retrieval. The NUD*IST software package was developed in the 1980s by Lyn Richards (a qualitative researcher) and her husband Tom Richards (a computer specialist) in Australia to facilitate in the analysis of qualitative data. The

programme is designed for the storage, coding, retrieval and analysis of text. A document system keeps track of all the text files and the index system enables the structuring of a database on the basis of a hierarchically organised index system.

Coding in NUD*IST is done on a node basis, with texts units being coded to a node. The system then allows coded text units indexed to a certain node to be retrieved or for combinations of codes to be investigated. Several codes can be assigned to given text units. Category structures can be factual or they can be referential. Factual category structures refer to the attributes of the informant who said it, when, facts about the informant. For example, in this study factual codes were used to distinguish the type of television organisation the informant was drawn from. The coding contents of a referential category summarise what the text is about, or attitudes and emotions expressed. A parent-child tree structure of codes can then be developed with the links being of a general to specific nature. So the transcript material can be categorised and indexed on the basis of themes identified by the researcher from general first level codes to more specific second, third and fourth level codes, the result being an index tree of codes. This process of categorisation and indexing helped in organising and relating concepts. For example, codes originally placed manually on the typed transcripts could then be checked and rechecked for associations using NUD*IST. This process was useful in examining the associations between codes and in retrieving illustrative quotes to highlight key ideas and concepts when writing up the findings of the research. For example, revisiting the quotes on skills relevance from NUD*IST highlighted the associated issue of knowledge

uncertainty under network production (as explained in Chapters Seven and Eight).

Various commentators have warned that for qualitative work computer systems do not substitute for the creative input of the researcher in developing categories (Mason, 1994; Richards and Richards, 1994). It was certainly the experience of this researcher that reading the hard copy of the transcript provided a clearer insight to the key issues and overall story in a given transcript than coding chunks of data on screen did do. So all the transcripts were manually read and analysed initially. However, as the pages of transcript rapidly grew NUD*IST became a useful tool for indexing and retrieving data because it enabled comparisons of issues and themes across the sample that would have been slow and laborious to undertake manually by wading through hard copy transcripts. This supports the experiences of others who have used computer based systems for qualitative data analysis (MacIntyre, 1979).

The NUD*IST package can also be used to record memos and ideas. However, because the software only became available for use well into the study an alternative system of interview summaries and research notes were already being used for this purpose. The NUD*IST system also allows text searches for exact words or phrases or patterns of grammatical synonyms. However, there is a danger with such searches that one is distanced from the themes of the data or that different informants use different phrases and words to discuss given issues, the danger being that word searches may miss key relevant data. Consequently,

the approach in this study was to focus on theme based analysis, rather than word driven searches.

A combination of manual and NUD*IST data analysis led to the identification of key concepts from the interviews and their presentation around an organising framework - The Knowledge Chain. This framework captured the key concepts emerging from the thesis and their inter-relationship as discussed in Chapters Six, Seven and Eight.

4.8 Triangulation and Validity

Triangulation is concerned with having checks and balances to avoid research bias. In this study data was triangulated by avoiding reliance on one type of industry informant. Theory triangulation was attempted by testing concepts and ideas as they emerged on practitioners. Considerable documentary information on the television industry was also gathered to enable cross checking of themes, trends and issues. Multiple methods of data collection improve the accuracy and credibility of findings (Jick, 1979: 602).

The validity of the results is another key issue in qualitative research. Researcher effects or bias can be a problem, if they are seen to undermine the logic of the analysis or method. The use of research notes assisted reflexivity. There are four dimensions of validity;-construct validity, internal validity, external validity and reliability (Yin, 1989). Construct validity is about establishing the correct operational measures for the concepts being researched. This is an issue at the

data collection phase. Multiple data sources and asking the views of informants on the key issues can contribute to construct validity.

Internal validity is an issue at the analysis stage and this requires effective and thorough analysis techniques (Miles and Huberman, 1994). The analysis techniques used in this study have been explained and seek to support internal validity. The combination of manual and computer based analysis techniques provide a thorough basis for concept development. External validity is the focus at the research design stage and establishes the domain to which findings can be generalised. This is not about trying to get a representative case in the statistical sense because this misses the logic of qualitative research according to Yin (1989: 44). Analysis across informants drawn from different organisational settings can be used to demonstrate the replication logic, by applying consistent codes and analysis procedures using tools such as NUD*IST, and interview summaries to assist the process.

Reliability arises at the data collection phase and it is concerned with demonstrating that the operations of a study could, theoretically at least, be repeated with the same results. This is concerned with trying to minimise the bias of the researcher and error. Reliability can be improved by effective documentation of the research procedures as discussed earlier to provide an audit trail.

The words of the researcher are used to describe how the research is designed, conducted and the findings. Results are inevitably stories based largely on the

words of the researcher. In writing up qualitative research illustrative examples can be helpful in substantiating the themes of the study (Wolcott, 1990). Letting the voices of informants flesh out that story is key (Marshall and Rossman, 1995). So in presenting the key findings of this study the voices of informants and illustrative examples have been used to substantiate the results.

4.9 Generalisability of Results

One of the criticisms of qualitative studies is they are a poor basis for scientific generalisation. However, as Yin (1989: 21) argues with qualitative work:

"the investigator's goal is to explain and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)."

Issues of learning processes and knowledge development will in part reflect industry context and structure because of the varying competitive, competence and resource issues facing different industries. Generalisability beyond the context of the television industry will require replication of the key concepts from this research to other industries. The findings of this study may provide the basis for such work in other industries which encourage flexible production building on the expertise of individuals. Suitable industry contexts might include education, computing, financial services, and design. Further research into the relationship between network production, learning and competitive advantage in other industries will be a step towards more generalisable theories than is possible given the resource limitations of PhD research.

4.10 Conclusion

This chapter has outlined the philosophical stance and the research methodology on which this study was based. The rationale for a qualitative methodology has been explained. Some of the practical difficulties and limitations of the research have been discussed. The research is exploratory building on the experiences of managers in the television industry. The methods used to collect and analyse the data have been discussed and the use of different data analysis techniques explained.

Having explained the theoretical context of the study in Chapters Two and Three, and the method deployed in this chapter, the final task before presenting the empirical results is to outline the key strategic issues faced by the UK television industry at the time of the research. In Chapter Five, the key issues facing the television industry at the time of the research are outlined drawing on both primary and secondary data.

CHAPTER FIVE

THE UK TELEVISION INDUSTRY

5.1 Introduction

In this chapter an attempt is made to outline the key general and competitive forces facing the television industry, in the UK, in order to explain how these forces have led to a greater reliance on flexible network forms to organise television production. Such networks bring together a vast array of internal and out-sourced workers. In order to identify the recurring forces for change, it is necessary to draw on the history of the UK television industry. From the early years of broadcasting to today there have been some recurring themes in UK television: the key role of regulation and the public service ethos in shaping the development of the industry, the centrality of the programmes, the impact of new technology on broadcasting and production, and the challenge of efficiently and effectively organising creative talent.

New technology has been a catalyst, or enabler of change in the structure and skills base of the television industry. New technology has offered new methods of distribution and production. In the 1990s, digital, satellite and cable technologies have overcome the physical scarcity of the frequencies offering the prospect of new entrants to broadcasting and production. Hundreds of new channels will give consumers a greater choice of television services. Satellite has enabled television across national frontiers. The convergence of previously distinct technologies has blurred industry boundaries between the television,

computing and telecommunications industry bringing the threat of substitute products and services.

In section 5.2 the key regulatory influences on the structure of the UK television industry are outlined, and the resultant intensification of competitive rivalry in the industry discussed. In section 5.3, the structure of the UK television industry at the time of the research is outlined, and the varying strategic objectives of the main broadcast organisations noted. In section 5.4 the pressures for television production to be organised for efficiency and/or quality drawing on network organisational forms is discussed. In section 5.5 the key environmental issues facing television production firms are outlined drawing on the experiences of informants. Finally, the key forces for change in the television industry are summarised.

5.2 Public Service Ethos and Regulation

Broadcasting systems grow out of their environment and must be assessed from their national setting (Paulu, 1956). The history of the UK television industry is more than a business history because of the powerful role of broadcasting in shaping national sovereignty (Briggs, 1961). A chronology of some of the key events in the history of the UK television industry is provided in Appendix C.

The UK television industry was founded on a public service ethos. Television was viewed as an instrument of public good for education, information and entertainment by Lord Reith, the first Director General of the British Broadcasting Corporation (BBC) (Briggs, 1961: 7). This legacy of television as

a medium for public good, imposed enduring public service obligations on terrestrial television companies. The public service ethos was built on the following principles: geographic universality, cater to all interests and tastes, meet minority interests, concern for national identity and community, detachment from political interests of government, one broadcasting system funded by all users, competition through good programmes rather than numbers of viewers, guide-lines to liberate programme makers not to restrict them (Peacock Committee, 1986: 7).

The public service ethos has been enforced by an evolving regulatory framework that has shaped the development of the UK television industry into the 1990s. Government has the responsibility for allocation of the nation's scarce frequency resource because the frequency spectrum is finite and allocated between nations by international regulation. This physical scarcity reinforced the idea that the BBC and later the ITV companies, Channel 4 and Channel 5 were trustees of the national interest in terms of broadcasting. However, despite the necessity of a regulatory framework, one of the recurring problems for the broadcasters and production firms has been the uncertainty of the shifting regulatory framework (Annan Committee, 1977: 178).

In the early years of television, the BBC enjoyed a monopoly position. The British Broadcasting Company was established initially as a private firm in 1922 bringing together the key wireless manufacturers in the UK. Public service broadcasting was founded on the principles of national coverage, unified control and high standards (Briggs, 1961: 236-40). How to finance public service

broadcasting to ensure quality programming is a key challenge and has been considered by various ad hoc Committees of Inquiry that have made recommendations on the future of broadcasting over the years (MacDonald, 1994). The Sykes Committee (1923) felt that the licence fee was the way to achieve a guaranteed source of income for public broadcasting and this method of funding has influenced the development of the BBC into the 1990s. The Crawford Committee (1926) recommended the BBC become a public corporation under Royal Charter with the powers and responsibilities of the corporation vested in the Board of Governors.

5.2.1 From monopoly to duopoly

Regulation has shaped two of the key competitive forces (Porter, 1980) in the UK television industry, the threat of new entrants and competitive rivalry. The competitive intensity of the industry increasing as new entrants have been allowed to enter following regulatory change. The first major change in the regulatory framework was the removal of the monopoly position of the BBC. In the 1950s, the opposition to the monopoly of the BBC fell broadly into two camps: those who were against monopolies in principle from an efficient market position; and those who felt that in broadcasting monopoly was problematic due to the wider social and cultural potential of the medium to influence thoughts and ideas. The 1954 Television Act introduced competition into the regulated national television market. In 1955, the Independent Television Authority began transmission from London and commercial independent television (ITV) had arrived in the UK.

Commercial television was significant for three reasons; it ended the monopoly of the BBC, it meant that programmes were provided on a commercial basis of financial risk and that industry and commerce had the opportunity to advertise on the influential medium of television helping the development of mass markets (Pilkington Committee, 1962a: 11). Competition from ITV companies encouraged the BBC to consider more closely the demands of the viewer. Many of the early ITV programmes were popular with the mass audience. A mixture of the public service broadcasting and populism has given the UK a competitive advantage in television programmes (Davis and Levy, 1992: 455).

Full details of the ITV contractors from 1954-1993 are given in Appendices D-H. The problem of the franchise system at ITV has been the uncertainty for the companies involved and the difficulty for the regulator in anticipating future performance from the promise of the applications. The history of ITV contains a number of significant firms who have lost franchises including Thames Television and TV-am. In 1993, the ITC awarded the franchises on a competitive tender basis within the control of a quality threshold. The competitive tendering system created an uneven costs base between the federation of ITV companies.

5.2.2 Programme diversity: the publisher model

During the 1960s and 1970s, the competition for market share between ITV firms and the BBC resulted in programmes to satisfy the general audience rather than minority interests (Annan Committee, 1977). Various commentators argued that the viewer should have a schedule offering choice to meet the needs of large

number of people, not merely content to hold the viewer to the screen (Annan Committee, 1977: 94). The hope for programme diversity and new ideas in broadcasting was the proposed fourth channel. This was not to suggest that BBC and ITV had failed as public service broadcasters but that;

"production on the scale of the BBC's and ITV's operations ...demands huge resources of money, equipment and people. The deployment of resources on such a scale inevitably leads to routines and standardisation of method..We see the fourth channel as a nursery for new forms and new methods of presenting ideas, it could also open the door to a new kind of broadcast publishing." (Annan Committee, 1977: 235).

A fourth channel drawing more of its production from smaller independent production firms was seen as a way of injecting new methods and ideas in to the UK television industry. Outsourced commissioned production might also lower production costs that were rising rapidly in the inflationary 1970s. Channel Four began operation in 1982, introducing a new production/broadcast arrangement of the publisher-broadcaster into British broadcasting. Channel Four acted as a programme buyer or publisher, commissioning programmes from a range of production firms. The remit of Channel Four was to cater for minority groups and provide content not available elsewhere. The publisher model opened up the possibility of a radical change to the structure of the television industry.

5.2.3 Deregulation and global competition

From the 1970s, the other key force for deregulation has been the competitiveness issues arising from technology that enabled the possibility of more forms of distribution for television services and including global television services via satellite technology. Firms with global ambitions became concerned about national regulation that might restrict their ability to achieve the requisite scale and scope to compete worldwide.

The technology of transmission and distribution was developed to overcome the physical scarcity of broadcasting capacity. The 1960s brought innovations in the technology of television. The first satellite capable of relaying television was launched in 1962 "Telstar". Between 1966-68 experiments into pay TV and local cable services were undertaken. By the 1970s, the prospect of blurred industry boundaries due to the convergence of the communications media of telecommunications, computing and television highlighted the need for more strategic regulation of television as part of a wider communications policy (Annan Committee, 1977: 50). The 1988 Broadcasting White Paper: *Broadcasting in the '90s: Competition, Choice and Quality* aimed to lighten the regulatory control on the commercial sector in advance of the increased competition from the cable and/or satellite sector.

Under the Broadcasting Act 1990, the Independent Television Commission (ITC) became the new regulatory body for commercial television. The ITC is responsible for the licensing of commercial service providers including cable, satellite and more recently digital services. The 1990 Broadcasting Act was

designed to introduce greater competition into both television production and broadcasting. Following the success of programme commissioning by Channel Four, the 1990 Broadcasting Act introduced a requirement that all terrestrial broadcasters were to source 25 percent of new programming from the independent production sector by 1993 (MacDonald, 1994). The Act also increased competition for advertising revenue as Channel Four became a statutory corporation selling its own advertising.

Television prior to the 1980s was an industry built around national markets. The 1980s saw rapid change in the structure of broadcasting as satellite technology enabled transnational television. From the 1990s global and regional markets for broadcast channels and content emerged. This was reflected in the success of global television brands such as the music channel MTV and CNN global news, and the international sales of successful UK content such as *The Living Planet*, *Inspector Morse* and *The Teletubbies*.

The general demand forces driving the growth of the audio-visual market, from the late 1980s, according to the European Union (1994: 27-1), have been: increasing penetration of equipment; technology changes bringing in new equipment or transmission methods (satellite or cable); more hours per day dedicated by people to entertainment; the commercial dynamism of producers and the aggressive marketing of distributors. In terms of supply, the audio-visual sector has undergone and is continuing rapid restructuring. In Europe the key supply and competition factors have been: deregulation of television; technological innovation and the increasing capital intensity of the audio-visual

sector. A spate of new entrants has occurred in broadcasting across Europe with a growth in the number of TV channels. For example the number of channels in Europe grew from 40 in 1981, to over 140 by 1991 with expansion ongoing (European Union, 1994: 27-1).

It is not so easy to chart the extent of the change to date. As the European Union DGIII (1994: 21-1) notes information abounds on the audio-visual sector but consistent data is elusive. By the 1990s, the UK was a significant global producer with receipts from overseas transactions from television programmes rising from £91 million in 1984 to £370 million by 1994 (Central Statistical Office, 1995). By 1991, DGIII state that the leading 100 audio-visual companies world-wide generated global sales of 102 billion ECU of which 35 percent was from the EC, 33 percent the USA and 23 percent Japan (European Union, 1994: 27-1). The UK was in the lead market position in Europe with 10 percent of the global market share. This total audio-visual market is dominated by broadcasting with 68 percent of the market.

One of the key problems for European producers has been an inability to cost effectively increase production to sufficient volumes to meet escalating content demand. So for example, between 1985 and 1990, the hourly volume of programmes broadcast in Europe increased by 175 percent, at the same time the available European supply increased by 60 percent (European Union, 1994: 27-11). The national broadcasters facing increased competition for domestic market share are concerned with cost effective audience maximisation. The Americans have an advantage in meeting that demand because of the sheer size of the

domestic market which enables them to cover the cost of programme production in domestic sales, enabling subsequent exports to be sold at marginal prices (Pilkington Committee, 1962a: 100).

The 1980s and 1990s saw the emergence of a number of pan-European broadcasters following the expansion of cable and satellite television services. The European Union (1994: 27-13) points to a study carried out in 1992 by the CSA (Centre Supererieur de l'Audiovisuel) which grouped the pan-European broadcasters into the following categories: the "Generalists" (i.e. BBC1, France's FR3, RA1 Italy) public channels in competition with commercial stations which seek balance between public service and commercial appeal; the "Americans" (i.e. Luxembourg's RTL, M6 France, Italy's Rete4) commercial channels dependent on fictional programmes from the USA; The "Fighters" (i.e. Italy's Canale 5, the Netherland's RTL4) aggressive choice of entertainment programmes to compete with the public channels; The "Culturals" (i.e. UK's Channel 4, France's La 7) to promote a national audio-visual heritage; The "Basics" (Spain's Kanall, Denmark's TV2) financed by licence fee but with low appeal, such channels relay information and show a high proportion of repeats. This segmentation of broadcasters is an indication of the necessity for broadcasters to assess their competitive position and strategy in broader regional markets, as well as managing strategy in the national context.

Managing the balance between global scope and local responsiveness is a real challenge in the television industry because of the cultural distinctions between countries. Interestingly, even the global players like MTV and CNN, in the late

1990s, have been focusing more on localising their programme content by splitting down their channel offerings into a series of services tailored to local audiences. For example, in order gain market share MTV is developing programmes for British and German markets, to replace the region-wide offerings of MTV Europe and CNN is stepping up its Spanish service for the Latin American market (Brown, 1997).

The European Union and the national governments within Europe are keen to develop a European production industry which can compete with the US, build on a strong domestic position and remain at the forefront of technological revolution in transmission, reception and production. The strategic need for Western European nations to fill the employment gap as manufacturing is relocated to emerging markets may explain the strategy of encouraging the development of audio-visual knowledge jobs. The employment potential of the audio-visual sector was highlighted in the EC White Paper on Growth, Competitiveness and Employment (in Commission of European Community, 1994: 17):

"The audio-visual sector has a highly labour-intensive structure....The sector intrinsically provides many high-level 'greymatter' jobs, like technicians, performers, script-writers, directors and so on. It is potentially less vulnerable to competition from low labour cost markets....it is estimated that at least 1.8 million are earning their living in the EC audio-visual services....".

The EU estimates that if the growth of this sector continues four million people could be employed in audio-visuals in the longer-term. The potential strategic significance of television production for the UK with a one third market share is clear and may help to explain the Labour government's support of creative industries, like television.

5.2.4. Cross-media ownership

Another issue concerning the regulators following the rise of global competition was the competitiveness issues arising from cross-media ownership. It is important in considering cross-media relationships to distinguish between cross-media activity to develop new activities and cross-media control to monopolise editorial content. The former is an enabler for technology and competency transfer, and the realisation of transformative capacity (Garud and Nayyar, 1994), the latter is an efficient market and governance issue.

The history of television suggests that some form of cross-subsidisation between established and emerging media may actually be a pre-requisite for the capital investment necessary for developing new communications infrastructure and markets, and for the rapid development of core competence (Prahalad and Hamel, 1990). The high sunk and operational costs of television, are a recurring theme in the history of television. For example, in the early years of the BBC's television service, the television licence fee income did not meet the cost of developing and running the television service because of the small number of television owners. The BBC's television service was initially cross-subsidised by radio income. Similarly, the ITA took the view that the newspaper industry

could help ITV leverage its learning (Pilkington Committee, 1962b: 548). For example, in the 1970s, Yorkshire Television was compelled to offer some of its shares to the Yorkshire Post because it was felt that it would benefit from transferable skills that existed between the media (Annan Committee, 1977: 198). More recently, Rupert Murdoch used revenues from his newspaper activities to launch his satellite business, and Channel Four was launched on the back of the ITV federation. Cross-media subsidisation can be conceptualised as an enabling device for effective innovation in developing mediums, a pre-requisite to a single media market and strong and dynamic media businesses that can compete in global markets.

However, the debate about the ethics of cross-media ownership is a complex issue because of the wider socio-political questions it raises such as: who should control the distribution gateways of the media that influence and shape people's ideas, and ideologies? The hegemony of the media empires of Rupert Murdoch's News Corporation, and the Bertlesmann Group spark fierce debate over how best to protect the necessary channels for democracy and free speech. Regulation in television goes beyond issues of competition to the wider political potential of the medium.

5.3 The Structure of the Industry

Having demonstrated the key role of regulation and technology in raising the threat of new entrants, substitutes and competitive rivalry in the industry. Attention now turns to the structure of the UK television industry at the time of research. First the strategic groupings of the broadcasters and their relative

market share are outlined and then the key interface between production and broadcasting is examined.

5.3.1. The broadcasters

The Strategic Grouping of the programme buyers in UK television industry prior to digital services is outlined in Figure 5.1, based on plotting two key variables: penetration of homes with televisions and revenue source. Figure 5.1 highlights the advantage of the incumbent services of the BBC, ITV and Channel Four in enjoying automatic access into viewers homes despite their different sources of revenue. Figure 5.1 also highlights the threat that new commercial services pose to incumbent commercial services through competition for advertising revenue and subscriptions.

Figure 5.1 Strategic Groupings in the UK Television Industry

The BBC is funded primarily from the licence fee and is delivered free to air as a public service to all homes with a television aerial. The problem of the value of the licence fee being eroded by inflation resulted in a substantial resource disadvantage by 1985 for the BBC in comparison with ITV in terms of funds to spend on programmes (Peacock Committee, 1986: 50). Eventually, indexation of the licence fee was implemented on the basis of the RPI, however, the finance problem was not been resolved for the BBC and, in 1995, the BBC had to temporarily freeze programme commissions. The BBC Charter was renewed in 1995 and this permitted the BBC to undertake more commercial activity.

The ITV companies are commercially funded primarily from advertising revenue but have public service obligations. ITV programmes are also available 'free' to all homes with a television aerial. The challenge for ITV companies is juggling their commercial and public service obligations. The ITV franchise holders must secure market share to satisfy the needs of their customers, the advertisers, whilst meeting the quality and diversity of programmes required of it by the ITC (1996). This includes requirements of the minimum amounts of time for drama, entertainment, sport, news, factual programmes, education, religion, arts and children's programming. The ITV companies also are required to broadcast programmes of regional interest. The proportion of original programming these broadcasters must either produce or commission is also stipulated by the ITC. The ITV companies have to satisfy the viewer, not as an end in itself, but as a means to satisfying the advertisers' need to cost effectively reach consumers. The search for scale and scope advantages has lead to mergers in ITV firms

which is now dominated by three companies Carlton Communications, Granada Group and United News Media that combine the producing competencies of the traditional producer-broadcaster with the retailing prowess of the publisher-broadcaster. For example, Granada has acquired LWT and Yorkshire-Tyne Tees; Carlton has merged with Central; United News owns the Anglia, Meridian and HTV television franchises (Price, 1997).

Channel 4 is also provided free to air to viewers and is financed by advertising income. Its remit is to provide programming not found elsewhere and in particular minority programming. It has also been responsible for successful international films such as *Four Weddings and a Funeral* and *Trainspotting*. A further terrestrial service, Channel 5, was launched in March 1997, its strategy has been to extract maximum value by commissioning long runs of shows at low prices from core suppliers, targeted at 18 to 49 year olds. Although provided free to viewers problems with reach and picture quality have limited the penetration of Channel 5.

The final key type of television service offered at the time of the research was provided by cable and satellite television services who are more loosely regulated. The providers must adhere to the ITC code on programmes for consumer protection, but they have no prescribed obligation on programme content, whether they offer a general or thematic service or technical quality. The cable and satellite services have multiple sources of finance (subscription, advertising/sponsorship and pay per view). The cable and satellite services thus enjoy greater commercial freedom than the terrestrial commercial channels. The

critical mass for survival for subscription services can only be achieved by offering services consumers are willing to pay for. For example, BSkyB has been successful with its specialist sports and movie channels. At the time of the research there was in excess of 50 cable and satellite services in the UK (Csaky, 1997: 14). The cable/satellite firms package a range of telephony and television services for subscribers to differentiate their product.

Although, digital television was not operational at the time of the research, many of the efficiency pressures, in the industry, were in anticipation of the further fragmentation of viewers with competition from an anticipated 200 plus television services in the future. The two key advantages of digital television over analogue are that it offers better picture quality and it is more efficient in that signals can be compressed enabling more channels to be transmitted on the same frequency. Digital television can be delivered by terrestrial, cable or satellite methods.

Although the BBC, the ITV companies and more recently the cable, satellite and digital services have different sources of income, the imperative to attract audiences for; sustainability in the case of the BBC, and viability in the commercial sector has encouraged a greater concern with satisfying viewers' demands. The key strategic asset for the industry is efficient access to quality programmes as defined by different genres that meet the programming strategy of the channel.

There has been a trend away from family viewing towards individual viewing and multiple set ownership in households. An increase in the number of channels in the 1980s and 1990s has increased the number of channels viewed in a household and the hours of television viewed, but reduced the market share for incumbent channels. Television viewing is exclusive because it is only possible to view one channel at a time, therefore, there is a saturation point whereby viewers can only be increased by gaining market share. The television households stood at 23.9 million in 1997, out of a total of 24 million, with cable penetration at 10 percent and satellite penetration at 18 percent of television households by 1997 (BFI, 1998). It is too early to assess the demand for emerging digital services. The development of cable, satellite and Channel 5 has been at the expense of audience share for BBC1 and ITV (BFI, 1998). The audience share, at the time of the research for the different channels are given in Figure 5.2. Declining market share prompted ITV to undertake a full review of the type of programmes it broadcast in 1997 (Ahmed, 1997).

Audience fragmentation means that programme budgets are challenged. For the BBC questions are being raised about the legitimacy of a public service broadcaster funded by a compulsory licence fee that more people are switching away from. For ITV, advertisers are concerned at the fragmentation of market share given their cost effective need to reach mass audiences. For subscription service providers maintaining subscribers is a key challenge. It is remains unclear how much further audience fragmentation will go as digital services are introduced. However, what is clear is that it is the programmes that will differentiate one service from the next.

Figure 5.2 Average TV Audience Share (%) of TV Channels in 1997

5.3.2 The centrality of the programmes

Programmes are the raison d'etre of the medium. The key issue for the UK television industry has always been the cost effective production of quality programmes. As the Beveridge Committee reported:

"by its programmes ...the [broadcaster] stands or falls. The study of how programmes are made and produced is thus one of the most important practical questions of enquiry" (Beveridge Committee, 1951: 53).

For television to become the mass medium required programmes that people wanted to watch in terms of technical and editorial content. The UK enjoyed an

early knowledge advantage in both broadcast and production techniques. Television was first demonstrated by John L. Baird in 1926 (Briggs 1961: 16). The BBC opened its first television studio in 1932. The UK had a lead in television technology with the world's first high definition 405-line service in 1936, based on a system developed by a joint venture between EMI and Marconi (Beveridge Committee, 1951: 11). By 1937, portable production equipment was developed which enabled production to move outside the confines of the studio, substantially increasing the versatility of the medium.

Television is an immaterial and novel commodity, the value to the viewer being the message or symbolic meaning in the programmes (Collins, Garnham and Locksley, 1988: 7). History suggests that only when technology enhances the viewing experience, as in the case of colour television, do people upgrade their hardware. It was the shared experience of watching the state occasion of the Coronation in 1937, that created a latent mass demand for television. The early expansion of television ownership was constrained by; the limited hours of transmission and the restricted geographic scope of broadcasting from London, the high cost of a set, and a fear of obsolescence, the latter two being recurring problems for the introduction of new technologies. To stimulate latent demand, the government responded by setting the standards for three years and the manufacturers by reducing the price of television sets.

The development of telerecording facilities meant that programmes could move beyond mass distributed theatre because programmes could be pre-recorded and re-shown. Telerecording both increased the versatility of the medium and altered the cost basis of programme making. The pre-conditions were in place for the development of diverse programme skills and production techniques. Telerecording enabled the distinction between 'stock' programmes (fiction, cartoons, films) which can be broadcast repeatedly, are the basis of programme catalogues and the backbone of schedules and 'flow' programmes (news, sports events) which are important at the time but have little repeat value. In thinking about programme strategy stocks provide ongoing revenue potential - the value behind a programme library. However, CNN and Sky Sports channels have capitalised on the immediacy and excitement of flow programmes showing the value of stocks and flows in programme strategy.

5.3.3 Different modes of organising and levels of regulation

Given the centrality of the programmes in the television industry, the value chain (Porter, 1985) interrelationship between the broadcast service and content production is fundamental. Programme makers must sell programmes to realise the value of their ideas and broadcasters are reliant upon efficiently produced and innovative content supply to enable them to compile an appealing schedule of programmes. The history of the television industry has seen a proliferation in the organisational arrangements for managing the broadcasting/production interface combined with varying levels of regulation for different programme buyers as outlined in Table 5.3 creating quite distinct strategic priorities for different broadcasters.

The mode of organisation is defined as the arrangement for managing the interface of the production and broadcast value chains. Tunstall (1993) identifies

three ways in which this relationship can be managed: vertical integration, publisher and packager. This classification has been incorporated into Table 5.3. The *producer* is the vertically integrated producer-broadcaster that manages both the production and broadcasting activities in house. This was the way the BBC and ITV companies operated for many years. Some media analysts suggest that TV signal distribution could turn into a low margin commodity industry with the best returns higher up the value chain in content production, however, to wield power content providers need distribution (Kluth, 1997). Consequently, some content providers are seeking to integrate forward along the value chain into broadcasting. For example, Disney has acquired the ABC TV network in the US for distribution.

The *publisher* mode is based on a commissioning relationship between the broadcaster and the programme supplier. This arrangement was legislated in, for terrestrial broadcasters, for at least 25 percent of new programming, from 1993 and provides external flexibility. The *packager* mode is based on a market relationship between the production and broadcast functions that involves the transfer of rights. For example, Channel 4 buying the rights to show *ER* in the UK. In practice, broadcasters may use all three mode of organisation. This way of securing product provides market choice of finished content.

A further dimension is necessary to understand the organisation of the UK television industry and that is the differing levels of regulation faced by the broadcasters. The level of regulation varies between the players on a number of levels including: programming obligations - what can and must be delivered in

terms of genres, the available sources of income and the ability to exploit market opportunities.

Table 5.3 Modes of organising and levels of regulation facing broadcasters in UK television

			Level of Regulation	
		High	Medium	Low
	Producer	Public Producer- Broadcaster (e.g. BBC in provison of domestic services)	Commercial Producer- Broadcaster (e.g.ITV company franchise holders)	Commodity Producer- Broadcaster (e.g. BBC World Service)
Category of Organisation	Publisher	Public Service Publisher (e.g. BBC)	Commercial Service Publisher (e.g. ITV companies, Channel 4 &5)	Commodity Publisher (e.g. cable & satellite channels that commission)
		Public Service Packager (e.g. BBC purchasing films from market place)	Commercial Service Packager (e.g. Channel 4 imports US comedy)	Commodity Packager (e.g. cable & satellite channels buy content)

Different levels of regulation result in different levels of commercial freedom (Office of Science and Technology, 1995). For example, the BBC in its domestic role as a public service broadcaster is financially constrained by the licence fee, committed to offering certain types of programmes and providing a service available to all. Its objective is quality and value for money as defined by editorial policy. Whereas the commodity broadcaster lacks the public service obligation, can focus on high margin services to specific viewers and draw on a range of income streams.

Commercial freedom increases the range of strategic options for programming strategy. Programming strategy might be to attract a mass audience (e.g. ITV), create a differentiated market (e.g. Sky Sport channel) or tap an unmet niche through narrowcast programming on a local, national or regional basis (e.g. MTV music programmes for the youth market). Different levels of regulation impose different levels of commercial risk and regulatory constraint on broadcasters. The different contexts faced by the broadcasters will change as regulation changes but at any given time this range of regulatory constraint will impact on programme strategy and the way programmes are sourced. The structure of the UK television industry builds from the inter-relationships between the programme makers and the programme buyers. It is the crucial strategic interface between production and broadcasting and the different commercial contexts faced by the BBC, ITV and cable and satellite in the 1990s, which offers an explanation for the concentration of distribution, the reintegration of production and the proliferation of independent production paradoxically co-existing in the 1990s.

5.4 Efficient and Effective Programme Production

The largest single expenditure for the broadcasters is on programmes (production, commissioning and acquisition) with this expenditure representing between 55 and 42 percent of income for the largest commercial broadcasters (ITC, 1996). One of the key cost drivers for efficient production has been the need of the broadcasters to fill more hours of programming with stretched budgets as television services have become twenty-four hours a day and more channels compete for share and income.

Given the centrality of the programmes to successful television services firms need both efficiency and effectiveness from their production suppliers (whether internally sourced, via commission or acquired from the market). Efficiency is based on cost control and the optimum use of resources (Carnall, 1990). Innovations in technology and facilities utilisation have been crucial to efficient production and raised productivity throughout the history of television. For example, innovations in production equipment such as cameras and sound equipment have made production equipment smaller and easier to use and more reliable in that it requires less maintenance. In the early 1970s, the BBC lost half a day a week in maintenance and produced 30 minutes of output per studio per day on average (Geddes, 1972: 57). Innovations in production technology enable smaller production crews and volume production techniques.

A drive to minimise costs, waste and maximise resource utilisation has been attributed to the greater use of out-sourced resources for in-house productions whether this be buying in labour, facilities (such as equipment, studio facilities, or editing services) or contract services (such as location catering or set building). Alternatively, the broadcaster may act as a publisher and enter into a commissioning relationship with an independent production firm to develop a production. So producer-broadcasters are generating revenues by charging out their facilities for use by third parties. New businesses have also been formed by: independent production firms that can be commissioned to make a production, facilities houses to provide a range of production and post production facilities, and other service providers.

The need for efficiency has also prompted greater emphasis on management and financial information within producer-broadcasters. Quantitative comparisons between different parts of the television industry are problematic not just because of the paucity of publicly available data, but also because different parts of the industry face different public service obligations and different levels of commercial risk as has been noted together with different mechanisms of finance (Collins, Garnham and Locksley, 1988: 23). For example, comparisons between the production costs of the BBC and ITV are problematic because the ITV companies face commercial risk and the costs of a network structure. The idiosyncratic nature of content, especially when taken across a range of genres (e.g. drama, comedy, factual programmes, children's programmes) led to the idea that good broadcasting could be recognised by the achievements of the programmes (Pilkington Committee, 1962a: 13). However, in recent years greater emphasis has been placed on performance indicators. For example, in 1982, Peat Marwick was commissioned by the BBC to undertake a value for money review. The consultants recommended the use of a number of performance indicators to measure efficiency in television production, the details of which are given in Appendix I. Such performance indicators can identify trends in the quantity of inputs with outputs, but take no account of the quality of the output. Quality is important if programmes are to attract viewers. Effectiveness issues such as market share, product/service quality and organisational flexibility are important here (Carnall, 1990). Organisational effectiveness impacts on technical quality, reliability, artistic flair and the matching to editorial objectives which are central factors in output performance

in television (Starks, 1993: 170). The organisation of production is a key issue in the television industry.

5.4.1 The organisation of production via flexible networks

The need for efficiency, quality and innovation at the level of the firm has resulted in organisational change to achieve more flexible operating methods in a range of industries (Harrigan 1985; Ohmae, 1989). The British tradition of programme excellence was founded on the calibre of the production team and the way the industry managed the production-broadcast interface.

"Good broadcasting depends on talent-the talents of the men and women who make the programmes and for which there is no substitute. But it also depends in part on the way broadcasting is organised; and those who point out that the output of individuals is to some extent conditioned by the structure of the industry are not wrong" (Annan Committee, 1977: 290)

Having outlined the structure of the industry we now turn our attention to how this drive for efficiency and innovation has shaped the organisation of television production at the point of production. The relationship between the talent of the individual and the organisation of production is becoming axiomatic in more and more industries as knowledge becomes a key strategic asset (Badaracco, 1991). British programmes have a reputation as a quality product with export potential and in part that quality has been derived from the British way of organising production.

What differentiates television from other industries is that; "it is producing thousands of one off jobs, each of them unique" (Annan Committee, 1977: 101). Idiosyncratic programmes based on the collaborative skills of a range of individual specialists is the British tradition.

"It is one of the achievements of British broadcasting that programmes are regarded as hand-made products produced by individual craftsmen and not as articles of mass production" (Annan Committee, 1977: 28).

The method of production in UK television has always been based on flexible networks at the point of production bringing together a dynamic team of diverse specialists. The UK television industry has always prided itself on creativity and innovation. As TWW Ltd said in their evidence to the Pilkington Committee (1962a: 18):

"If people say that they know what they like they always mean they like what they know; and our job is to familiarise people with something they have not had before."

The broadcasters' claim to be innovation driven, rather than purely customer-led, can be paralleled to the success of firms like Sony and IKEA in redefining customer demands. The work of Hamel and Prahalad (1994) stresses the competitive advantage that can be obtained by firms that can envisage and deliver to the market what the customer may not even be able to anticipate. The issue is then how best to organise for efficiency and innovation.

The use of dynamic teams was traditionally within a large vertically integrated producer-broadcaster. However, at the BBC and ITV companies levels of hierarchy eventually created difficulties and delays in realising programme proposals. The Beveridge Committee in 1951 recommended that the BBC examine its organisation to address the production issues created by its size and complexity (Beveridge Committee, 1951: 195). More effective lines of communication, fewer "chieftains" and clearer decision making processes were seen as pre-requisites to continued creative production in large broadcast organisations (Annan Committee, 1977: 124). Burns (1977) refers to the problem of control with programmes being made to enhance professional esteem rather than focusing on the interests of the viewer.

Competition between BBC and ITV introduced the necessity to maintain the creativity of the people who make the programmes, whilst introducing more ways of organising for functional and numeric flexibility. One of the key organisational issues facing television is how to achieve cost effective coordination. The production process involves the logistical problem of bringing together a diverse range of people with a diverse range of skills. Some of the key members of a production team are outlined in Appendix J, although this will vary from genre to genre.

In the UK television industry, production structures have traditionally been based upon technical, creative and facilities experts interacting at the project level (Tunstall, 1993). The producer acts as the manager of that process and

requires a broad range of skills including; the ability to enthuse others, specialist knowledge of the genre, a basic understanding of the technology and increasingly the management skills to manage the financial constraints of the "cumbersome and expensive" medium (Tunstall, 1993: 6).

Production flexibility within large vertically integrated producer-broadcaster organisations was achieved by internal reconfigurations of personnel, although some external parties, mainly in the form of creative staff, such as actors and writers, were introduced on an ad hoc basis. However, the ability of firms to maintain most of the necessary production skills in-house became problematic due to: the labour intensity of the industry and the unionisation of labour and the competition for labour initially between the BBC and ITV which created wage inflation; the capital required to invest in equipment and facilities, and the advent of low cost production from international sources. The limitations of vertical integration for developing the required diversity of expertise essential to producing innovative programmes was raised as far back as 1951 by the Beveridge Committee who urged that experts outside the BBC also be consulted in developing programmes (Beveridge Committee, 1951: 196). How to cost effectively secure the most creative people and what organisational forms enabled the creative fission necessary for craft work are ongoing strategic issues.

Whether production is undertaken in-house by producer-broadcasters or by a commissioning relationship the flexible television production network is the dominant way of organising for a given television production in the 1990s as

illustrated in Figure 5.4. This follows the need of production firms for numeric, functional and creative flexibility.

Flexible production networks of the 1990s rely on more outsourced services as previously discussed and a greater proportion of mobile workers. The proportion of the production, technical and post-production workforce employed by the broadcasters fell from 47 percent in 1989 to 32 percent in 1994, whilst the proportion of the workforce employed by independent firms rose from 13 to 14 percent in that period (Skillset, 1996c). The proportion of the total production workforce that are freelance increased from 39% in 1989 to 60% by 1996 (Skillset, 1996c).

Figure 5.4: A flexible television production network

The logistical issues of pulling together up to 125 services for a given production has always been a problem (Tunstall, 1993). Today, more of these services are outside the formal authority of one organisation as independent production and greater outsourcing, following the publisher ethos, have challenged the whole logic of formal firm boundaries in television production. Production firms are more reliant on external actors in their production teams.

The central role of the producer in managing the production process is a recurring theme from the 1950s to today. Tunstall (1993) in his study of producers described the UK system of production as producer led. The British tradition in broadcasting has always been that the producer is the best judge of what resources are required, where they can be best be obtained and how to make the most effective use of them. This was acknowledged in BBC in 1993, when it announced its Producer Choice initiative to encourage: internal and external contracting for services, streamline decision making by placing funding with programme makers to purchase their production resources internally or externally and optimise the use of existing production facilities. The authority mechanism of hierarchy being replaced with legal contract relationships with internal and external production partners (Starks, 1993). The strategic objective of the change was to improve efficiency and productivity, but to retain the editorial quality, production and craft skills that lie behind the BBC's international reputation. For the producer within the BBC greater emphasis on business skills of pricing, negotiating and purchasing was required.

The move to greater use of flexible networks implies a key management role for producers or executive producers as they provide a key broker role with programme buyers and co-ordinate the diverse range of workers required to deliver content to time, budget and quality. Many of the informants in this study had first hand experience of this vital network role.

5.5 The Key Environmental Issues for Production Firms

Having considered the history of the television industry and its current structure, secondary industry data and the responses of informants are used to highlight the key environmental issues of: uncertainty, competition, technology, regulation and working practices facing production firms at the time of the study.

The enduring tension in the management of commercial television is that between the commercial imperative of running a business and the wider cultural role of broadcasting. As a senior television executive states:

"...the historical growth of broadcasting has been a continuous conflict between the commercial realities of making a profit, showing a return for the investors, but at the same time trying to hang on to the cultural values..."

In the UK, the ethos of public service broadcasting as epitomised by the BBC, ITV and C4, combined with commercial competition for viewers has produced a diversity of television programmes that many informants argued would have

been unlikely to emerge from a purely commercial market. However, as technology has expanded the methods of distribution, the government is losing its ability to regulate the industry. New forces of competition are creating new challenges as all players become more commercial. The informants painted a picture of an industry experiencing a chaotic, transitional period of change characterised by high levels of uncertainty as described by one informant:

"I think the most obvious change in the industry is its uncertainty, its divergence and its uncertainty and no one really knows where it is going. We are all just sort of clinging onto the raft here, and everybody is going to step back in and continue down the rapids."

5.5.1 Uncertainty

Uncertainty was reported by informants concerning a number of issues including the impact of digital television and other forms of multimedia on competition; the uncertainty of the commissioning process; the future modus operandi of the industry and what viewers in the future would seek from television.

Where the boundaries of the television industry will be in the future is unclear. Between 1987 and 1994, the 12 leading audio-visual players in the world, based on turnover, changed from a list dominated by 9 terrestrial broadcasters (including the American networks ABC, NBC, and CBS and the BBC) to one dominated by broader multimedia groups such as Sony, Time Warner, Matsushita, Walt Disney/ABC (European Audiovisual Observatory, 1996: 53). The prospect of industry convergence raises many questions. Will competition

still be between television companies, or will television service providers compete with other newer media services such as CD-ROM, Digital Video Disc and the Internet? Is television actually part of a broader leisure market where competition is for people's precious spare time? The knowledge and capabilities required by programme companies longer-term will depend on the basis of competition which remains unclear.

The uncertainty of the commissioning process and the challenges of managing the broadcaster/producer relationship was a key theme in the interviews, both for production companies trying to develop their businesses, and for broadcasters seeking reliable content. The uncertainty of the commissioning process is a key issue for programme sellers who face a relatively small number of powerful buyers. As one independent producer explained talking about the programme buyers:

"...these guys dump all the consequences of their decisions on to us. They off-lay their risk on to us. We do their development for them. They abuse us continually. We are like a harem really. I mean in a really crude sense. You know if somebody says will you spend a night in bed with them, you know, and you don't know when they want to screw you again and it might be six days later, and it might be six years later. You have no control."

For the commissioning editor, the key uncertainty is about the ability of the pitching firm to realise an idea.

The uncertainty of commissioning process fuels financial uncertainty for production firms. This is a bigger problem for medium sized production firms because their fixed costs are higher than those of small firms. Bread and butter series that last several years are an important source of reliable cash-flow for successful production companies. However, even firms that have developed successful shows, that have run for several series, have to accept the uncertainty of not knowing if a programme will be re-commissioned until the eleventh hour. Informants expressed concern that even when re-commissioning confirmation arrives, it is often received at very short notice and only just in advance of when the programme is required, the result being the programme supplier is put under very tight deadlines.

Programme sellers secure commissions by a number of methods. These include open tenders, output deals (where the programme buyer agrees to take a certain volume of future programmes), speculative approach (based on an unsolicited pitch of an idea) or through relational knowledge to provide schedule solutions. One of the problems for programme makers is that they have to develop programme ideas to certain a stage so that the ideas are tangible to a commissioning editor. Ideas development is a costly exercise. It has been estimated that independent production firms spend £8.45 million each year on non-recoverable development costs (Price Waterhouse/PACT, 1995: 26).

The problem of contract uncertainty and commission dependence has made investing in the development of people for advancement impossible for many

programme suppliers. Even if a programme idea is commissioned, with production fees of 10-15% of budget, cash-flow is tight and so programme makers have to keep overheads as low as possible. Such firms cannot afford to retain talent in-house on an employee basis, instead they use networks of external relationships to tap into the best talent available. A survey of independent producers highlighted that production firms of all sizes are reliant on non-core contractual staff for the majority of their human resource needs (Price Waterhouse/PACT, 1995).

Uncertainty is also developing over the <u>modus operandi</u> of the industry. Deregulation combined with moves to an occupational labour market have resulted in a two-tier employment system. At one level are those employed within the large firms receiving in-house training. However, there is a growing proportion of external freelance professionals contractually engaged on a regular or production by production basis.

Several informants argued that the common currency of job grades and job titles is breaking down. For example, people are sometimes given inflated job titles that do not reflect their experience, but do provide some compensation for poor financial rewards. This has led to a call by some in the industry for a common currency of skills, talent and competence assessment. One solution is to use qualifications as a mark of competence. Industry National Vocational Qualifications (NVQs) are being developed by Skillset (the industry's training organisation for broadcast, film and video) in partnership with a range of training providers as the framework for employment based training and

recruitment. NVQs are recognised qualifications of proven competence and thus may facilitate mobility of labour. The aim being to offer NVQs across every main occupation in the industry and within each occupation at different levels (Skillset, 1996). For example, at the level of Assistant, Operational and Senior for technical, production and design roles. Skillset has also established a freelance training fund to provide access to subsidised places on courses for freelances in terms of skills updating, retraining and new entrants' training.

Skillset promotes the value of training, pointing to the BBC's investment of 2.5% of payroll in training as industry best practice. Concerns exist about how to maintain levels of training in the industry given cost pressures. The television industry in 1994/5 spent only 0.4 % of turnover on training investment in off-the-job training of staff and freelances, less than the mining industry that was in terminal decline at that time (Skillset, 1996b). The ITC also monitors training provision for core workers and freelance staff by ITV franchise holders, Channels 4 and 5 on an annual basis. Some informants wary of the cost and bureaucracy of NVQs see an individual's list of television credits as the most reliable indication of an individual's abilities and knowledge in an environment where job titles are increasingly ambiguous.

Finally, there is the uncertainty about what viewers will seek from programming as television moves multi-channel. Historically, television has fulfilled what one respondent described as the "Parish Pump Syndrome". This captures the shared viewing experience. Traditionally, broadcast television watched by millions provided the 'did you see?' factor; the basis for conversations down the pub, at

school or at work and even some suggest the basis of social cohesion. But is the parish pump still valued in a world where niche 'narrowcasting' services are possible to meet customised demands? The demand for narrowcasting appears to be driven by children who are growing up on their own themed channels. One television executive suggested that in the future television channels will be less based on maximising viewing figures and supporting 24 hour-a-day schedules and more akin to 'theatres' which are busy when something good is showing and dark when there is nothing to see.

5.5.2 Competition

The increasing competition in television broadcasting is the second key factor in the changing context of television production. The 25 percent quota for independent production, the loss in share by existing channels to cable and satellite services, the launch of the new "free" terrestrial service, Channel 5 and the prospect of a new generation of digital television services at the time of the interviews had heightened competition driving out operational slack. A senior manager from a producer-broadcaster highlighted the faster pace of work.

"Everything is just much faster. Life is just much tougher. You just don't have the options that you had. No one goes out for long lunches any more and you work very hard, very relentlessly."

The proliferation of channels has increased competitive rivalry and increased the bargaining power of buyers (advertisers and viewers who have increased choice) (Datamonitor, 1992: 103). In the days of the BBC and ITV duopoly companies

were less concerned with what individual programmes cost. Fragmentation has reduced the market share of BBC and ITV creating a focus on cost cutting, attacks on overheads and pressure for rationalisations.

Restructuring in the producer-broadcasters involved shedding people. One impact of these changes is that many of the highly experienced workers who were over 55 left the producer-broadcasters (Skillset, 1996c). The loss of mature, knowledgeable workers raises issues of how the industry achieves knowledge transfer and continuity to the next generation of personnel.

The search for scale and scope advantages has led to a spate of mergers and alliances. In trying to seize the digital market, competitors have come together. For example, Carlton and Granada have joined together to create ONDigital a terrestrial digital service. The BBC, trying to capitalise on the global potential of its content, has forged partnerships with Flextech for cable services in the UK, and the factual television network Discovery for international pay-TV channels on cable, satellite and digital. These joint ventures will significantly supplement the licence fee income of the BBC in the longer term and secure a better return on its programme productions in overseas markets (Horsman, 1998). Broadcasters and production firms are focusing more on marketing and developing their brand.

It has been seen that the <u>modus operandi</u> of television has altered with broadcasting becoming split from production in large television companies. The advantage of such separation, it is claimed, is that the broadcast function can

look to both in-house and external production for content and source where the price/quality mix is most competitive. This enables both numeric and functional flexibility. It also allows *ideas flexibility* because it is possible to lock into a wider range of ideas from external independent production talent enabling a search for creativity beyond the confines of the firm. This has given rise to more independent production firms. Independent production is an embryonic sector that raises interesting growth issues that are explored in subsequent chapters.

Competition amongst independents is high if one takes the total number of independent firms. PACT estimates this at 1,000 firms (PACT, 1996). However, a proportion of these companies are a platform from which an individual programme maker generates a free-lance career. Indeed, John Harvey Jones having reviewed the organisations of three independent television producers queried whether they were running a business or enjoying a lifestyle (Price Waterhouse/PACT, 1995: 3). A survey of UK independent production companies by Price Waterhouse/PACT (1995: 5) categorised respondents by producer size and found that: 61% were small (turnover £0-700,000 p.a.), 20% were medium (turnover between £700,000-1.3million p.a.) and just 19% of respondents had large turnovers (in excess of £1.3 million p.a.). The main source of income reported by respondents in the Price Waterhouse/Pact (1995) survey was from terrestrial broadcasters (BBC, 32.6%; ITV, 19.8%; C4, 15.1%), foreign TV (7.9%) and corporate video (4.1%). Smaller independents reported higher levels of profitability in percentage terms against turnover.

Informants for this research reported that in practice there are a limited number of companies, estimated at between 50 and 20 that are developing and growing their businesses as true competitive, commercial ventures. Even Channel 4, had focused 50 percent of its commission from 14 firms by 1985, highlighting the importance of delivering reliable content to programme buyers (Davis, 1991: 75). Successful production companies often began from competence in one genre and early success was based on the knowledge of the partners. For independents seeking to differentiate themselves having a clear knowledge base is a key issue. Independents with a reputation and a clear position find it easier to gain an audience from programme buyers for their ideas.

For independents, one of the real challenges of developing a business is the ability to build a management team which learns and develops its own expertise as the firm grows. A mix of creative and business skills at the top appears key to managing ideas work. The firms that are thriving have a reputation for reliability (delivering on time, budget, quality), and for delivering high levels of production value (creativity, innovation). To do this requires a belief in the power of your ideas to make the leap of faith to invest in the future of the firm and the development of ideas. This team often took the form of a founding partnership. One entrepreneurial manager expressed this problem:

"My competition is not other programmes, or other production companies or other broadcasters, my competitors are fear."

Independent production companies are looking at a range of organisational arrangements for growth. Merger and acquisitions are happening between independent production firms because too many firms are chasing too few commissions. Some independents are coming together in groups to merge their capabilities, thus enabling them to offer a greater diversity of production genres. Highly successful independents are themselves targets for takeover by larger multimedia groups. However, some firms having struggled hard for independence are happier to grow organically building on core competencies or to forge connections with related software providers such as firms that are already active in the related media of publishing, video or CD ROM.

5.5.3. Technology

Technology is another key driver for change. Changes in production and transmission technology enable new production arrangements and the proliferation of broadcast capacity. Three limitations of the television medium have been overcome to varying degrees by technology; transience which has been overcome by the video recorder; one-way communication which can be overcome by interactive services which offer the potential of dialogue and new forms of programmes and marketing, and the scarcity of frequencies which limit the number of channels have been overcome by broad band cable, satellite and digital technology. From a learning organisation perspective, technology changes the relevant knowledge for firms and requires people to learn new skills and to relinquish old ones. Communication technology enables production companies that can be managed across geographic borders. New production technology

enables both efficiency and a wider range of creative possibilities than ever before.

New production technology enables smaller crews for efficiency. However, sometimes production quality may benefit from the knowledge of several people feeding into the production process. A manager from a producer-broadcaster expressed the benefits of several brains:

"...technology may simply make it easier for certain people to do
two tasks very well and the one man crew is an example of that.

Directing and vision mixing sometimes you don't need [two people].

Sometimes you just need two brains."

Thanks to the limitless creative possibilities of new technology, production concepts are today only limited by the ideas of the production and post-production teams. This makes cost effective ideas generation and realisation the essence of television production. The programme suppliers have to sell their ideas and their capacity to deliver those ideas to time and to budget.

Technology also raises issues about what television will actually mean in the future. Industry convergence, we are told, will blur the distinction between TV programme services, shopping, banking and so on. Interactive TV offers a host of new applications for the customer from customer services (such as banking and home shopping) to entertainment (such as pay-per view, video-on-demand, games), information searching (including programme guides, electronic

catalogues, local information and Internet access) to teleworking and distance learning (Jacobs and Dransfield, 1998) Several informants have stressed that many of these changes will make significant impacts to the industry in the long-term. Indeed, a powerful group of players in BSkyB, BT, Midland Bank and Matsushita formed a consortium in July 1997 - British Interactive Broadcasting to develop interactive services like home shopping and banking. However, the passive leisure activity of television viewing is very different to the more interactive social activity of the Internet. A majority of informants argued that the two types of activity can happily co-exist. Radio, cinema and books survived the advent of television. However, exciting diversification possibilities are likely to exist for those that can apply their competencies and ideas across different media.

5.5.4 Regulation

Regulation, it has been shown, is a powerful driver for change in the television industry. Informants were asked what could be done to improve the regulation of the industry. The independent production companies sought a more protectionist policy on regulation to support home grown content. However, one informant felt that lack of any real competition was a problem amongst the more successful independents. This can be likened to Porter's (1990) theory on the competitive advantage of nations in that his research found that intense domestic competition was conducive to the development of stronger firms. There was some concern about the level of programme imports. One informant advocated regulation for 75 percent of the content shown on UK television to be domestically produced. The independent production quota was supported by many independent

producers and some felt it should be raised, perhaps to as high as 40 percent. There was some concern about the levels of cross-media power and some firms wanted to see a further curbing of cross-media ownership. The independent production companies were generally supportive of the BBC's public service role built on a guaranteed licence fee and the role of Channel 4 as a source of imaginative and innovative programmes to meet market failure. Some were concerned about the exploitation of individuals and felt that there should be regulation to prevent people being paid little or nothing on productions. More help was also sought to enable programme sellers to retain the value of key intellectual property such as rights and formats associated with programmes.

For the larger television companies, reducing the barriers to global competition was seen as crucial and deregulation as a measure towards that. So for example, further cross media ownership freedoms was seen as key to enable such firms to achieve the scale and scope necessary to compete in a global market. Another concern was the existing level of regulation on the content of programmes which some felt to be too high and better left to the viewer to decide by market forces.

A real challenge for the regulators appears to be how to marry up the wider cultural role of broadcasting with needs of small content providers for production opportunities, and the demands for greater freedoms by those programme buyers seeking global reach.

5.5.5 Working practices

The changes in the competitive environment in the television industry have also altered working practices. A combination of competition, slackening of union power, the independent production quota and changes in production technology have resulted in a reduction in core staff in the television companies (ITC, 1996). The need for functional and numeric flexibility has led to more flexible working patterns and in particular greater use of multi-skilling where people do a number of different jobs to a competent standard and greater reliance on freelance workers. This has resulted in last minute crewing, smaller crews and the shake-out of many assistant grades from the industry.

Skillset undertook a survey of freelance workers for 1993/4 and found that the distribution of the workforce had changed. Of an estimated 28,000 working in production/technical/post-production 13,000 were employed as permanent staff or on contracts of more than one year and 15,000 worked on freelance or short contracts of less than one year by 1994. The freelance workforce is highly educated with three-quarters having a degree or diploma (Skillset, 1996c). The areas where the need for training was felt by respondents to be highest was for skills updating to keep up with new technology and multi-skilling. Skillset point to the training challenge facing the industry of maintaining skill levels across the workforce.

Some informants felt that industry restructuring had paid little attention to the long-term core skills and competence requirements of the industry. However, it would be wrong to harp back to the past and portray it as a golden age. Several

informants pointed to the rigidity of the past, where the union ticket acted as the passport to practice, and people worked under a closed shop regime in very tightly defined jobs. In the 1990s, those who multi-skill have the potential job enrichment of a broader range of tasks. Multi-skilling has removed what one informant described as "the mystique of the dark art of television making" and eroded the creative/technocrats divide in television, thus enabling broader jobs that combine both types of skills. Individuals now expect to work for more firms in their career and even for several companies simultaneously.

Some concern was expressed about the exploitation of young people in television production. A former senior television executive summed up the problem:

"...production costs are being driven down. Independent producers are taking whatever labour they can get and they will get kids working for virtually nothing. You know, it is like the sweat shops really and that is precisely the climate that produced the power of the trade unions back in the 50s and 60s and we are re-creating those conditions and it is horrible. It is horrible. People will work for nothing, virtually nothing."

Some individuals from the industry had come together to try to develop a voluntary Code of Conduct to discourage such exploitation.

As some employers become more short-term in what they commit to people so the worker's perspective changes too. Some respondents expressed concern that people give less to a particular firm in a flexible labour market.

"The programme maker uses people and people use the programme maker because it is so freelance orientated that they work hard for 8 weeks and then it would be: Thank you very much. You have done a great job. Goodbye. So that they develop the same attitude which is - I am going there because it is a better opportunity actually. Why should I stay here?"

The breach of the implicit employment contract between firms and workers can work to the knowledgeable worker's advantage. The most competent and talented people seek opportunities to develop their portfolio of experience and are much in demand. They do not have company allegiance. Their own company is their work. The best firms can do is to try and lure such talent with the promise of challenging projects that offer professional kudos. Less experienced people want to develop their list of credits on projects that work. Several informants suggested that it was easier to take risks with people when they were internally developed, but as more people are freelance they are excluded from such development. It was suggested by one informant, that the BBC had come full circle on flexible labour practices, with a move back, since the mid 1990s, to greater use of longer two year contracts for key talent that provides some short-term security. Skillset (1996c) also pointed to some evidence of this trend. It was suggested by one informant that such continuity of employment may deliver a

competitive advantage because it enables talented production people to focus exclusively on the immediate production, rather than having their creative energies dissipated by the chase for the next contract.

Flexible production based on transient networks can be positive at the individual level if you are a self starter. However such fluid contexts do raise issues of effective boundary spanning and how to preserve organisational memory. One manager described it thus:

"It means that organisations are often more chaotic and less reliable than they used to be - because the downside was in the past you got stuck in the same job for about 7 years, but my God you knew how to do it well. Whereas now, you know you have got people working freelance as this, that and the other and you ring someone up and it will be a different person from last week and they will give you different answers than the person from the week before and the week after it will be a different person all over again..."

Preserving organisational memory is a key issue for organisational learning and this may be a challenge when workers are more mobile, and firms have greater reliance on freelance workers.

5.6 The Key Forces for Change in the UK Television Industry

The key forces for change in the television industry, that have been discussed in this chapter, are summarised in Figure 5.5.

The history of television in the UK has been a gradual move away from the public service tradition to a more commercially driven market (Cornford and Gillespie, 1993). The flexibility required by the industry reflects the increased competitive rivalry in both programme production and broadcasting, and market and technological uncertainty, which have been the forces for rationalisation and restructuring within firms, new organisational forms and the evolution of the knowledge and skills base of the industry. These forces have driven pressures for cost efficiencies and innovations in programming for differentiation.

(External Environment) Technology Change e.g.cable/satellite/ digital (within firm) **Technological** Restructuring or merger Uncertainty Cost Efficiency &/or Programme Innovation New processes, org **Pressures** forms, knowledge/ skills Retrain, recruit, Regulatory Change network relationships **Market Uncertainty New Entrants** - broadcasting/ production

Figure 5.5: The key forces for change in the UK Television Industry

The enduring issue is the centrality of the programmes and the challenge of organising for efficient and effective production. It has been shown that the

history of broadcasting in the UK has seen a proliferation in the organisational arrangements for the management of the broadcasting-production interface (Collins, 1993). At the same time there has been a transition from an internal labour market within vertically integrated producer-broadcaster organisations to a more flexible occupational labour market where training and development are becoming more complex to organise to meet the needs of the industry for flexibility and multi-skilling (Clarke, 1992). It has been illustrated that a more chaotic context prevails in the television industry for firms and individual workers.

The key players in the industry recognise that programmes are imperative for strategic success and the key to a differentiated product (Snow, 1991). The key learning issue for production firms, in the 1990s, is how to make flexible production work to your advantage in terms of knowledge development and knowledge utilisation? The remaining chapters of this thesis examine what can be learnt from production firms in the television industry that face this challenge.

CHAPTER SIX

RELATIONAL ADVANTAGE FOR LEVERAGED LEARNING AND KNOWLEDGE MARKETING

6.1 Introduction

"Ideas have power by themselves. They can accumulate without travelling through an institution, and then suddenly explode." (Michael Brown, Chief Financial Officer Microsoft, in Stewart, 1997: 59)

When production occurs across firm divides, ideas about how to improve efficiency and effectiveness or develop new products or markets can come from a variety of sources. A large part of organisational learning is about ensuring access to ideas and realising their potential for value creation. Television firms have considerable experience of co-ordinating workers for ideas generation and realisation. In this chapter, the empirical findings of the research begin to be discussed. The concept of *relational advantage* is introduced, herein, to capture the learning advantage that can be derived from effective relationships with external individuals and the potential such relationships offer to promote the expertise of the firm.

The findings of this study highlight the importance of effective relationships to organisational learning in network contexts. Relational connections with extra-firm knowledge partners facilitate immediate, and on-going, organisational learning and supports knowledge marketing. Knowledge marketing is about

developing the firm's knowledge reputation within the knowledge economy. In this chapter, it will be shown that relationships with external partners provide powerful informal channels for promoting the knowledge base of the firm. Relational connections thus support the development of the firm's knowledge reputation - a key differentiating device in a fragmented and chaotic industry, like television, in the 1990s. Relational advantage is a source of competitive advantage because it leverages both organisational learning and the knowledge reputation of the firm.

In section 6.2 the limitations of planned approaches to strategic management for television production firms are outlined and the possible advantages of more adaptive, learning based approaches to strategy discussed. In section 6.3 the concept of relational advantage is explained and the key types of relationships being forged by production firms discussed.

6.2 Strategic Management through Learning

Many informants suggested that high levels of environmental uncertainty made it almost impossible to apply traditional strategic management techniques when developing strategy in production firms. Informants highlighted the difficulties and even dangers of planned approaches to strategy in situations of environmental uncertainty. For example, one informant, from an independent production firm, described how the use of management consultants, brought in to help the firm at a difficult stage in its development, actually created further difficulties for the firm. The consultants tried to apply traditional planning techniques to the strategic management of the firm, but these generic techniques

were less helpful in the fast-moving environment of the television industry, as expressed by the informant below:

"We did projections, you know, did a whole lot of financial....consultants coming in helping us plan and it was a disaster. And in fact the whole business nearly went under as a result of all of that because we were putting things on hold so that this financial management, and the consultancy, and all this [could be done] and we had this team of people that were going to go out and get people involved, who were going to, you know, put money into the business so that we could grow and it was just a complete load of bull-shit...... So I am very wary now of that sort of thing and I think that one of the reasons is it is a very difficult industry to understand, and you can't apply traditional management skills and strategy to it."

In Chapter Two, the limitations of strategic planning in fluid environments were discussed and the advantages offered by learning based approaches to strategic management in terms of adaptation and competence renewal outlined. One of the advantages of organisational learning as an approach to strategic management, it was noted, is that it encourages firms to continually look for error in their understanding of the world (Argyris and Schon, 1978; Senge, 1990). Organisational learning implies there are no optimal strategies, but rather managers face an ongoing search for improvement in the accuracy of their

mental maps that in turn influence and shape strategic thought and dialogue in a firm.

In environments of uncertainty, the danger of quick fit strategic solutions was highlighted by one informant:

"When the level of business deteriorates instead of looking for the real reasons why, people tend to develop strategies which are indisputable but actually it is like a black art. So suddenly you are told that you need marketing. You need marketing because your sales are going down. So you are not presenting your case properly. So you say: "OK, we will have marketing." So you have a marketing expert and they start spending lots of money. They start telling you everything they are doing and the new clients that they are introducing, and then they tell you that the reason they are introducing clients but the new clients aren't using you. So then there is something else wrong with the company, and so on and so on. So if you are not very careful you can virtually throw the baby out with the bath water."

The previous quote highlights the danger of superficial solutions in developing strategy that neither address nor understand the key challenges in the environment. Such strategic tinkering can, as implied above, inadvertently begin a spiral of changes that may actually destroy the organisational routines that support existing capabilities (Nelson and Winter, 1982).

Both of the previous quotes highlight the importance of a deep understanding of the underlying forces that shape the particular environment of the firm by those charged with developing strategy. This can be linked to the systems view of organisational learning, outlined in Chapter Two, because this study suggests that those individuals facilitating strategic dialogues benefit from a systems understanding of the forces shaping their environment in order to develop effective strategies that address the most pertinent competitive issues (Senge, 1990). This study suggests that in complex and discontinuous environments strategy may be best developed by experts with an intimate knowledge of the firm's context and its capabilities, but who are willing to learn from a broad range of sources. Such an approach to strategy supports the model of the learning company advocated by Pedler et al. (1991), outlined in Chapter Two, with its emphasis on strategy as learning.

In the television industry, strategic management was portrayed more as a process of adapting to and learning from unfolding events. Firms try and plan the level of production they need to achieve their development ambitions, but the detail of how that is achieved is impossible to plan given the high levels of uncertainty. Many informants discussed the importance of strategic and organisational flexibility to seize opportunities, forge judicious partnerships with talent or to create new income possibilities. It appeared that strategy in many television production firms developed in a fairly loose and unstructured way building on insights from relational connections married with the capabilities of the firm and opportunism. This approach to strategy can be likened to the work of Quinn

(1980) on logical incrementalism, where senior managers consciously develop strategy in a flexible, step by step way, to enable new strategic directions to be explored and tactical moves by competitors responded to.

The importance of being flexible in the face of change is highlighted by the founder of a successful production firm:

"The truth is that we were and have always managed the company trying to preserve our production fees, and using that money to cover us for the times in between and actually developing new work, so that we were ready to take advantage of any new opportunity that arose. Suddenly, they [the producer-broadcaster] commission, like they did one year, 50 programmes and then they want 100 in the same time scale. So unless you are quick on your feet you can't survive in television. You have got to plan and you have got to have a strategy, but you have also got to be extremely nimble footed and say well if this happens we have got to respond."

The production firms thriving in an uncertain environment had strategies for development in terms of a clear understanding of what their production brand stood for and the knowledge that supported that, but they were open as to how that knowledge base could be extended and developed into new areas.

Knowledge-based differentiation was found to be key for production firms that were seeking to develop and grow. Each firm visited for this study appeared to

have a reputation for a distinct competence, whether that be innovation within a specific genre such as children's programming or drama or the ability to develop hybrid programmes such as 'edutainment' (a programme that combines education and entertainment). Firms that were growing and developing their activities in the fluid production context of television built on the knowledge base and reputation of the firm to penetrate existing markets and develop new products and markets. This appears to fit with a resource-based view of the firm where strategy develops from the existing capabilities of the firm (Barney, 1991; Prahalad and Hamel, 1990).

Learning and knowledge utilisation appear to support competitive advantage in television production. However, in the television industry, knowledge is much more contextually specific, fluid, intuitive and personal than is presented in much of the knowledge management literature emerging in the strategy field. Some advocates of knowledge management techniques portray organisational learning as the almost inevitable outcome of appointing a knowledge management department, and introducing the appropriate systems and remuneration packages (Davenport and Prusak, 1998). Knowledge management is often portrayed as a technical process of encoding the knowledge of workers so that when they go home at night or leave the firm still retains their knowledge base.

What emerges from the study of the television industry, is a picture of a much more informal, complex, interpersonal approach to organisational learning. In the television industry there was little evidence of firms focusing on capturing the knowledge of individuals and converting it to an explicit form. Formally encoding knowledge is not a viable option given the high levels of worker mobility, combined with the rapid formation and dispersal of production networks in the television industry. However, in terms of developing the theory of organisational learning to network contexts, this inability to readily encode knowledge may actually be a positive issue. Managers freed from a preoccupation with knowledge control and ownership, can focus their learning effort instead on unlocking the knowledge of others for knowledge sharing and knowledge utilisation. These activities may actually be where the firm can maximise the value of knowledge and organisational learning. If we look at the Japanese firms and their rapid progression in many industries in the post war decades, what they excelled at was getting other firms to share their knowledge and then rapidly deploying that learning into value adding products and services (Badaracco, 1991). Firms in dynamic network contexts, theoretically benefit from knowledge flexibility (Miles and Snow, 1986), but in order to realise the value of these outsourced knowledge partners, such organisations have to create conditions that support knowledge sharing an issue explored in the remaining chapters of this thesis.

6.3 Relational Advantage

Giving the client what they want on time, and on budget, to meet the programming strategy of the particular television channel comes from understanding the nature and position of the channel and the ultimate viewer.

Commission deals are very much founded on personal credibility and

interpersonal relationships built on trust, as expressed by this informant from a production firm discussing their success at programme pitching:

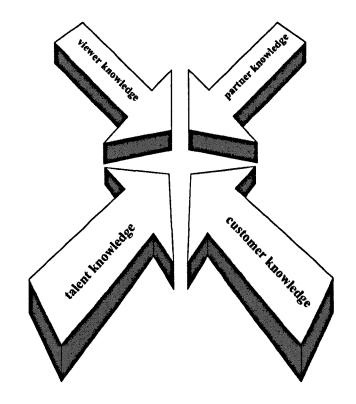
"So really I think that our best asset is the ideas; the creative bit really and the fact that people now know that we can do it and trust us to do it. I mean the fact that we have got 3 in the 8, that are still in the hat. I mean I am really pleased with that, but it is partly to do with the fact that when they were sent in, the person that was reading them knew us and that we could do it, and we targeted them very, very specifically."

Relational advantage is about developing and exploiting effective <u>learning</u> relationships with key groups, the key groups in television production being the customers (the programme buyers), talent (both in-house, freelance and in other firms), partners (collaboration partners for co-productions or new ventures) and viewers (the final judges of your content). These categories of contacts provide valuable opportunities for knowledge sharing and organisational learning. These relationships as the basis of an important source of learning are summarised in Figure 6.1

Relational advantage is not just about who you know (although clearly this helps). It is also about how well you understand who you know. Relational advantage leverages organisational learning in that it enables a firm to develop: a clearer understanding of its customer's needs, a clearer understanding of its supplier's capabilities, and a clearer insight into how distinctive and relevant the

firm's capabilities really are. Relational advantage also captures how relationships can be used to market the firm's capabilities to a wide array of potentially interested parties from workers, to programme buyers, to co-production partners and finance providers by informal, word of mouth endorsement. Thus, a wide array of knowledge relationships facilitate developing a wider knowledge reputation that acts as a magnet, thereby, attracting further knowledge partners to the firm.

Figure 6.1 Relational Advantage



In a fast moving talent- and ideas-based industry, such as television, what is 'in' and 'out' is constantly changing, and thus it is important to be alert to new talent and trends. A relational architecture can help a firm to maintain alertness to what is coming up and who the rising stars are in terms of production talent or new

production buyers. Relational advantage supports knowing. Relational advantage may provide insights into what programme ideas are viable, which channel has content problems that need solutions, or whether your latest programme idea is already being developed elsewhere. Relational advantage can thus focus your strategy on areas that will make most impact and waste least resources. This approach fits well with the emphasis placed on resource leverage by (Hamel and Prahalad, 1989).

The flexible and transient networks used for television production make the rapid establishment of effective working relationships crucial. The ability to forge, develop and utilise relationships with key individuals provides an important source of competitive advantage. Relational advantage captures the coming together of two key sources of advantage - that of knowledge and collaboration. Relational advantage provides the foundation for future competitive advantage by creating the network of knowledge connections that facilitate accelerated learning and thus help a firm of any size to develop new capabilities faster. In the next section the value of effective customer relationships for organisational learning are explored.

6.3.1 Customer relationships

In television production, the relationship between the programme maker and the programme buyer is crucial. It has been shown that historically such relationships were managed by a vertically integrated producer-broadcaster, and this still remains the model for ITV and BBC, when producing their in-house productions. Nevertheless, increasingly the production and broadcast functions

in television straddle firm boundaries as programme buyers follow the publisher model. But what issues are raised by these more fluid network production arrangements arising from the publisher model for broadcasting in television?

In Chapter Five, it was shown that effective and efficient programme production is a key concern to broadcasters and so efficient and effective buyer/supplier relationships are crucial to the management of existing projects and the development of new programmes. Given the increased competitive rivalry between incumbent television channels, and the threat of new digital competition, inspiring client confidence in the ability of your production firm to deliver anticipated viewers is key. Commissions are likely to go to those firms that can develop effective partnerships and dialogue with commissioning editors as noted in the earlier quote. Both programme makers and buyers are under considerable pressure. For the programme seller the security of regular commissions is needed to ensure cash-flow to develop new projects. For the programme buyer, the search is for scheduling solutions to deliver the target audience.

It has been shown that different programme buyers seek different things from programming. The BBC, seek to meet the diverse viewing needs of different groups in society, to fulfil their public service remit and to justify public funding. Whereas, ITV are seeking a mass audience to meet the advertisers' requirements. Cable and satellite services are targeted at niche audiences of subscribers. If those subcribers are not satisfied they will not renew their subscription. As television moves into a multi-channel environment of digital

services, strategy builds on giving the viewer what they want, when they want, and thus, firms need to be able to create packages of programmes to suit niche markets. Different packages will have different levels of perceived value. Bundling packages is about keeping costs down and delivering the new programming that the customer wants. Re-bundling of packages is the key to success. Cable and satellite providers are already commissioning content, but they are usually looking for content at very low costs. Some programme sellers are already adapting their techniques to meet the demand for low cost content. All programme buyers share the need for reliable content that delivers their specific viewer needs.

The programme seller is trying to make reliable programmes that meet the needs of the broadcaster. In the UK, the broadcasters have considerable power over domestic producers. Many of those independent producers that were interviewed felt there is no free market for programmes in the UK because of the power imbalance between the independent producers of programmes and the broadcasters. This power imbalance was summed up by one large production company manager:

"There is no free market in programmes in this country.

Broadcasters have taken it upon themselves to tell independents how
much it costs to make a programme and say you can make a small
margin on top."

For example, Channel 5 launched on a strategy of low cost-programmes was reported by informants to be seeking programmes that cost several thousand pounds an hour to produce, this was approximately one tenth of the cost that comparable programming had been made at compared to incumbents. The power of the broadcast companies means that the term 'independent production company' is a misnomer. Production companies, even the successful ones, are dependent on their domestic broadcast customers. This dependence leads to ongoing pressures to minimise costs, as outlined in the previous chapter and real production planning problems.

For many companies it is hard to plan beyond the current commission because of the vagaries of the commissioning process and this creates real problems in developing any long-term strategy or forward planning. The uncertainty of whether project ideas will be commissioned creates high levels of business risk that require keeping overheads to a minimum, as noted by another informant:

"In my ideal world I would love to get the people around me that I like and I love working with and just steam ahead, but to do that you have got to have long commissions or to have quick turnover of commissions. So planning a strategy and finding a business plan in that sort of environment is impossible, you can't do that."

There are exceptions to this power differential between programme buyers and sellers. For example, when there are perceptions of talent shortages, such as currently in comedy, the power balance shifts to the production company's

favour. If a production firm can make a successful international show, such as *Sesame Street*, and can retain the rights to that content they can earn considerable sums from international sales. Indeed, given that content is the key basis for the differentiation of television services, it is not surprising that several of the firms participating in this study had recently been taken over by larger media companies.

The initial strategic issue for the programme supplier is survival as there are no barriers to entry and only a limited, but growing, number of domestic buyers. For production companies that have growth aspirations, as opposed to being set up purely to provide a vehicle for the creative work of the founder, effective relationships with broadcasters appear key because these may lead to core supplier status and more regular commissions. The uncertainty of the commissioning process meant that most informants from independent production firms stressed the importance of securing the big, long running bread and butter commission for security of cash-flow. Reliable cash-flow provided the income to begin to take a longer-term view on strategic direction. So for example, a two year output deal with Channel 5, for an entertainment show that records every day, may support a studio that can then be used to make other shows. One programme supplier had been able to establish an entertainment centre on the back of such security. Greater certainty of cash-flow also enables firms to retain talent. The significance of strategic relationships with programme buyers is described by a representative from an independent production company:

"..we are saying that we will increasingly look at strategic relationships with either broadcasters or other means of distributing - I hate the term - software. It could be a video company. It could be a programme distributor. People who, again, are desperately looking for high quality programming and so if [we] build strong relationships with those people they will give you more financial resources and stronger position, but also the backup, hopefully, of strong talent."

Those independent companies that are thriving recognise their dependence on the broadcasters, but are trying to find ways to work more effectively with a range of broadcasters. The managers of such firms recognise the threat of getting bogged down in chasing work, particularly given the limitations on managers' time. Several informants pointed to piles of programme ideas and programme pitching paperwork, or expressed concern at the waste of non-recoverable development costs. Finding ways of leveraging scarce resource seemed a key issue in television production, particularly to smaller firms, who had modest resources from which to develop.

The founding managers or partners of successful production firms appear to think strategically and proactively in looking for ways of developing their business. The managers of some successful firms seemed to be trying to move away from the day to day operations of directing, or producing, to enable them to focus more time and effort on using their knowledge and contacts to sell ideas

at home and overseas. As was outlined in the previous Chapter, many of the founders of such firms were originally employed by one or more of the incumbent broadcasting organisations, providing them, in the early years of business, with a strong knowledge of their customer's needs. However, without ongoing and new relational contacts, such knowledge would quickly become redundant because of the pace of change in the industry and the mobility of key buyers.

The strategy of programme sellers appears to build from a clear understanding of where their ideas fit with specific broadcaster's needs. In other words, firms that are succeeding are trying to move beyond the notion of supplier to one of coproducer of value as 'a problem definer and solver.' In the words of one independent television company manager:

"We don't think up ideas and then try to flog them to broadcasters.

We start from finding out what broadcasters want. So we are not really in the business of selling programmes, we are in the business of selling scheduling solutions."

The previous quote highlights that securing programme commissions is not just about the quality of the programme concept, but whether the programme idea meets the programme buyer's particular scheduling problem or represents a differentiating new hybrid programming innovation, that will enable the buying channel to secure market share. Many programme makers are focused on the programme idea, but without effective customer relationships how do they know

if the idea is original or if it is in demand? The importance of customer knowledge, or 'customer capital', as it is increasingly termed, is reflected in the considerable investment being made by many blue-chip companies like Xerox, American Express, and Motorola in understanding their customers' needs (Stewart, 1997). In the television industry, some production firms are investing considerable time and effort in understanding how their programme ideas can contribute to the programming strategy of their customers.

In practice, it was found that these buyer-supplier relationships were often forged with just one or two programme buyers. These relationships were usually between the senior managers or partners of the production firm and a representative at the level of commissioning editor or higher within the broadcast organisation. However, many production companies were trying to develop relationships with a wide range of broadcasters to avoid reliance on one or two buyers. One company which had successfully grown a wide customer net to embrace traditional buyers (BBC and ITV) and new customers (cable, satellite and foreign customers) summed up the importance of buyer-supplier polygamy:

"..in the early days when BSkyB first started people were a bit sniffy about it, you know...and they thought it would never work. But we thought you can't rely on just one customer, or even a couple of customers, because the television industry is changing so dramatically inside a year, really expanding and the ground is shifting and the rules are changing and we decided quite early on when there was a bit of recession within ITV. They were just

switching over to the Network Centre way of operating business....
and for a about a year nothing happened. You know there were no
new commissions, so we thought we can't afford to be like that. So it
was a conscious policy decision to spread our net."

Dependence on one programme buyer made firms vulnerable to restructuring by the broadcaster. During the period of the research, there was major reorganisation occurring at BBC, ITV and Channel 4. Several companies had experienced problems following the restructuring of particular broadcasters because the contacts they had forged, at an inter-personal level, were made redundant by re-organisation, as commissioning editors took on new roles or changed organisations altogether. In some cases, it was possible to follow the individual to a new organisation or post, but often contacts had to be forged again and this involved considerable time and effort for managers.

The large producer-broadcasters have also been hit by the commercial pressures for falling production costs. A key issue for them is to focus scarce resources where they will make most impact, on the screen, and to try and cut costs behind the scenes. As one senior manager described it.

"It is clear that most of the new competitors don't have the sort of budgets to spend on programmes that ITV has traditionally enjoyed and the BBC. If [the broadcaster] were simply to court easy popularity by cheap and cheerful shows it would end up, probably, producing the same sort of shows as its competitors and lose its

unique selling proposition. So I think that the trick is, or we perceive the trick is, to do everything off-screen that you can to save money."

The use of merger and acquisition, the separation of the production and broadcast functions and altered working practices enables the established producer-broadcasters, like the ITV franchise holders and the BBC, to compete with new entrants who have less to spend on programmes. Again the emphasis is on leveraging resources for maximum competitive impact (Hamel and Prahalad, 1994).

Each television channel is seeking to develop a clear consumer proposition that differentiates it from the competition, in an increasingly competitive market. One of the criticisms levelled at Channel 5, when it began broadcasting in 1997, was that it had no clear unique selling proposition that the viewer could identify with. The programme buyer is seeking reliable content that will secure an acceptable and appropriate viewing audience. This requires a clear understanding of what the channel is about combined with an ability to innovate, as described by one senior manager:

"You should have a strong understanding of the nature of your channel and what it needs. You know, I have been a network controller at ITV. I have hitched round a long time. I think I have been at every [the broadcaster] strategy conference and you are employing people who are familiar with the needs of the channel at the same time as not trying to give the idea that there is a kind of

[the broadcaster] formula because once people start self-censoring themselves and saying, 'Oh no, that would never work in [the broadcaster]', you get no innovation. You just get endless replication of what has probably worked."

The danger of developing a formula or one best way within a firm can be likened to the threat of core rigidities where the competence of the firm in time looses consonance with the environment preventing innovation (Leonard-Barton, 1992). Contextual knowledge of what a channel stands for and where it is going is important for programme buyers and suppliers, however how that is to be achieved appears may be best left fairly open to allow the freedom for innovation. Senior managers that provide too much direction may stifle innovation.

Programmes are commissioned on the basis of the idea, how the idea fits with the programming strategy of the channel, and the ability of the pitching company to deliver that idea. With an intangible product, like a programme concept, mutual trust and understanding are crucial. The programme buyer relies on the ability of the programme supplier to make the programme idea tangible in order to deliver the target audience. The relationships between the programme buyer and supplier were reported to be very much interpersonal and built on trust as expressed by one programme maker:

"What we do as a matter of course is make sure that we get close to all of the buyers. So we meet - I mean, you know, I have been in the industry 20 odd years and most of the people who are key buyers some of them I know, I have worked with, you know, they are kind of old chums."

The importance of trust in developing effective network relationships has been highlighted by various commentators (Powell, 1998; Badaracco, 1991). Programme buyers face high levels of commercial uncertainty as competitive rivalry increases, commissioning editors need to be able to rely on programme suppliers to deliver to anticipated cost/quality standards. The ability to trust the programme supplier also reduces the cost of programming in that the buyer has to spend less time monitoring the progress of the production process.

Clearly, the better the relationship between the buyer and supplier of content the sharper will be the shared vision of what the final show will be like, and a mutual understanding of what the quality and performance criteria will be reduces the time required for boundary spanning activity. Production companies need ongoing commissions and broadcasters need programmes that perform. Being known as a "safe pair of hands" is a critical advantage to securing a commission. As one programme maker notes:

"I mean you have to be trusted because there are a lot of scared people who commission who are not exactly the biggest risk takers in the world. And because I have been a freelance producer for twenty something years ...that was the one advantage that I did

have. If I had been nobody from nowhere with just some money, it wouldn't have worked."

These relationships have been forged at the inter-personal level and this makes the strategic knowledge brokers in the producer/broadcaster interface the representative of the production firm, often the founding partners in the case of an independent production company or a producer/executive producer or above within a larger television firm and the programme buyer at the level of commissioning editor or above.

The programme buyer can develop effective relationships round two models: one is to go the core supplier route; and the other is to broker a large network of relationships. The core supplier route is where a limited number of programme sellers supply the bulk of the buyer's commissioning needs, as in the case of Channel 5. By focusing on a smaller number of relationships more time can be invested in boundary spanning activities like quality control and ideas development to develop a deeper relationship and mutual understanding of the buyer's/supplier's reciprocal needs. Closer collaboration provides mutual trust and reliability of supply.

An accreditation process can be one way of introducing a mechanism for quality control. Japanese car companies and the retailer Marks and Spencer secured advantage from the use of quality accredited suppliers with whom they work very closely. Such relationships also enable the negotiation of volume contracts at lower unit costs. It has been noted that Channel 5 also applied this approach to

its volume commissioning deals. In the chaotic and uncertain world of television, the security of the known supplier has huge appeal for risk management. Below a senior executive from a commercial channel outlines the accreditation process they introduced into their organisation:

"What I introduced at the Channel, which was a novel concept, was really quality control on the production process which is kind of what Marks and Spencer do you know. You have to prove to Marks and Spencer that you can make the jumpers or the knickers, or whatever it is and they stand over you, on the production side, and make sure that you are meeting their spec, and that is what we introduced at [the broadcaster]. And the kind of idealist producers felt that this was, you know, this was an intrusion, but I was very clear from the beginning. I said, you know, 'We are in the business of pleasing our viewers first.' The viewers come before producers, you know in that order of priority at [the broadcaster], and this was a hard message, but eventually they learned to live with it."

The core supplier route, if widely adopted by broadcasters, results in concentration of production and the shake-out of some programme sellers. Operating network relationships with a limited number of sources of supply involves certain risks for the broadcaster, such as being pushed up on price by specialist suppliers with highly rated programmes, or getting locked into existing production talent at the expense of identifying, new and sometimes better sources of future creativity. For this reason, many programme buyers, as well as

forging deep relationships with some suppliers, also cast their commissioning net widely to look beyond their trusted core suppliers for new ideas.

A reputation for being receptive to new ideas and new talent can provide a competitive edge. To cite a former senior television executive:

"You always want to be the first shop that people come to with their ideas. That is a competitive edge....[and] that means being supplier friendly, fast decision making, sensible deals, fast deals, prompt payment, nice people, welcoming that is competitive advantage."

Some of the most successful recent programming has been innovative. Informants pointed to the success of programmes like *The Big Breakfast*, *This Life*, and *Teletubbies* that were fresh, and original as evidence that viewers welcome innovative, new programming ideas. Informants also pointed to a wide range of sources from which programme ideas could come. If innovation can come from surprising sources, programme buyers need to be receptive to new ideas from a wide range of sources. This highlights the importance of external boundary spanning as noted by Pedler, et al. (1991) for organisational learning. It also highlights the importance of ongoing learning by managers if they are to stay open to new programme formats and ideas (Senge, 1990).

The previous quote highlights that programme buyers as well as having trust of suppliers, also have obligations to them, if their relationship is to be effective. Programme sellers benefit from efficient and effective purchasing decisions that

minimise wasted resources, such as non-recoverable development costs. Thus effective buyer/supplier relationships are based on trust, shared norms about costs and quality standards, and mutual obligation to one another. This way of interacting appears to fit well with Nahapiet and Ghoshal's (1998) notion of social capital whereby relationships can reduces transaction costs and facilitate innovation in terms of cost and/or differentiation.

These relationships between programme buyers and sellers are probably best conceptualised as forms of architecture that facilitate knowledge development as outlined in Chapter Two (Kay, 1993). One way to develop a more sophisticated relational architecture for identifying new talent is to learn from a web of intermediary knowledge brokers. Here a knowledge broker mediates between a programme buyer and seller. A buyer-broker-supplier architecture was found to be particularly useful in situations where new production talent may come from any genre and/or geographic location. Identifying new, talented programme makers is a daunting task for any commissioning editor with a UK wide remit. Developing a network of local knowledge brokers as intermediaries to spot local talent may help the primary knowledge broker in their task. For example, several informants referred to the case of one programme buyer who had developed a web of intermediary brokers throughout the UK, each of these brokers then identified emerging production talent in their locality. This commissioning editor then acted as the national broker to identify new talent, but he was assisted in this role by local media organisations whose managers acted as knowledge brokers. Intermediary network brokers enabled the commissioning editor to leverage learning by forging an elaborate network architecture of intermediate learners.

Local brokers had three roles: to connect the small regional producers and the metropolitan commissioning process; to link programme buyers with ideas to the suppliers with the money to realise those ideas, and to create communities of practice where local television freelancers can share knowledge and experiences to improve their pitching and production techniques. This local learning can enable talent to stay at the local level, at least until their talent is proven, by providing links to sophisticated buyers without the need for the physical proximity. One local knowledge broker described their role as an intermediary broker:

"..being a sort of broker and satellite between them, we to some extent, sort of artificially create communities, you know, like the latter day town planners and we are the village shop. ...one of our very important areas of brokerage is between regional, inexperienced, small producers and the commissioning process which is basically metropolitan, in theory, and that also means between the people with the money and the people without the money."

Creating communities of practice, bringing together previously isolated local talent, enables novice talent to share experiences and leverage their learning by drawing on each other's experiences. This highlights the power of informal

learning in communities of practice (Brown and Duguid, 1991), but highlights that such learning need not be bounded within a firm. Those managers of independent firms that had experienced this multi-level brokering reported that such a network model was effective in encouraging the development of independent production talent. Multi-level broker networks were reported to improve information flow and reduce the complexity of the knowledge management task. External knowledge brokers can provide a more flexible and extensive learning architecture than would be possible by relying exclusively on internal resources.

One broadcaster prided itself on identifying and developing new production talent by drawing on a wider network of knowledge brokers:

"It is essentially a nursery which is the great strength of the Channel and you know, there are endless examples....people who are now household names. Almost certainly if they are on screen they are household names - if they are off screen, like directors and producers they are household names in the industry and so many of them have got [the broadcaster] as their starting - their point of entry. They got their first break here."

When television firms recruit key programme buyers or sellers one of the key resources they are obtaining is that individual's knowledge of the wider learning community and who the key network members are. In other words, they are potentially gaining access to a wider knowledge network. The downside of this

reliance on interpersonal relationships that are built on trust appears to be that it is hard for a new recruit to join a management team and step readily into an established network of relationships. As expressed by one programme seller:

"But you know it is a people industry and when people think of [the firm] they think of [the partner] and I, so it is very hard, you know, to step into those relationships."

This can create problems for managers of productions firms that want to distance themselves from operations in order to develop new areas of activity, if a broadcaster still expects to deal with that particular individual. Succession issues and developing a broader management team can be complex in such situations. Developing a relationship takes time, effort and tacit knowledge as expressed by one programme maker, but the potential rewards from forging such links are clear:

"I think it is very hard to teach people it...[the] actual commissioning editor process; the fact that there is a subtle dialogue between you and the commissioning editors. Some people don't appreciate the fact that when they get a commission for television it is a partnership. They are not simply going to be funding your idea - we want to make a programme with you, not we want to pay you to make a programme - and that therefore they have got to co-ordinate, they have got to cultivate, to actually have a dialogue, and know where they are strong, and then to listen. It is

really those [programme makers] that can do that that get commissions again."

6.3.2 Talent relationships

The second key type of relationships for programme makers is with talent.

Access to high calibre talent is axiomatic to successful productions in a range of genres. As described by one informant:

"It is all about having the talent."

This reliance on talent extends from the development stage where programme ideas are developed to the post-production stage of editing. The need for more creative skills to complement technological know-how had changed the skills base and relevant knowledge in post-production, as described by the manager of a facilities firm:

"..we are no longer the purveyors of technology, we are the purveyors of talent."

The centrality of talent to effective television production was expressed to be important for both behind the scenes production talent and front of camera talent. As talent is a key differentiating issue, competition for talent is fierce between production firms of all sizes. This is expressed by another informant from a production firm:

"I think that there is a few talented people at the moment, and they are getting fewer. You know, the fight for them is amazing at the moment."

Specialist freelancers such as writers, producers, directors, performing artists and editors are central to the realisation of the programme idea. Having good relationships forged at the inter-personal level with such talent is key to achieving creative success - an issue discussed further in Chapter Seven. Large producer-broadcasters try and retain key talent in-house. For the larger producer-broadcaster, it may be possible to offer golden-handcuff deals to secure talent for longer periods or more regular work contracts. For example, the BBC locked the comedy writing talents of Ben Elton into a one million pound golden-handcuff deal. However, the dual demands for cost control and creative flexibility means that specific production teams are brought together on an ad hoc basis as and when required, to work on given projects. Consequently, the production firms normally retain a minimal core of administration and production staff.

"You know you can't promise them [work] even though you 99% think that you will be re-commissioned, you can't promise them that it will and so you risk losing the talent that goes to make these things. You can't put people on long-term contracts because you are not quite sure what is coming up..."

The uncertainty of when the next production will materialise means firms are not in a position to offer ongoing work to the majority of the freelance production workers on which they rely. Consequently, given the competition for commissions and the constraints on employing talent on a permanent basis, the ability to demonstrate an established network of wider relationships with key talent provides a relational advantage for production firms. For the production company, talent relationships provide credibility to their programme proposals, in the eyes of the programme buyers, it also provides the time based advantage of being nimble. Already knowing the relevant people, may enable production companies to pull together a production network at shorter notice than their less well connected competitors. Some firms try to develop an A list of people who they try and use on a regular basis. These individuals then come together with core employees on a regular basis to comprise an evolving community of practice comprised of both internal and external workers (Brown and Duguid, 1991).

Relationships with talent also leverage learning. A broad web of talent relationships with mobile freelancers, who are constantly moving round, working with other talent and for other production companies can provide a powerful, informal learning network. Such a knowledge grapevine can provide valuable insights about competitor activity, emergent talent and market opportunities. In other words, talent relationships can provide multiple levels of knowledge brokering and learning. As one manager described it, freelancers can themselves act as knowledge brokers drawing on their own architecture of network relationships with talent and programme buyers (Kay, 1993).

"...a good producer has a relationship with key writers, key performers. So more than anything else we want to have top producers working here who have strong relationships."

The issue in forging relationships with individuals that are external to the firm, is not just, who do you know, but who do the people that you know know? A key consideration, therefore, when recruiting people as employees or on a freelance basis, aside from their professional ability, is what relational advantage do they have that they could contribute to the firm's existing knowledge network? Organisational learning will be leveraged by working with people who are well connected to other knowledge rich individuals because they can provide access to that broader knowledge base.

Informal grapevines can be used to absorb external knowledge in to the firm, but they can also be used to promote, outwardly, the firm's capabilities to prospective freelance talent partners and programme buyers. These knowledge relationships, used to full advantage, can provide both absorptive capacity (Cohen and Levinthal, 1990) and knowledge marketing. Those talented individuals that work in the production network that the production company manages have an opportunity to experience many facets of the organisation including: the culture of the firm; the way it treats people; how it functions under crisis and the strength of its production expertise. Being known as an organisation that is good to work with was considered important by many

production firms with informants priding themselves on the 'fun', 'lively', or 'professionally challenging' environments their firms offered.

A flexible production network in part depends on the calibre of the people it brings together for its success. It is important that the organisation, that brokers a network, leaves the freelancers who pass through it with a memory of a positive work experience, positive in the sense of a fun place to work, or creatively challenging. Unless talent remains in contact with the organisation, once the immediate production network has dispersed, there is no ongoing relationship and the only advantage derived from the contract with the talent will be a one-off transactional advantage of having high calibre talent on a given production. However, for ongoing relational advantage, it is necessary to maintain relationships with talent. The mechanisms for supporting such relationships are discussed more fully in the next chapter. One message from this study was that talent that is in high demand will not return to an unpleasant work context. Or put another way as described by one informant talking about some production firms:

".. some cultures are so neurotic or aggressive or pressurised that people get fed up..."

Word of mouth recommendation is a key promotional device in many industries, but is especially important in such a personally interconnected industry as television. The talent that leaves a production company with a favourable impression will be more willing to work with that firm again in the future and to

act as an unpaid ambassador, spreading the reputation of the organisation as an effective, knowledge rich place to work and create through the industry grapevine. Forging talent relationships can bring rewards by creating a hub of talent, a source of production ideas for creative success, and unpaid PR agents spreading your knowledge reputation - good or otherwise to the industry.

6.3.3 Partner relationships

Some production companies had extended their relationships beyond those made with individual talent and programme buyers to include other partners. There was evidence of firms developing alliances with other television production firms to spread the scope of their production work in terms of genre or geographic market. Alternatively, production firms by forging partnerships with other media companies can diversify into other media. Partner relationships potentially provide a further source of relational advantage for learning and knowledge marketing.

The high profile collaborations of the large television companies are well documented and referred to in Chapter Five. Firms like Rupert Murdoch's News Corporation have developed an elaborate network of alliances for global reach. However, there is evidence that smaller production companies are exploring also the strategic possibilities of such relationships. The firms in the television industry place a high emphasis on reputation and brand position. It is, therefore perhaps, not surprising that there was much concern that a poor collaboration might tarnish the brand. One manager expressed the potential problem of brand diminution from a poor alliance thus:

"You know, [the name of firm] is quite a good name and it would be spoilt by tagging on another name, one is known as this."

Many informants expressed a view that collaborations would be more and more a feature of business development in the industry to share costs or develop income streams. Some firms had already been approached about the possibility of collaborating with other production companies. The message from the interviews was one of a high level of awareness of the potential of such relationships, but great caution into rushing into collaborative relationships with other firms. Finding the right partner was a key issue and the search was more intuitive than rational as expressed by one informant that had established overseas partners:

"The one thing we did when we were looking for these partners abroad, and it was terribly unscientific...we found people that we liked and who seemed a bit like us. And in the end, if they are going to be producing one of your shows and you go to the studios and they are not doing it right, or they are doing something that actually jeopardises what we do with formats you are going to have to say 'Sorry, you really can't do this.' ...And we have got to be able to do it with people that basically we get on with and with whom we have mutual respect for."

The interpersonal element again is key and finding partners that you can be frank and open with without jeopardising an effective working relationship appears key. Or as another production executive put it:

"..it is not so much the deal, as the people that you are doing the deal with that you have got to keep an eye on and if you think you can work with them that is fine."

In practice, firms seem more willing to enter partner relationships with organisations that are similar in their way of working, but different in terms of their core activity, there thus being no direct competitive rivalry between such firms (Porter, 1980). The collaborating firms may have complementary skills or access to different geographic markets. Such relationships might involve working with overseas firms for format sales or co-productions. These collaborative relationships provide synergy by combining the diverse capabilities of the partners, but perhaps increasingly important they provide learning opportunities about markets and products.

The informant below describes how a lack of knowledge in particular markets calls for a different approach to developing overseas activity, based more on working in partnership with indigenous production firms that have local knowledge of overseas programme buyers:

ï

"So we saw the potential quite early on and what we did was to set up our own international department...we decided that we weren't going to form an alliance with - we weren't going to go straight into broadcasters in Sweden and Spain and say, you know, we are [the firm] and would you like to buy our [programmes] because: a. we didn't really know them on an intimate basis in the way that we knew a lot of people in the British market; but, b. it was also slightly arrogant to walk in and say "look we are going to teach you to do [these programmes]." So we didn't think that was the right approach. So we found like-minded independent producers in various countries around Europe and we team up with them ... so it was a loose alliance of producers."

For this particular firm, these partner relationships provided market information and exclusive access to the products of other companies that could then be sold in the home market. Several companies reported entering reciprocal content arrangements with overseas partners. However, developing such relationships involves the senior managers attending international programme markets, fact-finding missions, and in the case of co-productions securing funding, all of which takes considerable management time. Some smaller programme makers reported that it was difficult to commit the necessary time to exploit such opportunities, given the demands of domestic production schedules.

Some production companies were looking to diversify to escape their dependence on the broadcasters for revenues. The new directions being considered by informants included: the possibilities for Internet services, CD-ROM, advertising, corporate work, merchandise, and stage shows for theatre.

Collaboration is one potential way of combining complementary competencies to quickly and efficiently diversify. For example, one global production company was diversifying using a range of strategic relationships that were appropriate to the market they sought to enter as noted by a senior manager from the firm:

"So yes, I believe it is possible to stay autonomous, but we have judicious partnerships. We have to do that. We are partners with Sony in terms of movies, and we are partners with Microsoft in terms of interactive, and we are about to be partners with A.N. Other on video."

Many of the independent companies were established by two partners who had complementary skills and the effective synergy of their skills and personalities provided the knowledge base of the firm. There was considerable evidence that firms that were expanding their activities were looking to relationships with external partners as a method for ongoing learning that extended beyond the knowledge base of the firm. The ability to leverage learning from collaborative relationships has been noted by other commentators (Badaracco, 1991).

6.3.4 Viewer relationships

The producer-broadcaster has a knowledge advantage over a production-only firm in that they have the viewer feedback from their broadcast channels to draw on when developing new productions ideas in competition with dedicated production firms. The cable and satellite providers also have a gatekeeper role

with their subscribers that gives them a direct relationship with viewers. Dedicated production firms lack this direct viewer relationship, being higher up the value chain (Porter, 1985). However, some dedicated programme makers felt it was important to have a knowledge and understanding of the ultimate judge of their product, the viewer, and this suggests that viewer relationships also provide important learning opportunities.

Just as Nike and Levi-Strauss, recognise that the key relationship is with the end user in developing brand loyalty, so, too, some production companies felt better able to deliver programmes that interest and hold viewers if they have a direct knowledge and understanding of those viewers' needs. After all, how the viewers react to a firm's programmes will be a key consideration of the programme buyer in deciding whether to commission a second run of programmes.

Those programme sellers that produce programmes that are targeted at a particular viewing segment seemed particularly keen to forge a direct viewer relationship. This can be seen as part of a focus differentiation strategy where close understanding of the consumers' needs are crucial to success (Porter, 1985). Some such production firms were investing considerable time and resources to develop insights into what would engage the target audience and to identify what their future interests and priorities might be. For example, one firm making pre-school children's programming was investing time and money in improving their understanding of children by working closely with their ultimate

viewers. Another firm concerned with the lifestyle market was developing a knowledge of the key leisure trends in society:

"...we are getting people to come and talk to us here about consumer trends and consumer behaviour in food, in gardening, homes and motor cars because I want to feed that knowledge into our creative process and get us more focused in inventing new formats and ideas for television ... so that is another form of knowledge."

Developing a viewer relationship can also facilitate diversification by providing a demand for other merchandise that builds on the programme concept or characters. Videos, publications, magazines, and toys are just some examples of the range of merchandise that can be marketed to viewers once the viewer has been engaged with the ideas of the programmes. Viewers that purchase such merchandise may develop a more direct association with the production company, thereby providing a platform for the direct marketing of future products, or programmes. For example, the animation characters Wallace and Gromit began life as a short animation film. The production firm Aardman Animation, which specialises in model animation, then produced further Wallace and Gromit films for the BBC. The characters of Wallace and Gromit have gone on to provide the basis for a massive range of merchandise for both children and adults appearing as toys, household items, clothing and stationary to name but a few. In terms of other media, Wallace and Gromit now appear on videos, books, CD-ROM, and even toured as a stage play. Ragdoll Productions developed the *Teletubbies* for the BBC and the character rights from the associated merchandise has earned the firm's founder approximately £55 million. In both these examples relationships with the viewer have provided additional income streams and shot these characters rapidly into the British psyche and later the world stage, putting them on a par with Peter Pan and Rupert Bear.

Another example of the learning benefits of forging a direct relationship with viewers is provided by the BBC programme open.saturday, produced in partnership with the Open University provides education on topical issues for the general public as part of the BBC's remit to educate and inform. By forging a and postal relationship with lifelong learners via internet, phone communications for further information on the programme topics, the BBC and the Open University can improve their understanding of what lifelong learners are actually interested in, thereby providing valuable market information. Viewer relationships also provides a platform for marketing the BBC's Learning Zone and Open University paid for courses. Viewer relationships, again, enable knowledge leverage and knowledge marketing. Mutual learning in this context benefits programme sellers, education providers and individual learners. This suggests that programme makers who can forge relationships with viewers can improve the income from a given programme idea, and develop deeper knowledge of their viewers' needs. Such knowledge will be beneficial in developing new programme ideas or associated product concepts.

6.4 Conclusion

To summarise, relational advantage, in television production, rests on the notion of being a good supplier, a good production partner, a good employer, and a good view. In a multi-channel environment television production firms will have to be more commercial and responsive to survive. Those firms that are developing broader-based content businesses are leveraging their learning with the help of key strategic relationships. These relationships are with the groups that can influence the ultimate success or failure of a production firm namely the customers (the programme buyers), the production talent, the partners in related media activities and the viewers. Such relationships are not necessarily planned for as part of an explicit knowledge strategy. However, the research for this thesis suggests that in the fluid, context of network production a web of strategic relationships can provide vital knowledge, aid learning and promote the knowledge reputation of the firm to the key groups that will dictate the ultimate success or failure of the firm.

In this chapter, the importance of a range of different types of effective relationships were discussed for effective organisational learning in network contexts. In Chapter Seven, the key types of knowledge resources available to a firm in creating a learning advantage over competitors are discussed. The specific knowledge brokering tasks of internal managers, charged with building a multi-level learning network for knowledge leverage, in network production settings, are outlined.

CHAPTER SEVEN

THE KNOWLEDGE CHAIN:

KNOWLEDGE RESOURCES AND KNOWLEDGE BROKERING

7.1 Introduction

Faced with a highly dynamic environment in the mid 1990s, television production firms focused on trying to unlock the knowledge of key production workers in order to develop new programme ideas. Given that many of the key knowledge resources in television are not directly owned by production firms, but outsourced from the freelance market, the ability to rapidly unlock the knowledge of free agents became key if programmes ideas were to be realised and experiential learning was to be achieved in fluid production networks. In this chapter, a conceptual tool, *The Knowledge Chain*, is introduced. This framework has been developed from the findings of this research in an attempt to synthesise the main organisational learning and knowledge development issues emerging from this study. The key knowledge resources of the firm are outlined and the key dimensions of knowledge brokering in the television industry are examined in more detail.

7.2 The Knowledge Chain

The concept of the Knowledge Chain builds on existing theories and concepts in an attempt to integrate previous work on organisational learning with the research findings of this study to develop our understanding of organisational learning in situations of network production. Figure 7.1 illustrates the dimensions that appeared key to learning in the television production industry.

Figure 7.1 The Knowledge Chain



The first stage of the Knowledge Chain is the key knowledge resources that feed both the production and organisational learning processes. Knowledge resources are the firm's knowledge inputs into flexible network production. In section 7.3 the key types of knowledge resources used by television production firms for competitive success are outlined. In section 7.4 the significance of knowledge brokering to learning in network contexts is noted, focusing on the challenge of brokering learning relationships with freelance knowledge workers and the value of creating a knowledge hub. A firm's knowledge hub being the internal knowledge of the firm that acts as a magnet for attracting other key knowledge resources to work with the organisation. This knowledge hub comprises: the specialist knowledge of the firm, the relational knowledge of the firm for

effective networking for learning (as discussed in Chapter Six), the creative knowledge of the firm that enables it to create conditions conducive to knowledge exchange (this is discussed in more detail in Chapter Eight) and the knowledge reputation of the firm that raises its external kudos. It is this combination of specialist expertise reinforced by a high external profile for excellence in their programme genres, with effective inter-personal relationships with key external groups, and the ability to provide settings for individual creativity and knowledge exchange that attracts a diverse range of talent and buyers to work with a given firm. The knowledge hub is returned to in Chapter Eight. In Chapter Eight the creative process of television production is examined to explain how the operational environment can be instrumental in the effectiveness, or otherwise, of network interaction for unlocking knowledge. experiential learning, and knowledge utilisation. The issues surrounding safe space learning, knowledge outputs, building learning relationships, creating learning contexts and knowledge marketing will also be explored.

7.3 Knowledge Resources

The key knowledge resources that production firms use for differentiating themselves are: the specialist knowledge base of the firm; the relational advantage to be able to effectively broker knowledge from a wide range of external parties, at short notice, to realise production deals and develop new products and/or markets; the creative advantage to foster a working environment that encourages knowledge to be mobilised for effective creative production and shared learning (discussed in section 7.5); and the knowledge reputation of the

firm built on previous production successes that opens doors with key network partners (discussed in Chapter 8).

As has been previously noted, the specialist knowledge of a production firm usually begins with the professional expertise of the founding partners. Such knowledge is only valuable as long as it remains congruent with the external environment. Whether this specialist knowledge evolves with external market forces depends on the ability of the senior managers and other core staff to continually learn about customer needs and the competitive context.

It was argued, in the last chapter, that the ability to learn in network contexts in the television industry depends on effective learning relationships. The collaboration literature tells us that individuals are more likely to enter into learning relationships where there is the prospect of mutual learning (Badaracco, 1991). The results from this study suggest that a firm with a reputation for being knowledge-rich appears to find the process of brokering external knowledge easier. A firm's unique knowledge resources form a *knowledge hub* that is the organisation's internal knowledge base. It is this knowledge hub, working in tandem with an effective learning context, that acts as a beacon that directs and attracts other knowledge resources to a television production firm. It takes time and considerable management effort to develop internal knowledge resources and so incumbents enjoy a considerable knowledge advantage over new entrants to television production.

7.4 Knowledge Brokering

Having assembled the firm's knowledge resources the next key dimension of the Knowledge Chain in television production is knowledge brokering. The role of brokers in network organisations in identifying network agents and facilitating network interaction was highlighted by Miles and Snow (1986). However, if organisational learning is to be achieved in fast moving, fluid network contexts, the broker also needs to be able to unlock the knowledge of others to ensure the firm has access to fresh strategic insights for product innovations and market opportunities.

Hargadon (1998) argues that knowledge brokering is about the transfer of ideas from where they are known to where they are unknown. Knowledge brokering potentially provides access to ideas, and facilitates learning, linking of knowledge and knowledge utilisation (Hargadon, 1998). Access to ideas and linking of knowledge it has been argued is very much built on interpersonal rapport in the television industry. Production firms that are using knowledge strategically are developing multi-level learning networks that build on a broad base of learning relationships for knowledge leverage. Figure 7.2 illustrates a simplified version of such a multi-level learning network.

Successful television production firms seem to compensate for limited in-house knowledge resources by building a wider multi-level learning network. This strategic architecture is akin to that advocated by Kay (1993) for knowledge development. However, in the context of network production, various levels of network brokers undertake knowledge brokering, including individuals that are

external to the firm. Knowledge leverage is therefore obtained from building a wider learning network than a firm could directly broker. Leverage is a key part of maximising the impact of scarce resources (Hamel and Prahalad, 1989).

Figure 7.2 A Multi-Level Learning Network in the Television Industry



Such relational armoury is initiated by internal, primary level knowledge brokers, who over time, forge a wide network of learning relationships with intermediate (secondary, tertiary or below) levels of external knowledge brokers. These relationships can be likened to those developed within a hypertext organisation between senior managers and middle managers (Nonaka and Takeuchi, 1995). However, whereas in hierarchical organisations, it was noted in Chapter Three, that middle managers can act as 'knowledge engineers' (Nonaka,

1991) synthesising the tacit knowledge of senior managers with that of workers to make new explicit, organisational knowledge, thereby, amplifying knowledge flows around the organisation, in multi-level networks it is through a web of external, intermediary knowledge brokers that access is provided to the learning of more knowledge workers than a single television production company could hope to directly employ or broker. Multi-level learning networks thus represent a key source of knowledge leverage for de-layered, and restructured production firms of all sizes.

7.4.1 Primary level network relationships

Primary level network relationships are of high strategic significance and thus are normally brokered by the managing director, partner/director or senior manager of an independent production company. For larger production firms primary network relationships are maintained by the managers concerned with production, for example, Directors of Production and Executive Producers. The network partners considered to be of primary importance by production firms were discussed in Chapter Six and include key programme buyers, production talent (such as key writers, producers, cameramen and front of camera talent), production partners (such as overseas production firms) and for niche producers viewer links are also key. It has been shown that the ability to rapidly broker these strategic external knowledge partners is a key issue in securing the confidence of commissioning executives and developing viable programme ideas.

Effective relationships with programme buyers build customer capital (Stewart, 1997). Programme suppliers armed with such relational advantage can more accurately identify programme demands and the degree to which those programme demands are already in the process of being met. Such knowledge can improve boundary spanning to avoid unnecessary duplication and waste. Types of customer knowledge that were reported to be particularly important in television production were: an understanding of the programme buyer's strategy and the schedule that underpins that, and the specific weaknesses and holes in that strategy. This knowledge provides a basis for deciding if and how the firm's capabilities can be used to develop programme concepts relevant to the buyer's needs.

The reciprocal understanding between some programme buyers and programme suppliers is based on a genuine knowledge about what the other demands to succeed. This knowledge takes time to develop and is built on trust, as noted by many informants, and outlined in the quotes from managers below:

"What you can earn by having a reasonably successful track record is access to quite a few key positions, I think, which means that we have a better idea than a newer, smaller company would as to what is being looked for and what is not being looked for, what is actually already in development at a much more advanced stage. So we probably get told or can discover 'don't bother to do that.'"

"I have made 17 of them [the programme] and so it is natural that they would come to us because...we have the expertise in the area. They know [the broadcaster] that we will bring it in on budget and you know they know that in the end it will probably be made up against quite a tight deadline because I have made such a lot of [the programme] before. When they see a first rough cut there will only be minor changes needed because we know exactly how they think."

The previous quotes illustrate that customer knowledge can reduce redundant development costs, as outlined in Chapter Five, and support effective production built on shared quality standards between programme buyer and supplier. Clearly, because it takes time to develop a relationship built on trust, such relationships again provide incumbents with advantages over new entrants.

Talent relationships are another key part of an organisation's learning network. The majority of these relationships are managed on a freelance basis in television. The experience of the television industry suggests that it may be the duration and depth of a worker's relationship with a firm, rather than being a core employee per se, that may be crucial to forging the mutual trust and understanding necessary for organisational learning.

Managers reported that freelancers that worked repeatedly on a firm's productions gradually developed a knowledge of the company and the way it worked in terms of the norms, culture, values, management style and particular, processes, systems and procedures. This contextual knowledge made these

freelancers almost like quasi-employees able to fit readily into the working environment of the firm. The importance of contextual company knowledge was discussed by several managers of different production firms:

"Yes, I mean we do have a lot of the same people coming back again ... and that works well because they know how your systems work, they know how the ordering works, the accounts work, they know how [the partner] and I work."

"I think that the way that people approach their jobs it is very important and their knowledge of the company is very important."

"The people we like working with on the programme side are the people that know [the company] and have knowledge of the way we work and what we want is quite important."

In Chapter Three it was noted that the importance of contextual knowledge is beginning to be highlighted in the organisational learning literature (Cole, 1998). The results of this study highlight the importance of contextual knowledge in contexts of network production. Freelance production workers were considered more valuable if they could contribute their professional expertise and contextual knowledge of the way a firm worked in terms of its strategic objectives, standards and values. This suggests that developing contextual knowledge of production firms may be as important as honing particular production skills for freelance workers. The need for reliability at all levels of

television production may explain why freelance workers often work on a recurring basis for organisations they know and by whom they are known.

7.4.2 Lower level network relationships

Primary relationships are strategically important, however, in practice the number of such linkages a firm can maintain is dependent on the number of senior managers and the amount of time available to such managers to maintain existing relationships and build new ones. In practice, for a small/medium production firm the responsibility for maintaining learning relationships may rest with just one or two managers and so as the number of such relationships grows, the energy and time required to maintain a firm's learning network increases. Yet senior managers in television production firms are already extremely time pressured. It has been shown that such managers are required to invest considerable time in developing their relationships with customers for new commissions and in ensuring quality control on ongoing productions. Consequently, in order to widen the learning net whilst circumventing these managerial time constraints, managers can informally rely on lower level knowledge brokers to extend the relational armoury of the firm. By utilising external, intermediary knowledge brokers a firm can delegate some of its knowledge brokering, thereby cost efficiently growing the learning network of the firm.

Lower level network relationships arise when learning relationships are brokered by individuals external to a production firm. The lower the level of external network broker (as depicted in Figure 7.3) the more indirect the relationship with a firm. For example, a freelance producer, with whom the firm has a primary network relationship, may have forged their own relationships with programme buyers, talent, partners or viewers that are not directly known by the firm. By working closely with that producer the firm can profit from any secondary network partner links that producer may have as noted by this informant:

"And one of the good things about bringing in external producers is that they bring in new people we haven't worked with before and we will say 'hey gosh what a brilliant designer' or 'she is a great make-up artist we have never come across her before' or you know, 'what a good lighting designer'. So there is actually a beneficial side to that."

If the network partners of that producer, for example the designer, are themselves connected to knowledge-rich individuals further tertiary-level network partners may be developed for a firm in time.

Lower-level relationships may remain lower-level, in that, a third party continues to mediate any key knowledge or ideas between the lower-level network partner and a firm. However, such relationships can eventually be directly brokered by a firm to become part of the firm's primary learning architecture. Lower level network relationships multiply organisational learning in fluid network contexts. The senior managers of a firm can thereby gain access to the knowledge of individuals that were not previously known to the firm.

Thus, building a multi-level learning network is instrumental to growing a firm's relational armoury for learning.

Firms consciously trying to establish learning networks assess how well connected primary network partners are before deciding which relationships to develop for competitive advantage. For example, in the last chapter it was shown that building relationships with well connected talent was a key issue for firms. These relationships are dynamic because they change in terms of their strategic importance over time. For example, as a talented individual becomes more sought after, it makes sense for a production firm to move from a secondary relationship mediated by a secondary level broker to a primary brokered relationship with that talent in order to boost the firm's relational advantage.

7.4.3 Knowledge relevance

Another key challenge for television production firms, given a high level of environmental uncertainty, is maintaining knowledge relevance. Again, knowledge brokers have a key role here. Knowledge relevance ensures that an organisation continues to have the knowledge necessary to support its competitive strategy and business development plans. In the television industry, an environment of rapid change makes keeping pace with competition, technology, and programme topicality an ongoing challenge. In an environment of uncertainty, the experience of the television industry suggests that the key strategic, knowledge development issue is facilitating ongoing organisational learning rather than auditing existent knowledge.

Knowledge management, as it is developed in much of the strategy literature, focuses on knowledge ownership and audit in the sense of trying to acquire, stockpile, codify and measure all available knowledge as a resource. For example, Davenport and Prusak (1998) adopt a knowledge management perspective and contend that knowledge exchange and combination is facilitated by creating more effective internal knowledge markets where workers are encouraged to share knowledge. This might be achieved by informal networks but supported by information technology, reward systems and appraisal systems in organisations to encourage knowledge sharing.

The notion of the employed knowledge worker being encouraged to share knowledge in an intra-organisational knowledge market reinforced by appropriate remuneration, training and performance appraisal is far removed from the dynamic operational context of television production where the majority of workers are freelance, and, therefore, are theoretically excluded from the carrots and sticks of the internal labour market. Knowledge development in television production, is more complex because many of the assumptions that underlie much of the existing knowledge management literature do not hold in such a fluid context. For example, given the tacit nature of many production and commissioning skills much of the knowledge that underpins the industry may not be readily codified for explicit transfer. It has been argued herein that this is not the type of industry where 'one best way solutions' developed by knowledge management support competitive advantage, as those firms that are thriving are innovative in their programming solutions and development ideas.

Furthermore, knowledge development and the creative process are inextricably linked in the television industry. The firm that can harness its knowing in a focused way can centre its creative capabilities on areas that potentially will bring more added value to the customer and viewer through new programme concepts. Success with audiences always contains an element of risk, but in certain genres, viewer success is particularly risky. For example, comedy and drama were cited as particularly risky genres. Buyers seek confidence from programme sellers. It may not be possible to guarantee creative success given the vagaries of the viewing public. Firms can, however, reduce the risk by achieving a higher proportion of reliable content that delivers anticipated audiences. Maintaining knowledge relevance appeared central to achieving this goal. Given dynamic conditions and the need to rapidly seize opportunities in the television industry, it may be better to focus on the process of developing and using knowledge effectively for value adding outcomes rather than amassing knowledge (Cohen, 1998).

In trying to maintain knowledge relevance, one key issue for firms is to decide whether to develop knowledge in-house or by looking to acquire businesses or hire in from the freelance market. As expressed by one executive producer:

"...a concrete example, we are looking at developing multi-media training support... once you have started thinking about what you do in relation to that, you can say what knowledge do I need to acquire or what skills do I need to buy-in? It seems to me that unless you

know a little bit about where you are situated to the product it is very difficult to know what is relevant in terms of your knowledge acquisition."

The experience of the previous executive producer suggests that being reflexive about the existing knowledge base of the firm and its underlying capabilities is key to clarifying the starting point of any knowledge development strategy. This links to the importance of detecting error in one's perceptions of the world as highlighted by Argyris and Schon (1978) and Senge (1990) and this begins with an organisation having a clear idea about its current reality. In the case of the television industry, firms are known by their brand and so extending into new products or markets where one's knowledge is merely average can be a high risk development strategy. As expressed by one independent producer:

"So all the three strands that we are doing here are really, you know, things that I have experience and knowledge and ability to grow myself, in a hands on way. ... I wouldn't do business just for the sake of it. If someone came to me with a cookery programme or a comedy programme I would say 'no' because I wouldn't know."

The knowledge of workers in the television industry needs to be updated if it is to remain relevant. Professional knowledge might include the knowledge of a particular genre, expertise in developing hybrid forms of programming, and specialist knowledge of production techniques to which one can add one's

contextual knowledge of a firm. Often this was a unique tacit knowledge based on the career path of an individual.

Specific specialist, contextual and relational knowledge needs renewing through on-going learning. Although this often happened on an ad-hoc basis, some firms were trying to manage this process in a more explicit way at the organisational level. For example, the informant below highlighted the importance of learning focused on strategic priorities, in this case, product and market development:

"...Another sort of knowledge that we need is what sort of - in our chosen area ..., lots of trends are coming up that we need to lock into and I have locked into them in the past by accident, actually, and I am now trying to discipline that experience. To give you an example, what I am doing for [the broadcaster] at [the channel] in the autumn is that I am arranging a symposium here for his people and my people and we are getting people to come and talk to us here about ...because I want to feed that knowledge into the creative process and get us more focused and inventing new formats and ideas for television."

Having a focused approach to knowledge development supports learning that is relevant to the firm's business and development strategies. Knowledgeable workers are a key issue in network production to developing competitive intelligence, production ideas and new development opportunities. In the next

section, the methods television production firms are using to foster learning relationships with knowledge workers, as defined in Chapter Two, are explored.

7.4.4 Knowledge workers, knowledge options and knowledge hubs

In the television industry, people remain the key asset as expressed by these managers:

"The owners of this company consider people their only asset. You know there is nothing more important than people - creative people it is what matters."

"Every single person is extremely hand picked because the most expensive thing in production is people, ...our overhead is probably 75% people."

The interesting thing about television production firms is that they currently operate on a basis that appears counter to what the theory on organisational learning recommends; namely that key types of knowledge workers that are in short supply should be developed within the firm (Stewart, 1997).

The majority of knowledge rich workers or 'talent' (front of camera and behind the camera crew) in the television industry are competed for by firms in the freelance market. To a large extent, competition to attract such workers follows from the economic forces facing the industry that were discussed in Chapter Five. The creative flexibility offered by network production is another key factor driving the use of freelance labour in fluid television production teams.

This outsourcing of key human resources in the television industry also appears contrary to the organisational learning literature that emphasises learning by 'permanent' employees (Drucker, 1969). In the Information Age we are told that employees matter as never before to the competitive success of organisations (Senge, 1990) although, in practice, since the 1970s, an increasing proportion of the UK and US work force have been working on temporary or fixed term contracts (Barnatt, 1999). In Chapter Five, it was noted that the proportion of workers in the UK television industry that are permanently employed as core workers has been falling, with firms assembling production crews largely from the freelance market. Several researchers have outlined the industrial relations aspects of these changes that are beyond the scope of this thesis (see for example, Nolan and Saundry, 1997). This shifting employment practice by firms appears to be largely neglected, however, by much organisational learning literature that seems to assume a neatly bounded firm with managers responsible for internal workers.

The present labour arrangements in television may well turn out to be transitional, however, as more industries look to outsource a greater proportion of their labour, the television industry as currently managed offers some insight into how flexible production built on networks of core and transient workers impact on organisational learning.

Human capital it is contended (the talent and intellect of individuals) is a vital component of the intellectual capital of an organisation (Stewart, 1997). In uncertain environments it is not always possible to identify what the key strategic knowledge and skill requirements will be in the future, therefore, permanently employing specific workers, with specific knowledge, may be a high risk option. For example, a representative from a training organisation pointed out that as recently as the mid 1990s, it remained unclear which media would lead in the digital age and so skill requirements and training priorities were uncertain:

"We recently, about a year ago, brought together our working groups on graphics, on animation, on post-production ... and we pulled in people who were at the forefront of using kind of converging technologies to get them to actually sit down and understand it, and they couldn't, and wouldn't because even though they were the best that the industry had, they still felt that things were changing so rapidly that it wasn't possible to actually identify what the knowledge would be."

This example raises issues of the technological and market uncertainty surrounding digital convergence. Given such levels of uncertainty, having knowledge options on different types of human capital, into the future, may be strategically advantageous in helping a firm to maintain knowledge relevant to shifting environments. Knowledge options are developed via flexible links with

emerging talent enabling expertise to be secured for future productions or competitive or market insights to be tapped for business development. The ongoing learning offered by access to a wide range of external human capital counters the threat of getting locked into the knowledge base and core competencies of yesterday, that in time become the core rigidities of tomorrow (Leonard-Barton, 1992). Forging knowledge options on external, knowledgeable workers may facilitate strategic flexibility.

Flexible employment arrangements in the television industry enable organisations to work with a range of workers and, thereby, to convene specific combinations of knowledge for specific programmes. Re-configuring successful production teams can be a key source of advantage for firms and relies on effective knowledge brokering. The shared understanding about the programme concept developed by a specific network configuration of workers, combined with the trust forged between team members appear particularly important in developing some types of programming, as expressed by this manager:

".. each time we have got the same crew back: the same production manager, the same producer, the same two writers etc... and that is really of the essence."

Firms can assess individuals on the job to see which have the knowledge and skills that fit most closely with knowledge needs of the firm in terms of its competitive and development strategies. The knowledge such workers have might be relational, specialist professional knowledge, or contextual knowledge of the culture and ethos of the firm to fit with a small team of core workers.

In television production, the range of core staff that are permanently employed by the firm varies considerably depending on the scale and scope of the firm. For example, at a small independent production company the only core employee may be a receptionist to support the work of the management team. As a firm grows other production support staff may be recruited as core workers. For example, given the level of documentation associated with productions, firms as they grow may need more production support staff from administrators and office managers, to development and finance personnel. Large programme makers may have a larger number of in-house production support and management positions and are more likely to have a dedicated personnel function. However, as one personnel manager from a large producer-broadcaster noted even large firms keep "very little in-house" in terms of core production workers.

A significant proportion of core staff in the television industry are administrative. Some might question the extent to which such workers can be classified as 'knowledge workers' (Drucker, 1955). Indeed, according to Stewart's (1997) framework of human capital, outlined in Chapter Two, such administrative workers could be argued to perform tasks that are easy to replicate and of low value added and thus theory suggests that where possible such tasks should be automated. However, this prescription ignores the dynamic development of workers. For example, informants provided examples of

receptionists being given the opportunity to gain production experience and move across into more creative production work in the television industry. This suggests managers should be cautious about generically classifying certain types of workers into 'knowledge' and 'non-knowledge' labour because this may exclude a large section of human capital from contributing to the firm's strategy. Such classifications ignore the fact that individuals can become more knowledgeable over-time or equally that an individual's knowledge base can lose its relevance in time. Indeed, the organisational learning literature stresses the benefits of ongoing development opportunities for all recognising the shifting relevance of knowledge over-time (Pedler et al., 1991).

Despite flexible labour, core workers retain a key role in television production firms in developing new directions of development (Ansoff, 1965). When a production firm is small, its reputation is built on the skills of a few significant individuals. For a firm to develop into new areas of programming appears to necessitate having at least some core workers with a knowledge of and reputation in the chosen genre, product or market for development. For example, one small production company manager described how the firm's efforts to develop documentary were paying off with the help of just one internal knowledge rich worker:

"I had a development assistant who was very, very strong on documentaries and factual and she really concentrated on that. She was with me for a year and [we] were just beginning to crack it. ... she then left and went to work for a company that completely

specialised in documentaries .. The serious factual we have had to leave, we can't do that and we have had to say right, we haven't got a track record..."

This quote highlights two key issues about knowledge in television. Firstly, expansion into new genres in television often requires having at least one core knowledge worker in that area to satisfy customer confidence and gain commissions. Secondly, workers understanding the importance of developing their personal knowledge base, gravitate towards a knowledge hub because this represents a context where their particular specialism is concentrated and valued. In this example, the core worker moved to another firm to gain greater experience of documentary work by working in a dedicated knowledge hub that attracted other documentary specialists from whom she could learn. This suggests that offering a knowledge hub may be a key factor in attracting mobile, knowledge rich workers to work with a firm, in the absence of being able to offer an enduring employee relationship, because it enables an individual to leverage their learning.

Within a knowledge hub, core workers and freelancers can maximise their own learning and knowledge development through exposure to concentrated learning opportunities via more projects involving a greater variety of experts within their specialism. In practice, a knowledge hub may gravitate around no more than one or two highly experienced workers who attracts a broad network of knowledge freelancers to work with a firm. Working in a knowledge rich context can enhance one's professional knowledge reputation within the television industry

because specific firm specialisms are widely known. Firms that can create a knowledge hub for a particular type of programming or related multi-media activity not only improve the perception of the firm to the customer, but also appear more likely to attract higher calibre, knowledgeable workers to work with them. A knowledge hub, therefore, supports a knowledge rich learning context. For example, a successful incumbent comedy production firm is more likely to secure the best front of camera and production workers to work with it on specific commissions than a firm diversifying into that area. Therefore, a knowledge hub: reduces the power of knowledge rich, freelance workers in that they have much to gain with working with the firm, and creates barriers to entrants, in that, incumbents with a focused knowledge hub enjoy enhanced knowledge reputations with programme buyers.

7.4.5 Freelancers, knowledge investments and attachments

Freelance workers are a heterogeneous mix in television. Ranging from the work experience novice, to the highly sought after internationally regarded executive producer or director. Between those two extremes are the many professionally competent individuals that move from contract to contract living off their unique knowledge base and skills. Some freelancers have spent their careers as freelancers, others are the result of restructuring in the large producer-broadcasters in the 1980s and early 1990s. Freelancing is and always has been the route to experience for many aspiring writers, producers, directors. Individuals competing in the freelance market have to be entrepreneurial to survive.

Different types of production require different knowledge and skills. The level of specialist professional knowledge, contextual knowledge and relational knowledge needed by freelance workers varies depending on the nature of the production. For example, certain types of production, such as game shows, are mass produced to very tight budgets and time scales. This may entail shooting a run of shows in a day and tight cost control. For such productions the ability to get on with the work efficiently and quickly may be key. Freelancers on such productions need to be: technically and creatively competent with standard professional knowledge; to slot quickly into the contextual environment having high contextual knowledge and to have the personal qualities of being easy to work with and adaptable (sometimes referred to as 'emotional intelligence', Goleman, 1996). Contextual knowledge and emotional intelligence are valued in freelancers to achieve the fit with the firm and effective social interaction crucial to team based production. Freelancers need to be good to work with in terms of their flexibility and adaptability to the different ways of working required on different types of programmes and by different firms. One informant highlights the ability of mobile workers to adapt to changing production contexts.

"What is interesting about this industry is that because these freelancers move around so much they are actually extremely good at adapting,.... So they are very good at adapting to systems and management."

A key part of brokering knowledge is ensuring that those with the best ideas have their say and get learning experiences. Novice development is an issue for any industry if its future skills base is to be world class. There was some concern expressed by some informants that given the need for reliable content some novices may only be permitted to work on mass produced programmes and this may detract from the development of specialist production knowledge:

".. the feeling that younger people coming into the industry, those sort of media graduates or whatever are sort of launching the coming ideas, either go into very high volume, low budget production and are just sort of there as assembly line workers or they are just brought in and their ideas, that they don't get a fair crack or whatever...."

The issue of novice learning is discussed in more detail in Chapter Eight.

By contrast, on high budget productions, such as quality drama, the requirement for quality may necessitate a higher proportion of the freelance production crew to be experienced experts with high professional knowledge. The ability to slot effectively into the contextual environment is still valued. However, emotional quirks may be more tolerated in highly creative individuals making moderate emotional intelligence sufficient. Freelancers working on high quality productions are concerned about the project in terms of how it will reflect on their professional kudos as described by one manager:

"I suppose with freelance staff you would have a good cameraman that is why they got the job and to them their reputation is more important than anything else...."

Being the first port of call for individual workers who are knowledge rich is vital because such individuals can potentially add real value to a firm's productions by providing insights into where ideas might be placed, fresh ideas on production techniques, or by bringing new talent to the attention of the firm. Firms may be eager to forge *attachments* for continuity and learning with talented freelancers. Attachments are based on ongoing relationships with knowledgeable workers brokered by a primary knowledge broker and fostered by recurring work contracts with a given firm. However, talented freelancers recognise that their knowledge and experience is their power and having survived outside the context of a firm such experts may resist and even resent attachment. An executive producer describes this attitude in one freelance talent:

"He will go off onto the next project and may come back to us in the future but I don't expect he feels that his long-term is here. He is a bit of a mayerick and he goes around ..."

This suggests that some freelance workers come to relish the professional independence contract work offers and may not want to be more tightly associated with a given firm. This does not necessarily matter from a learning

basis provided that a firm can still work on an intermittent basis with such individuals or find other ways of profiting from their knowledge. For example, one manager described the potential for innovation from working with a knowledge rich cameraman:

"Now the cameraman... is the greatest photography cameraman in the world. A brilliant guy in all kinds of ways. He is very intimidating to work with because...he demands to know when we are filming: how we are filming, what we are filming, why these characters. He demands to understand the film as a writer would understand it, as an artist would understand it, as - not only are those questions intimidating because half the time he calls you haven't got good answers but they put you under a lot of stress. But it is a very functional stress because he is also trying to find his own answers to this ...and so he is working on the same problem all the time."

It is this obsessive questioning and the search for new solutions that can achieve production innovation and quality. In many ways it is akin to the way that children challenge our assumptions about the world by asking questions about everything they see for the first time. Although the 'why' question can be wearing for the recipient, it can be beneficial for both learner and learned in that it revisits established and sometimes inferior assumptions on which current practice is based. Such probing may facilitate innovative solutions or generate ideas for new programme concepts.

One method used by television production firms to invest in the ideas and programme innovations of entrepreneurial workers was by investing directly into such workers' new business ventures. The advantage of such investments, for incumbent firms, is that if the new business venture fails it does not undermine the reputation of the knowledge hub of the incumbent firm, thereby reducing the risk of damaging the incumbent brand. Investing in the businesses of other knowledgeable workers enables a firm to invest in new products/markets without having to develop an in-house expertise in that area. In this way a firm can spread its risk across genres or programming areas without jeopardising the core business. Such investment strategies extend the firm's knowledge options into new genres or production areas without undermining the original firm's brand if the new venture fails.

This technique of investing in the knowledge of others to multiply income streams has been used in other creative industries. For example, in the music industry, Madonna has invested in emerging new music talents to widen her income base beyond her immediate recording success. In such cases, the knowledge brokers in the original firm fulfil a role more akin to a knowledge investor providing knowledge and investment funding to support a new knowledge enterprise. One informant described how their firm had backed various attached workers in their quest to forge new production firms:

".. the really good ones do want to sort of branch off on their own, they want something in their own right and the only way they can is if people like us set them up in business,.."

By assisting knowledgeable workers to establish a complementary business, firm's can claim a stake in tomorrow's knowledge based businesses whilst preserving the knowledge hub from which they currently profit.

However, not all knowledge workers have the skills or desire to run a production firm and so several firms spoke of working on a recurring basis with such freelance workers. Attachments enable a closer link to be forged over time with key individuals that have proven their expertise on specific firm projects. Such attachments involve a sustained link between a firm and a freelance worker even though an individual will work on an ad hoc basis on other projects for other firms as noted by these independent production company managers.

"Some of those freelance people you would consider core people as well because they are much more of a permanent freelance. Half a dozen people perhaps people that even though they are freelance probably work 9 months of the year for us."

"There is a reliance in television production on people that you know. You have to be able to trust people that you work with. This leads to repeat contracting."

Knowledge brokers feel more secure working with a known individual because they have witnessed their knowledge and talent in action. This suggests that the flexible firm, as originally described, in terms of a limited number of core, employed workers supported by contractual, periphery workers, being brought in on an ad hoc basis, may not fully reflect the variety of knowledge relationships forged by television production firms.

Attachment is based on the logic that it may be safer to work with the workers who you know have got the knowledge you need, rather than risking working with unknown workers who claim to be knowledge rich. The individual that is repeat contracting for a firm can develop the contextual understanding of the firm that managers claim is so important. This can make an attached worker more valuable than a new or recent core recruit.

Financial logic suggests that expensive directors, writers, researchers, producers, editors, and cameramen are cheaper if hired as required, but there may also be learning advantages from such arrangements because they offer the prospect of a learning multiple. For example, two managers discuss the wider importance of attachment relationships:

"I have at least a 10:1 ratio of people in the building to outside the building who are on the phone developing, talking, thinking, preparing and when we have got a contract they come in and work.

So at least 90% of my life is sort of outside the building, nurturing projects with people and other companies and that is what most of my day is."

"I could add that there is a huge additional set of relationships that are [the company] relationships. They [the attachments] know what our history is, they have worked on our previous productions. We are in various levels of negotiation, discussion, planning, organising with and that could run at its most peripheral level to 40 or 50 [people]."

Attachments keep the costs of human capital down, provide knowledge flexibility, and facilitate learning for programme innovation. Workers that have an ongoing relationship with a firm, but enjoy other work experiences, in other contexts, can bring their new experiences and learning from other productions for use on the firm's productions. Attachments potentially enable knowledge leverage in the firm. A production firm with 10 employees, may have a further 90 attachments from which to learn. If all such relationships were on a full-time employee basis (an unlikely scenario in the television industry) a firm would only gain access to as many brains as it could afford to employ on a long-term basis. Furthermore, such core workers may be less alert to external changes being bounded more closely to a firm. One key advantage of network production, in terms of organisational learning, is that it offers greater scope for knowledge flexibility through flexibility of human capital.

Attachments provide a half-way house for firms between the completely detached freelance worker and the employee by combining knowledge flexibility with greater reliability of supply. In television production, specific skill or talent shortages have created an impetus for firms to create specific mechanisms to encourage and reward high levels of attachment with knowledge rich individuals. As noted by one informant:

"If you look at some contracts now available for freelancers working for the bigger companies they are starting to do retainers, on a first call basis because what is happening is that they are not necessarily able to get the skills, when they want them, how they want them, at the price they want them."

Attachments were being facilitated by managers in a number of ways. One way was for firms to provide as long a run of work for freelance talent as possible. For example, one senior manager describes one producer-broadcaster firm tries to provide longer work opportunities and development opportunities.

"...there is a department which I used to run that essentially controls the assignments of programme makers to ensure that we give people the longest employment possible and to develop talent..."

Such an approach cuts across the core/periphery distinction of the flexible firm and suggests that workers can adopt a half-way position between employee and freelance worker if there is the prospect of mutual gain from knowledge sharing. Knowledge shortages, in the form of skill shortages, have placed companies that have access to workers with scarce capabilities in a powerful position. For example, in comedy there is a perceived shortage of good sitcom writers. Firms recognise that having attachments to such talent is a major part in getting a broadcast commitment as noted by this informant describing the benefit of attachments with a key writer:

"You know she really is a fantastic writer and once you have got her on board it is not difficult to get a broadcast commitment and to get great directors and great actors to work with you because everyone desperately looks for a good script."

Another way of supporting ongoing attachments with individuals is for a manager to use their knowledge network to secure contracts for knowledgeable workers at other organisations during periods when an individual is not required by a production firm. This method of supporting attachments between the individual and the company has the advantage of enabling the individual to continue to learn elsewhere between a firm's productions. The manager of a production firm describes how this works in practice:

"Likewise one or two of our best producers are people who have actually been with me 5 or 6 years and I have managed to hang onto them, but not necessarily being able to afford to employ them all year round. In the past, I have also arranged for them to go and work on [a producer-broadcaster show] or other programmes... and got them around so that they have got different experiences on their CVs."

A final way of encouraging attachments with knowledge rich workers identified by this study was profit participation schemes. Providing a stake in the firm's success encourages continuity of the knowledge relationship and greater incentive for knowledge sharing, particularly for those sought after freelancers who did not necessarily want to limit their work options and learning to those opportunities offered by one firm. Several firms were trying to attach to such freelancers for the majority of the time by providing incentives to encourage greater continuity of employment. One of the ways that production firms can attract key talent is to provide a share in intellectual assets as noted by these managers:

"Well how you bridge the difference is by hanging onto the controlling rights or assets of that [programme] and making them profit participants and giving them certain control of the details."

"Then we have a half way house, which is because the main problem in this industry is trying to buy continuity of employment because

basically everybody in this industry is a nomad, and so in order to try and create an atmosphere where people can flourish and to give them some security, we have a system whereby - or people who work for us get [x] % of the production fee, then we also have a profit share."

Profit participation is designed to encourage greater continuity of employment and retention of a knowledge relationship with key workers that might otherwise be severed. Such schemes may appeal to those who see themselves as entrepreneurial by giving them a share in the value that they help to create.

Attachment arrangements place primacy on the relationship with knowledge, rather than the ownership of it. Attachment mechanisms are not arrangements that can be imposed on the individual, freelance, knowledge worker because such workers are only responsible to the organisations for the duration of the project or contract. Attachments acknowledge and treat the external knowledge provider more as a customer than an employee thereby redefining the relationship with workers.

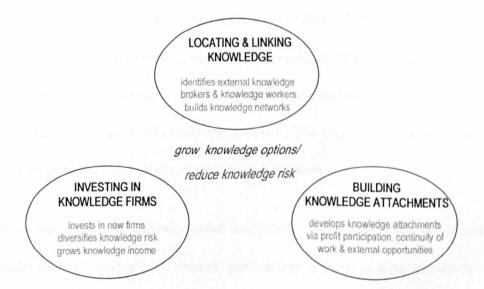
7.4.6 Knowledge brokering task

Given the uncertainty of knowledge demand and supply in television production, firms need to develop arrangements that manage knowledge risk and foster learning. This research identified three key knowledge development roles for knowledge brokers designed to reduce knowledge risk and grow knowledge

options building on human capital. The three knowledge brokering tasks for a managers of television production firms are summarised in Figure 7.3.

The first knowledge brokering role of the manager involves locating and linking knowledge rich individuals to develop multi-level learning networks from which to rapidly put together effective production teams and to monitor the changing external environment. To establish oneself as a primary knowledge broker it is vital to establish a network of customer (programme buyer) connections (as discussed in chapter five). As a primary knowledge broker the manager identifies those individuals that are particularly knowledge rich. Individuals might be knowledge rich because of their prior contextual experience, their professional knowledge or because they have developed their own learning network they can contribute to a firm's relational armoury.

FIGURE 7.3 KNOWLEDGE BROKERING TASKS IN TV PRODUCTON FIRMS



Access to knowledge rich individuals is the starting point for reducing knowledge risk and growing knowledge options. Having contacts with such individuals enables their knowledge to be fed into your production bids and production cycle. Cohen and Levinthal's (1990) concept of absorptive capacity captures the capacity of individuals and thereby firms to absorb ideas, skills and techniques from external production partners. This absorptive capacity appears to be enhanced the deeper the relationship and shared understanding is with external workers. Explicit knowledge, for example about customer needs or competitors offerings is more likely to be shared if there is regular interaction between the knowledge broker and the knowledge freelancer to develop mutual trust (Nonaka and Takeuchi, 1995). One way to strengthen the relationship with knowledge rich individuals is for the manager of the production firm to build knowledge attachments with key external freelance workers that add real value to the business.

Attachments can develop from the relationships that are fostered from repeat contracting and involve supporting rising and established talent, and enhance the knowledge link to the firm by a range of inducements. Some of the firms in this study were using profit participation schemes and assisting freelancers to find other contracts using their knowledge network. The large producer-broadcasters may also use fixed term retainers to lock in key talent.

Finally, for those with a real proven knowledge base it may be beneficial to consider making them a core worker, particularly if there is tight knowledge fit with the firm's brand. However, the firm may lack the resources to offer permanent employment or the individual may resist entering the confines of an

employee relationship. Workers reliant on their knowledge for work are more concerned with being entrepreneurial than finding security of employment and thus they may welcome some form of backing to assist them in establishing their own firm. The incumbent firm faced with the prospect of a severed knowledge relationship or offering support (financial and/or advisory) to individuals to forge new knowledge hubs may decide the latter offers better learning advantages and ongoing business development opportunities. The benefit to the incumbent firm is that they spread their knowledge risk by having a stake in a new knowledge venture that offers different sorts of programming and extends their knowledge options to include a new hub of network contacts centred around the new venture. Investing in knowledge businesses is about sharing risk, knowledge and profit.

7.5 Conclusion

In this chapter the framework of the Knowledge Chain has been introduced to help explain the key learning issues arising from network production in the television industry. The knowledge resources of production firms have been outlined. It was noted, in Chapter Two, that managers seek more insight into their role in facilitating strategic learning (Ruggles, 1998). The findings of this study suggest some specific knowledge brokering activities in the network context of television production and this expands our understanding of the knowledge development roles managers might undertake to keep knowledgeable workers mentally engaged with and committed to the work of the organisation if not actually full-time employed, a key issue in an age of mobile knowledge workers.

In network organisations knowledge brokers have a key role to play in facilitating learning (Hargadon, 1998). In this Chapter, the key knowledge brokering tasks of managers in production firms have been highlighted to explain how firms can forge multi-level learning networks to leverage learning, invest in new business opportunities and achieve via attachments knowledge flexibility combined with ongoing access to key knowledge. The experience of the television industry suggests managers need to think carefully about which relationships to foster and how best to do this.

The definition of a learning organisation, as outlined in Chapter Two, still holds for television production firms in that they appear to facilitate the learning of their members, but in flexible network contexts these members extend beyond the firm placing a high emphasis on the inter-company learning dimension of organisational learning outlined by Pedler et al. (1991). Having brokered strategic knowledge relationships, the resultant learning networks provide an opportunity for individuals and firms to learn. However, if this social capital (Nahapiet and Ghoshal, 1998) is to increase efficiency and innovation knowledge must be unlocked and utilised. Bringing together knowledge rich individuals does not in itself guarantee that strategic learning will take place. Unlocking knowledge in the television industry appears to depend not just on effective learning relationships, but also upon effective management of the creative process. The management of the creative process and the resultant knowledge outputs are discussed in the next chapter.

CHAPTER EIGHT

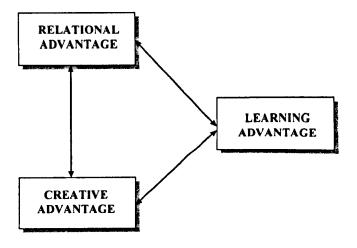
THE KNOWLEDGE CHAIN:

EFFECTIVE LEARNING CONTEXTS, KNOWLEDGE OUTPUTS AND KNOWLEDGE DEVELOPMENT CHALLENGES

8.1 Introduction

It has been shown that relational advantage supported by knowledge brokering can provide access to a broad range of knowledgeable individuals. However, for a firm to profit from the learning of network members to derive a strategic learning advantage it is also be necessary to find ways of unlocking the knowledge of network partners for product and/or market developments.

Figure 8.1 Learning Advantage in Television Production



The concept of *creative advantage*, outlined herein, captures the ability of a firm to effectively manage the creative process to provide the conditions whereby the knowledge of others can be unlocked and shared for short-term commercial

performance, experiential learning of network members and strategic knowledge outputs. It is contended, herein, that it is the combination of relational advantage and creative advantage that is paramount in deriving a strategic learning advantage from network production in the television industry, as represented in Figure 8.1. Many of the firms visited for this research, appeared to be both relationally astute and adept at managing the creative process for knowledge utilisation and learning.

If a production firm cannot generate ideas and harness knowledge to realise programmes that meet buyers' needs it will not last long in the competitive television industry. Effectively unlocking the knowledge of the production team improves the likelihood of delivering a programme that meets a buyer's needs for cost, quality and innovation, whilst at the same time increases the possibility of the production firm gaining strategic insights into emerging opportunities and threats.

In this Chapter, the remaining stages of The Knowledge Chain are examined. These stages being: the creative process, safe space learning, building relationships, learning contexts and knowledge marketing. In section 8.2 the creative process of television production is outlined to explain how creating an effective learning context around a knowledge hub facilitates the unlocking of workers' knowledge and experiential learning. In section 8.3 the role of safe space learning for organisational learning in network contexts is examined. The resultant strategic knowledge outputs a firm can derive from a learning advantage are then discussed in section 8.4. In section 8.5 the issues of building

learning relationships, knowledge hubs and learning contexts are addressed. In section 8.6 the role of knowledge marketing in forging knowledge reputation is summarised. Finally, the challenges of knowledge development under flexible network production in the television industry are outlined.

8.2 The Creative Process: Unlocking Knowledge and Experiential Learning
An effective creative process requires more than access to knowledge as
Armbruster (1989: 177) notes: "The creative process involves the acquisition of
knowledge and skills, the transformation of knowledge into new forms and the
rendering of those forms into a shareable product." This suggests that the
creative process needs to be managed with knowledge access, knowledge
utilisation and learning in mind. The creative process of developing and making
a programme is where experiential learning occurs for individuals and firms
engaged in television production. Consequently, the production process, if
managed effectively, can make a significant contribution to building the firm's
knowledge base (specialist, relational and creative).

To develop the concept of creative advantage it is necessary to first outline the creative process of ideas work in television production. The creative process underlying ideas work in television production is illustrated in Figure 8.2. The remainder of section 8.2 explains how the management of the creative process potentially impacts on strategic learning and knowledge utilisation.

8.2.1 Creative culture, people and ideas generation

Programme ideas are the lifeblood of a production company, as stressed by one informant:

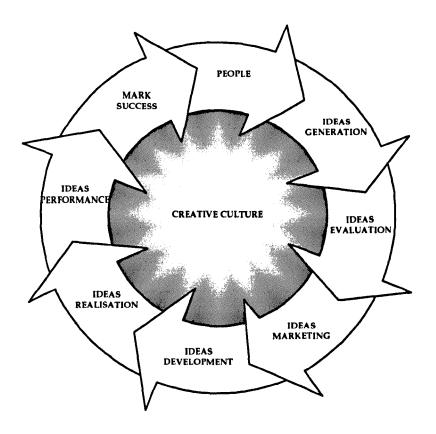
"...ideas are absolutely premium priority, number one commodities"

A key issue for production firms is, therefore, attracting people who either have innovative production ideas or who can help a firm to realise the full potential of internally generated ideas. Attracting people to work with a given television firm, it has been demonstrated, is in part a relational issue but also requires creating an appropriate working environment to support ideas work. As one informant suggested, what production firms may be selling more than anything else to network partners was a place "where people feel comfortable to create".

Creating a stimulating working environment was described as important by many firms if the knowledge of talented workers was to be unlocked and fully utilised. Phrases like "fun" and "cutting edge" as opposed to "neurotic" and "aggressive" were used by some informants to describe the characteristics of such a positive working environment. Several managers of production firms expressed this positive learning environment in terms of creating a "creative culture". So for example, the manager of one production firm noted that ideas generation was associated with a positive creative culture:

"What comes first is having the ideas and you need to have the right sort of creative culture."

Figure 8.2 The Creative Process of Ideas Work in Television Production



The creative culture is thus placed at the centre of the creative process in Figure 8.2 because it appeared to influence the whole of the production cycle in television, from the generation of ideas through to the way the success or failure of a given production was handled. In television, the creative production process begins with and relies on the effective interaction of production workers and so the creative process, as depicted in Figure 8.2, begins with people. Effective ideas work begins with brokering people with relevant specialist, relational and

contextual knowledge to fulfil the firm's production goals as discussed in Chapter Seven.

Having identified key knowledge rich workers, television production firms then require ideas for scheduling solutions. In order to stay ahead of the competition ideas are needed for: programme concepts or formats; how or where to pitch the programme concept; how to develop the programme concept into specific programme items; how to achieve the best audio-visual effects to realise the potential of the programme idea and so on. Ideas generation is thus a key strategic issue for production firms. An effective creative culture can encourage knowledge sharing for creative solutions, as noted by one informant.

"So we need a creative culture within the business. So you need to:
one, have people who are able to be creative, to think laterally, to
come up with ideas. Secondly, you need to organise so that you
frequently meet for brainstormings to come up with ideas. So you
need to do that in an organised way. Thirdly, you need people who
trust each other enough not to be frightened of peer review. The best
ideas come out of the most stupid remarks. People have got to be
confident enough to make those stupid remarks in front of other
people which are then chewed on and developed."

The previous quote suggests that an important feature of an effective creative culture is an ethos of experimentation and tolerance of unforeseen mistakes. Equally important is creating a setting where people are confident to voice their

ideas without fear of being ridiculed by peers or senior managers. Such a creative culture appears akin to the 'learning climate' ascribed to internally bounded learning companies by Pedler et al. (1991), as outlined in Chapter Two.

In the fluid organisational setting of television, it has been demonstrated that firms are more reliant on external workers. For example, some production companies are open to the possibility of sourcing ideas from external sources. Production firms reported receiving unsolicited programme ideas from freelancers, those individuals aspiring to enter the industry or members of the public. One informant noted how external production workers with whom the firm had a relationship can be a valuable source of ideas:

"They tend to ring up and say you know, we know that the BBC is looking for this, this and this, shall we sit down tomorrow night and come up with an idea?"

The previous quote illustrates that attached, external knowledge workers, as discussed in Chapter Seven, can undertake strategic 'boundary spanning' on behalf of firms in network contexts by providing knowledge of how ideas may be married to opportunities. Again, this is akin to the role ascribed to internal employees in the model of the learning company (Pedler, et al. 1991), but in the case of the television industry, the use of external parties to fulfil this role makes efficient use of internal manager's time and widens the learning network. This suggests that firms can out-source boundary spanning responsibilities to external

partners provided that those individuals have sufficient knowledge of the strategic direction of the firm to gauge what constitutes an opportunity or threat.

The knowledge hub of a firm and its resultant knowledge reputation, as outlined in Chapter Seven, is key to attracting unsolicited programming ideas from external people. Some firms readily worked with external individuals to develop ideas. However, some firms preferred to use only internally generated ideas because this enabled them to retain more of the equity in the idea. A key issue in a market where programme ideas are the basis for intellectual property.

Consequently, many firms were trying to encourage ideas generation within their organisation. The methods being deployed by managers to promote ideas generation varied considerably. In some organisations, firms formally brought together a range of workers to focus on ideas generation through techniques such as brain storming, or away days. Some production companies reported having dedicated development units where several people were specifically charged with developing ideas. However, some managers were sceptical about the success of planned approaches to ideas generation, as summarised by one informant:

"You can't tell people when to have a good idea".

Some managers argued that ideas generation is a more unmanageable and unpredictable process which cannot be assigned to a group of people between 9am and 5pm. Managers that queried the logic of managing the process of ideas generation instead favoured creating an open, informal environment where ideas

can emerge from any source or setting. For example, several managers reported that out of hours socialising could be an effective way of generating ideas and getting people to think laterally. This suggests that the context for and process of generating ideas are key issues.

The work environment or context offered by the firm through its creative culture plays a key role in enticing creative talent to work on a project, as noted by one manager from a production firm:

"... everything we do is bold and adventurous and rarely fails critically...and that encourages people to work. There are only certain places where that happens, that is less to do with being number one at the box office, or whatever, and they [freelance workers] are usually more interested in working where there is creative freedom that enables the development of ideas, to do something different ...and if you don't have that you will fail..."

Giving people space, and the opportunity to develop their ideas is a key feature of an effective creative culture. Many informants spoke about the best programming coming from those with a passion for production and how fuelling that passion (a key element in commercial and creative success) involves providing an appropriate work context:

"I think you try and give them some space. I think you try and not be endlessly pushing them into production, after production, after

production. I think you encourage them to follow their instincts, rather than purely what the market wants."

The creative culture provided by the firm and its relational advantage appeared key to the effective ideas generation matched to business opportunities that is crucial for commercial success in television production.

8.2.2 Ideas evaluation, ideas marketing and ideas development

Having generated a range of programme ideas, production firms then need to evaluate which ideas are commercially viable. The challenge of producing an innovative programme idea was highlighted by several informants, as summarised by one production firm manager:

"I mean hundreds of formats arrive on my desk each week and a lot of them are the same..."

Many programme ideas may have already been made before or be in preproduction at another firm. A production firm that has access to a multi-level
learning network, as discussed in Chapter Seven, will have more information to
draw on than a less well connected firm when deciding which programme ideas
to 'pitch' to buyers and which ideas to discard. The ability of a programme seller
to evaluate an idea is based on specialist professional knowledge, a relational
knowledge of the buyers' and viewers' needs, and an understanding of how the
programme idea fits with the development strategy of the firm as expressed by
one manager:

"... the criteria that one sets must include what one does and what one doesn't do. I want things that will run and run. I want things, if possible, that will give us a reputation for innovation. I want it to be quite original-if possible..."

Questions that managers ask in evaluating an idea include: is it a good show; something that will develop the knowledge reputation of the firm; can the firm afford to develop it and who will own any resultant intellectual property? Another issue in evaluating ideas is considering the existing knowledge reputation of the firm. Knowledge marketing establishes your firm as an expert, but this can be a double edged sword if this specialist reputation limits the type of work open to you. Whilst reputation and positioning can open doors, if a firm has developed a clear brand for certain types of programming diversifying beyond that may be problematic. One solution may be to work with other firms to diversify the activities of the firm. It was has been noted that some established production firms are investing in the business ventures of new talent to reduce the risk of diversifying into new areas. This process is outlined by one manager:

"...we are about to set someone up in business with their own little production company, but we will have a stake in [it]. They will pitch ideas under their own name and it will just be a subsidiary company of ours. So we are trying to release people with a bit more freedom to develop their own style and to pitch onto their own style because what is happening with companies like ours is that suddenly

everything becomes the same house style, you know... We provide people that want to start a business...they don't know anything
about running a company and we provide all the services. I would
contract all the staff, help them recruit, our legal department would
do all the contracts, our production manager would actually put a
producer manager in place for them."

Inevitably, there will be ideas that have to be culled. How managers tackle the culling of ideas is a key issue given that production firms are reliant on ongoing relationships with key mobile knowledge workers. The difficult inter-personal aspect of ideas evaluation and culling is noted by the informant below:

"to be to a certain extent the person who says: great idea but no one is looking for it; or it is a great idea but they have already got it and they don't want another one, and one has to do that every now and then.... You can't do it too often because if you keep doing it to someone who is talented and offering original ideas [because] then they will go elsewhere."

Clearly, in evaluating ideas from knowledge workers there is a fine balance to be had between culling ideas for commercial criteria and damaging relational advantage.

Having evaluated which ideas to pursue, the next stage of the creative process in television production is marketing the idea to the programme buyer.

Commissioning editors want to see how the idea fits with their programming strategy or as one manager described it:

"I can see if the ideas are there or wanting. Really what they have to sell is the marketplace."

Thus, ideas marketing is important and involves pitching an idea to demonstrate how it provides a scheduling solution. Senior managers of production firms develop a knowledge, gained through experience, of where an idea should be targeted, and how it will be written and presented to different programme buyers for maximum impact as noted by the manager below:

"So we basically sell programmes for whoever wants to commission them and we adapt our programme making style depending on the budget, you know, the requirements of the different customers."

Given the limited number of buyers for television programmes, in the UK, at the time of the research, firms that knew and understood their buyers' programme strategy were at an advantage because they were able to repackage a programme idea to match the programming needs of different Channels and thereby increase the likelihood of being commissioned. For example, one programme seller described getting nowhere with a programme idea pitched to Channel 4. Rather than consign the idea to non-recoverable development the firm rewrote the programme concept in a different style and the idea was commissioned by ITV.

Just as a retailer has a given level of stock, but if any stock is stolen or broken

that is shrinkage from the potential cash-flow, so too investment in a programme idea if it fails to find a market is a drain on a firm's scarce resources. Buyer knowledge, therefore, also reduces the wastage of ideas.

Programme buyers act as ideas gatekeepers in deciding what will and won't reach the screen. What the programme buyers are looking for is driven by many factors including: editorial policy, technology and the possibilities it creates, fashions, social trends, and budgets. Programme buyers need the ability to spot good programme ideas. Intuition and judgement are central skills to effective programme buying. For example, one of the key issues in commissioning and scheduling is knowing what will and will not work with the viewer. This is a tacit knowledge that cannot be readily codified as noted by a senior executive:

"I always thought the best things are always gut, always gut and as an executive in television, I always felt what I was paid to do was to know what was not going to work, what had no chance."

Despite the power of the programme buyers, some programme makers were wary of following the market too closely fearing it might lead to stale, homogenised content as summarised by one manager.

"... you must adapt to the market. All that is true, but it is also true that in some ways that producers influence the market. That actually new ideas come from the bottom up."

In particular several informants were wary of the use of market research in developing television formats. The worry that market research may deliver yesterday's programmes today can be likened to the concerns expressed by Hamel and Prahalad (1994) that firms aiming to be customer-led are in danger of constantly catching up with their buyers' needs, whilst other firms using innovative ideas to lead customers delight customers with unanticipated functionality of their products/services. This issue is expressed by one manager from a production firm:

".. the current trend of over researching what audiences are supposed to want is an absolute killer because of course you end up listening very hard to people with ideas that were probably informed 5-10 years ago."

In the previous example, the limitations of being market driven in developing television production ideas are expressed clearly. The viewer bases their viewing demands on what they already know and are familiar with. However, it has been questioned whether Sony would have developed the Walkman by relying on market research (Hamel and Prahalad, 1994). Similarly innovation in television production relies on a knowledge of what is possible and this requires the insight of the expert with specialist knowledge of the genre, as noted by one senior production manager describing a novel drama programme:

"When I first took [the programme] to ITV, in 1986, and said you know: - it is two hours; there are no cars chases; he hasn't got a

woman; there is no sex in it; nobody gets thumped; he does crossword puzzles and he listens to classical music, there was a sort of universal -`you have got to be off your head'...happily, I worked with people who said "Let's give it a go," because that is the joy. The joy is that there is still scope to surprise."

The scope to surprise is akin to Hamel and Prahalad's (1994) notion of expeditionary marketing built on understanding customer needs to carve out new competitive space. In television production opportunities exist for creating new types of programming, or new quality thresholds. The pre-school children's programme *Teletubbies* was cited by several informants as a good example of innovation because it opened up a new market for educational programming for very young children, a previously neglected segment of the television audience.

Having found a potential buyer for a programme idea, there is often considerable development work required to secure a commission and so ideas development is the next stage of the creative process. The commissioning process may involve several stages of short-listing for a given commission. A company short-listed for a commission tender has no guarantee of success, but is still often required by the broadcaster to come up with large numbers of detailed ideas at very short notice. For example, one manager described the challenge of having a week to come up with 60 programme ideas for a series. Senior managers expressed some concern about the difficulty of finding time to develop ideas given the demands of on-going production work.

The downside of knowledge brokering is that the primary knowledge brokers within a firm often become the initial contact point for all network partners. Some managers of independent production companies recognising the scarcity of their time consciously tried to focus on a limited number of projects. Alternatively, as a business grows the management team of the production firm can be widened to avoid connectivity over-load for founding managers. The operational detail of production work can then be delegated leaving more time for managers to market and develop ideas for business development as described by one manager:

"...about 2 or 3 years ago we [the senior managers] decided that we would spend much more time basically working as executive producers, bringing in producers and directors. ...we would spend much more of our time actually running the business and basically becoming sales people"

8.2.3 Ideas realisation, ideas performance and marking success

The next stage of the creative process is making production ideas into programmes. Ideas realisation comes after the commission has been secured and it entails managing the production process to deliver the programme to time, budget and quality. Knowing how to bring together key resources to realise the production idea is a creative capability. It has been argued that relational advantage can enable a programme seller to rapidly assemble necessary production talent from outside and inside the firm into a production crew.

Having assembled that talent, effective ideas work then relies on workers being willing and able to contribute their knowledge to the production process. Creative culture is again key here because it can facilitate innovative solutions. For example, one manager of a production firm discussed how he encouraged a creative culture of innovation by removing the option of established solutions being used as a safety net on projects:

"I am trying to get teams to think more creatively...early in the planning of a project, particularly where there is a lot of pressure In the back of your mind, you know, that there are certain safety nets: we can always do an interview; we could always...traditional ways of doing things - they are used because they work, and they are boring, because everybody uses them and so sometimes I sit them down and give them an exercise -` if this doesn't work what are we going to do?'... I get them to list, almost unconsciously all the conventional responses. We write them down and then I say: 'Oh as the series producer, the executive producer I will not entertain, ever, at any point in this production someone bringing these ideas to me.' - So, there is no safety net and there is something about the process of burning your bridges, it liberates you. We can't go back we have to go forwards - going back is creative death."

The production team in the previous example was thus actively encouraged by management to draw on their knowledge for innovative solutions. A senior

production executive from a producer-broadcaster similarly describes the value of creating an environment where people dare to challenge convention:

"I mean there is a danger that people will try and second guess too much. I think people say: Well I will try and flatter this chap by saying: 'Have I got a show for you. I know what you like. I think you will like this.' And there is a danger, especially when the competition hots up ...people are not going to take the level of risk that they should. Good programme makers will always demand the right to fail and demand the right to take some risks."

The expert programme maker is not restricted by conventions. As one manager described it.

"You know...commissioning editors are drawn to, ...often film makers that take risks, and then they are looking for some kind of structure so they can reduce the risk and of course again these two things are in tension, because you know if you want your film to be noticed you have got to commission a certain type of filmmaker. If you want a nice easy life, where everything goes along a nice smooth track, you know, you can do that. Many people can probably deliver that, but they probably won't deliver that nth degree of 'extraness': extra billing, extra imagination, extra controversy, whatever it might be, that will sort of achieve the ultimate target."

A creative advantage in ideas realisation is in part about knowing where to place and manage risk on productions and this is built from professional experience. Tougher programme budgets leave less room for error from programme makers. Effective programme makers reduce the risk on productions by placing a high emphasis on quality control to realise innovation to acceptable cost/quality standards. One informant likened creative people to "excited children" who had a tendency for perfectionism. The desire to find a better solution meant that creative people needed managing if projects were to be delivered to time and budget. Thus, in network contexts a key role of the manager is knowing when to encourage questioning and challenge and when it is time to get on with the routine tasks.

After the programme has been supplied to the buyer a key issue for the production firm and constituent network members is how the programme performs, because in the television industry, firms and individuals are often judged 'only as good as their last piece of work'. The primary concern is customer satisfaction. There are various measures and indicators that the buyer may use to assess programme performance. These indicators include viewing figures, audience appreciation indexes, press perceptions and awards. However, perhaps most important is the judgement of the programme buyer as to whether the delivered programme fulfilled the expectations of it when it was originally commissioned. Assessing the performance of a programme appeared to be further complicated in television by the fact that programme buyers may not always be clear about what constitutes effective performance for a given production. Concern was expressed by several programme makers that the

programme buyers were not always clear about what they were seeking from programming. This raises another important issue in fluid network contexts that of establishing mutually understood performance criteria. Again relational advantage can enable a deeper dialogue and thus understanding between programme buyer and seller of what constitutes effective programme performance. For example, one programme seller described how he had invested considerable effort working with programme buyers to clarify their performance criteria. This was a process of mutual learning to create shared performance criteria. The ability to facilitate such shared learning is another source of creative advantage, but is derived from relational advantage:

"Now, in a way if I hadn't focused their minds on precisely what it [the programme] needed to do to be successful, they wouldn't now be saying it is a success, so it wasn't for me to tell them, but I helped them to work it out. So getting the broadcaster to define what is success and what is failure."

In an environment of flexible production, without such shared understanding of what the programme is trying to achieve the potential for misunderstanding and a jeopardised buyer-supplier relationship is high. Network production requires mutual learning to establish the shared performance criteria to which production firms, broadcasters and knowledge workers are working towards.

Having shared knowledge to define what constitutes production success, it is important to mark production successes with customers, and knowledge workers to reinforce the knowledge reputation of the firm as a positive production context for reliable content and knowledge development. This marking of success increases the confidence of the buyer and workers in the knowledge base of the firm. Buyers reminded of the success of a programme are more likely to re-commission. Mobile knowledge workers, that work with you, rather than for you, are more likely to return if they feel a valued part of a successful venture. This is in part motivational, but marking success also highlights the importance of a given project in contributing to their work portfolio and knowledge development. Taking time out to celebrate shared success reinforces a firm's knowledge attachments.

It would be easy, given hectic production schedules, to forget to mark success. However, in the course of interviewing informants there were many tales of celebrations or tangible evidence of parties in full flow to mark a broadcast success. To miss this stage of the creative process may be a false economy as it provides a valuable opportunity to amplify the creative culture and knowledge base of the firm. As expressed by one manager:

"You know, it needs to be marked and acknowledged and it brings people together in a very positive environment and a happy environment, and its says these things are important...you work your backside off but there is pleasure and excitement, and commitment, and fun there."

Creative advantage is about harnessing the knowledge and ideas available to the organisation both internally and externally for commercial gain. Putting

knowledge to work is a key challenge facing many industries and there may be lessons to be learnt from the television industry. The Knowledge Chain, as outlined in the previous chapter, depicts the creative process of unlocking knowledge and facilitating experiential learning, as summarised below.

8.2.4 Unlocking knowledge

Knowledge networks built largely of external labour enable a firm to economise on knowledge actors and to learn from external sources (Lincoln et al., 1998). However, it has been argued, herein, that bringing together knowledge rich individuals does not automatically deliver innovative programme ideas or costeffective production solutions. Knowledge sharing is not an automatic outcome of bringing people together in production networks because people may consciously hoard their knowledge or people may only utilise a fraction of their knowledge base. It has been shown that the contextual environment provided by the firm for the production team is instrumental in unlocking the knowledge of core workers, attachments and freelance workers. It has been argued that effective ideas work relies on individuals tapping into their knowledge base. Failure to do so threatens the ability of a firm to deliver differentiating high quality and/or low cost productions because both require ingenious solutions. It has been argued that creative advantage is about creating a vibrant creative culture combined with knowledge of how to manage the creative process. Managers have a key role to play in shaping the values, systems and processes that define an organisation's learning environment. It is the softer management skills that are key to creating the "demanding", "fun", "open" and "inclusive" environments that informants discussed as conducive to learning. The importance of an appropriate culture for organisational learning within neatly bounded firms has recently been stressed by a number of commentators (Fahey and Prusak, 1998; O'Dell and Grayson, 1998). The research for this thesis suggests that appropriate learning cultures are equally, if not more, important in network contexts.

Organisations that are effective at unlocking knowledge in network contexts recognise that human capital is not owned or as one informant described it: "..vast numbers of those people are actually freelance and they just happen to be staying with us," and so attracting and retaining knowledge rich individuals becomes a strategic issue. This research suggests that, in network contexts, where there is great reliance by firms on external workers, organisations may need to pay more attention to the context they provide for the work to be done. In a knowledge age, where effective, knowledge rich workers are mobile, in high demand and recognise their worth creating a context where people want to return to learn is a key challenge. Although, the atmosphere within an organisation is likely to vary considerably, the importance some informants placed on a fun, playful working environment seems to support those commentators that have conceptualised learning as play (de Geus 1997; Quinn 1992). Firms that can provide the conditions for play may be the one's best able to unlock the knowledge bases of workers.

Flexible production not only provides opportunities for managers in a firm to learn from external actors, it also provides potentially an environment where internal and freelance workers have the opportunity to learn across firm divides, from each other. Thus in network contexts the learning of internal core workers is leveraged by their ongoing and close interaction with external workers. This suggests that faster rates of learning may be possible in network contexts. The experiential learning possible from the creative process of programme production is now considered.

8.2.5 Experiential learning

Experiential learning is the learning that occurs in work. Many informants argued that experience is important for individual learning and this is supported by previous research that tells us that doing is key to experiential learning (Kolb, 1984). In television production, learning can occur at any stage of the Knowledge Chain, but there appear to be two particularly rich opportunities for learning: firstly the on-going learning that occurs during the production process when the ideas, insights and knowledge of individual production team members are surfaced and shared; and secondly, the post-production opportunity for safe space learning. The former is discussed in this section and the latter in section 8.3.

Learning impacts on behaviour. Beach in Gibb (1997: 14) defines learning as "the human process by which skills, knowledge, habit and attitude are acquired and altered in such a way that behaviour is modified". A definition of learning that embraces skills, knowledge, habit and attitude can be applied to learning in television production. For individuals working in television production learning involves: keeping abreast of the key skills necessary to deliver efficient, quality programmes; developing the key specialist, relational and creative knowledge to be of both professional and strategic value to a firm; comparing one's

established production practices with those of others to keep up to date and developing the attitude required to secure work contracts in a competitive employment environment.

At the level of the firm, learning as skill, knowledge, habit (organisational routines) and attitude (mental models) could be argued to come together in core competence (Prahalad and Hamel, 1990). Indeed, in Chapter Two it was noted that Prahalad and Hamel (1990: 82) define core competence as the "collective learning of the organisation." In the context of flexible network production, collective learning may be more problematic as individuals move between communities of practice. In an environment where organisational structure is circumvented by the production team and only a small proportion of the total knowledge resource used in production is held in-house, what remains core to a firm is the relationships it has forged, its specialist knowledge that constitutes its knowledge hub and its understanding of the culture, management style, work processes and so on that facilitate learning. Building an effective knowledge hub which provides the nexus for knowledge exchange and mobilisation is about creating effective socio-psychological conditions for learning. However, whereas core competence focuses on the collective learning held within the organisation for competitive advantage, television production firms rely upon a broader array of external individuals for the knowledge and capabilities necessary to realise the ideas for innovative, scheduling solutions. In flexible production environments, core competence may be better conceptualised as the ability of an organisation to build effective learning contexts where individual

and organisational knowledge can be unlocked, shared and utilised for innovative solutions.

Creating effective learning contexts is perhaps best explained drawing on the example of universities. Successful universities do not try to encode the knowledge of the diverse experts that pass through their gates, but rather they put considerable effort into creating an attractive, stimulating learning environment. This learning environment attracts potential customers and knowledge workers, that in turn, enhance the institution's technology transfer, knowledge reputation, and intellectual property.

The key issue for firms in dynamic situations is reviewing and monitoring how relevant their existing knowledge resources both internal and external remain to delivering customer value and thereby securing production deals. Establishing and maintaining an effective learning context facilitates this ongoing process of learning. The vital role of new knowledge to feed into the strategy process to avoid getting locked into outdated core competencies, in dynamic situations, was highlighted in Chapter Two. The importance of challenging established organisational attitudes in developing new strategy was discussed in Chapter Two (Argyris and Schon, 1978; Senge, 1990 and Leonard-Barton, 1992). The pathology of time warped core competencies that are no longer congruent with the demands of the environment was noted in Chapter Two. This limitation of given core competencies over time is captured in Leonard-Barton's (1992) notion of core-rigidities, as outlined in Chapter Two, and can stifle a firm's ability to adapt to change thereby undermining performance in the longer-term.

Argyris and Schon (1978) and Senge (1990) argue that a firm's mental view is built on the mental maps of the employees. A key strategic issue for the learning organisation is to share and thereby challenge existing mental maps to create new views of reality as the basis for developing fresh strategic thinking. Hence, strategy becomes the process of continual learning for firms if they are to continue to build value for their customers. An organisational learning perspective sees a dynamic process of knowledge development as central to organisational learning and generating new strategic options. Successful television production firms appear to focus on ongoing learning and mobilising networked knowledge for competitive advantage rather than a quest for owning knowledge per se. Thus, the experience of learning and knowledge utilisation in the television industry endorses the organisational learning perspective that knowledge is only of value to the extent that it supports enhanced strategic thinking or innovation. This may explain why firms in the television industry focus on developing strategically relevant knowledge that supports their brand and reputation, leaving workers to invest in the particular knowledge that supports their individual professional competence.

Clearly, the selective identification and sourcing of strategically important knowledge is key if the organisational learning approach to strategy is not to become tomorrow's failed in practice management fad. There is a danger that the knowledge management literature, as outlined in Chapter Two, if crudely applied, because of its emphasis on knowledge as a commodity could lead to

firms relentlessly stockpiling data, information and knowledge that may be of little strategic use.

Facilitating absorptive capacity (Cohen and Levinthal, 1990), as discussed in Chapter Two, appears particularly important in the network organisational forms prevalent in television production. Effective learning contexts enable firms to unlock the knowledge of external partners for absorptive capacity enabling internal knowledge brokers to learn about external opportunities and threats, and clarify the firm's strengths and weaknesses. It has been shown that the transient, freelance worker and production buyers are a central part of the knowledge network of the organisation.

Experiential learning was reported as particularly important in developing programme concepts and the values that underlie them. Informants used phrases like "knowing the show" and "learning the show" to capture the shared learning that programme development entails. Production workers and managers appeared to learn a given show by working on it and developing it over a period of time. One informant highlighted that for resource scarce, small to medium sized independent production companies, this focused effort of learning a new product (the show) may necessitate focusing on learning just a few programmes at a time:

"...you cannot be researching and developing a lot of programmes at the same time. So, there tends to be a sort of pattern in developing work. We establish [programme A] people learn that show, and they

can carry it on - it runs. Then they go ahead and develop
[programme B] learn that show stay with it."

Penrose (1959) emphasised the importance of teamwork in knowledge development. Given that in television production many freelance workers are moving between teams that straddle firm boundaries Brown and Duguid's (1991) notion of "communities of practice" discussed in Chapter Two is particularly relevant. In the evolving communities of practice of television production the continuity provided by incumbent production team members is enriched by the fresh insights of new members enabling the programme concept to evolve overtime and the experiential learning of team members to be ongoing.

Evolving production teams enable both continuity and renewal. Retaining some members of a production team provides continuity in terms of the shared knowledge that underpins the programme concept. Whilst the addition of new crew and cast members provides fresh ideas. Soaps, such as *Coronation Street*, or dramas, such as *Casualty*, that have endured ratings success over many years provide good examples of how a programme concept can evolve to meet changing audience demands. Story lines, characters and production crew can be changed over time as the demands of viewers evolve. Many successful programmes have survived the departure of significant individuals, for example, the departure of lead actors, presenters or the executive producer. For example, the successful drama series Peak Practice survived the departure of its lead actor, Amanda Burton, and its executive producer, Ted Childs. The teams that develop

around long-running programmes evolve as individual workers leave a programme to pursue new, learning opportunities.

Knowledge combination often occurs within the community of practice of the production team. Several informants referred to the possibilities for knowledge combination and sharing resulting from bringing people together with different experiences. Such diversity of experience might be in terms of genres, country, wider life experiences and so on. For example, several informants referred to the rich opportunities for learning within international production teams as described by one manager of a production firm below:

"We did a show in Germany 3 years ago.... A sophisticated puppet show ...an international puppetry show that was to be shot there and had not been done. We used puppeteers and back-up - puppeteers and fed them all into the process. So the production personnel were a mixture of Brits who knew what they were doing within the genre of programming and Germans who had not worked on that so there was a bit of a melange and everyone learnt from it. And so we try when we go and do that sort of stuff to make it obvious that there is some history and develop people who yes come back and make the big company accounts...."

The history discussed by the previous informant is based on a shared learning experience from which the shared understanding and trust of effective network production is built.

Understanding the programme concept is also important for programme buyers if they are to reap the full value of a programme idea. Where the programme idea is a response to a commission award, the programme concept may be developed in close consultation with the buyer. In such cases, the programme buyer and seller develop a shared understanding of what the programme concept is about. Educating prospective buyers about the value and meaning of a programme was also reported to be an important aspect of international sales in some genres. For example, the makers of children's programmes and light entertainment programmes discussed the importance of overseas buyers understanding the programme concept. Without such understanding there was a danger that the brand could be damaged. This educational role for the firm in its customer relationships takes time. For example, teaching buyers the philosophy and values that underpin a programme concept was tackled by one firm through training overseas buyers in the programme concept as explained below:

"...one of the conscious things we will be doing with [the programme] is having a U.S. producer and director, for instance, to come here to see the way we work. So that if they were going to shoot any material using American children with those programmes they would have to do it the way that we would do it and understand the philosophy behind which we make the programmes."

Considerable management time and effort may be required to teach customers about the value of the programme. Indeed, there may be very real costs associated with this educational role accompanying knowledge-based products.

These education costs for knowledge based firms warrant more research to ensure practitioners are aware not just of the benefits, but also the costs that underlie knowledge based competition.

Experiential learning, it has been argued, requires behaviour to be modified and this requires individual change and effort. Even managers and workers with an aptitude for learning still appear to need a reason or motivation to learn. Establishing learning relevance is another key issue for firms seeking learning advantages. One senior manager of a production firm noted that if one takes the view that strategy is about learning, an important threat to the development of new strategies are those individuals that have the least incentive to learn. The example below draws on the example of an American producer, working for an international production firm, who may lack any real incentive to consider global strategy when developing productions given the dominance of the US television industry:

"...you always go for the lowest common denominator and that lowest common denominator is not necessarily lack of knowledge, but the person who has the least reason to be understanding the global picture. But not just the least reason to understand it, but the least involvement with it. So a producer in New York, they may feel that it has no relevance to them, the global scene, but of course it has because how they produce it, how they make it shows the practical aspects of it, the elements that will make something work globally - all those are of the essence, so they will effect us."

In global television firms, it is understandable, given the size of the US market, that US managers may feel that they have little reason to look to the wider global market. If global production firms rely on involving US managers to progress global strategy then establishing a reason to learn for such managers becomes a key strategic issue. Firms may need to demonstrate the commercial benefits of ongoing learning to all of those both employed, and in network relationships with the firm, if they are to maximise the potential of their networks for experiential learning.

Given the value of individuals motivated to learn, several managers reported that retaining and developing those individuals that have a desire to continue learning, rather than those with the most knowledge per se, was vital. As one manager of a production firm explains:

"I think that one of the problems of this industry is that the only people that will survive are those people that can stay on that steep learning curve because if you slip it is very hard to get back on."

Similarly, learning at the individual level was expressed as very important by another manager, particularly learning that looked beyond the confines of the television industry:

"I would say how important is reading books and how important it is to meet people outside television - it is incredibly important. If you don't pursue avidly those things outside television it is an incredibly incestuous process and goes nowhere. ...Learning is terribly important...But the moment that you aren't interested in learning and genuinely feel ready to attack life with a little excitement it isn't going to go anywhere, it will look dead..."

Some organisations actively encouraged ongoing learning through an open culture that encouraged new ideas. Sometimes this process was formalised. For example, through training or setting new entrants the task of pitching a given number of their own ideas on a regular basis to an executive producer. The pitching process helped reinforce creative advantage by helping individuals to learn on what basis to assess the feasibility of ideas and how to market ideas. However, if a willingness to learn is a more important attribute for workers, than having the most knowledge per se, this begs the question why so much of the knowledge literature emphasises the role of the 'expert' as discussed in Chapter Two. The next section also raises questions about the supremacy of the expert for organisational learning.

8.2.6. Shadowing and intergenerational learning

Senge (1990) contends that senior managers have a key role as teachers to encourage managers and workers to revisit their mental models and to continue learning. There was considerable evidence of individuals learning by shadowing more experienced individuals in the television industry. Shadowing could be formalised via trainee schemes, but was more likely, given the cost constraints of the industry, to develop from individuals forging a shadowing mentality where every encounter with a senior individual could be treated as a learning opportunity. As one executive producer described his experience of shadowing:

"However, I got where I am today, wherever that may be, by sticking my head round corners, and looking over people's shoulders and all that lot and it is a terrible way to do it on one level, but, I think that there are things that are easier to teach and things that are harder to teach, and lots of skills that you learn in production you can't, or are terribly difficult to pick up, through training schemes."

Shadowing can facilitate the learning of tacit skills, and thus is akin to Nonaka's (1991) concept of socialisation discussed in Chapter Two.

Shadowing and intergenerational learning is usually thought of as a way for less experienced people to learn from more experienced individuals through mentoring or apprenticeship schemes. However, reciprocal intergenerational learning can also be achieved from shadowing. This research found evidence of more experienced individuals learning from less experienced individuals. Such two way intergenerational learning can be of real strategic benefit in keeping programme ideas and production techniques contemporary and relevant. As the informant below describes there can be shared learning and value creation from mixing enthusiastic, but less experienced people, with more experienced individuals who understand the practical issues of ideas realisation and project feasibility:

"We do believe in putting less experienced people with more experienced people. We really structure our teams in that way. You

know you would put a producer, a director and an associate producer who is very senior and then you would have a junior researcher and the junior researcher might be somebody who has just been a runner and would very much be put with a that they can learn from. ...So, you know, you get the young bright ideas people working with the people that can help them realise them."

This suggests that the experience mix of production teams is crucial to learning. Indeed, some informants suggested that shadowing can facilitate knowledge sharing and experiential learning for novice and expert alike, and this suggests that optimum production teams may not result from assembling proven experts. One manager described how intergenerational learning can help to facilitate innovation:

"...she is coming up with ideas that are not at all original for me, but are original for her in a generational context. She is discovering ideas that are new for her and that have been done by previous generations and because I have that knowledge, I don't think of it as new ideas. But the television audience is a relatively short-term audience, so her freshness is helping us to go back and revisit areas of subject matter that we wouldn't have thought of and therefore wouldn't access."

The previous quote highlights how combining individuals with different levels of experience may actually unlock or mobilise the valuable existent knowledge of experts, that might otherwise have remained dormant. Thus, within a

production team it may be of real value to mix relative novices with experts because the novice may act as a catalyst by sparking the expert's memory and helping them to better utilise their knowledge base. The intergenerational mix of teams and the resultant impact on knowledge utilisation is an area that warrants further research.

In television, one of the key issues of intergenerational learning is the meeting of the experienced person's contextual memory for what has worked or not in the past, with a new generation's insights on what is topical and current. Television programmes often build on what has worked in the past but updated for the current socio-economic context. Another manager highlighted the importance of intergenerational learning to strategic management:

"There is still a lot of attention paid to production value and it is that sort of thing about putting juniors with more experienced people ...that is a very important part of how we develop our strategy"

For this firm, intergenerational learning focused strategic thinking on what programme ideas were viable and stood a reasonable chance of gaining an audience.

Having discussed some of the key experiential issues of learning depicted in the Knowledge Chain, attention now turns to the role of safe space learning that occurs after the production cycle or at the margins of practice.

8.3 Safe Space Learning

The next key theme of the Knowledge Chain is that of *safe space learning*. Handy reminds us of the importance of space and reflection to learning, an issue also raised by Kolb (1984):

"Learning is experience understood in tranquillity. We learn by reflecting on what has happened." (Handy, 1997: 225)

In strategic terms, it is often after a production is completed that strategic thinking can really advance. After the interaction and knowledge sharing of the production process, individuals within the firm can try and reflect on what strategic information has been gathered, who the new talents are, what new techniques can be used to improve production quality or save time.

One key challenge for television firms is providing such space for learning. It has been shown that firms are working under considerable time and cost pressures. A major challenge for individuals and firms in the age of global communication, and thus global interruption may be finding the necessary tranquillity to reflect on what has happened, so learning can occur for competitive gain at both the individual and organisational level. In the 1990s, managers are advised by consultants of the power of knowledge for strategic success, yet, the legacy of industry and firm restructuring, in the 1980s, when firms were urged to downsize and de-layer for efficiency gains means that individual workers are expected to do more in a given time. The trouble with doing more in a working day is that it squeezes out the slack that might be used for reflective learning. Hamel and Prahalad (1994) stress the importance of

managers spending more time thinking about future strategic opportunities and threats that face their firms.

Clearly, for strategic thinking and knowledge development to foster profitable insights time out is necessary for managers to place information in context. In the information age, there is a real danger that we are informed about more, but know about less. Computer systems enable more sophisticated databases and communications networks. However, at some point individuals must reflect on that data if learning is to occur.

One informant, running a production company, suggested that strategy can be thought of as "learning in itself." This is akin to the organisational learning literature discussed in Chapter Two that sees strategy as a form of learning, in that strategists are trying to bring together the knowledge available to the organisation to create new opportunities (Grant, 1991; Barney, 1991). In the television industry, it has been shown that the organisation becomes relationally connected as a mechanism to learn about customer knowledge, viewer knowledge, talent knowledge and partner knowledge. However, it has also been argued that knowledge brokers with contextual knowledge are only valuable if they continue to learn. Strategy as learning requires time and space if information is to become knowledge. Time to reflect on new experiences and information. Space to avoid constant interruption from the operational environment in considering what new knowledge means for the organisation. Thus what happens with information and insights gained from a production cycle after the production crew have dispersed is a key issue if organisations are to learn from experience.

However, some informants suggested that pressurised flexible production may be squeezing out post-production reflection. Many managers felt they and their production crews were under considerable time and space pressures. This time and space constraint may limit their ability to reflect and learn. If strategy is a learning process there are real threats to the quality of strategic thinking if learning is being squeezed out by operational pressures. Ensuring that operational efficiency is not achieved at the price of long-term advancement is a strategic issue for organisations (Krogh, Roos and Slocum, 1994).

Thus preserving safe space learning is a key challenge under flexible network production. Safe space is about providing learning opportunities for all. Safe space learning enables individual expertise to develop, and managers and workers to come together to feed individual insights into the strategy process. Clearly on-going learning is central to sustaining dynamic and context relevant strategies. There are two levels at which safe space can be considered. First at the level of the individual, where providing space to all workers to learn and develop is key. Second, at the organisational level where bringing people together for shared strategic insights is key. In practice, the former feeds the latter.

A number of informants expressed the view that people needed space to learn. An ability to make mistakes and to try ideas is an important part of individual learning (Leonard, 1998). The cost and performance pressures on programme makers made providing space for individuals to learn a major challenge. One particular concern expressed by informants was providing individuals with the

space to bridge the novice to competence gap. Several informants expressed concern that flexible production and the associated changed working practices were driving out the operational slack necessary to allow novices to experiment on the margins of the production process. This safe space learning is akin to Brown and Duguid's (1991) notion of legitimate peripheral participation where novices experiment at the margins of production where their capacity for commercial damage is limited. Flexible production in television had increased the demand for those individuals that could already do a job to certain level of competence. As noted by one informant:

"Budgets are such that there used to be these things called assistant grades, OK, well they don't exist anymore, they have been cut out of every single budget.... They [the production companies] haven't got the space for people to learn, they haven't got the space for people to make mistakes, so that they are constantly using the pool that they know can do and the ones that have got the talent and could do are actually left behind."

The issue of novice learning is crucial. For firms reliant on freelance labour, the ability of individuals to obtain effective learning experiences early in their career is essential to ensuring that a supply of competent workers and higher level experts exist in the future. Equally novice participation is key to the balanced teams necessary for intergenerational learning referred to in the previous section.

Production firms are being squeezed by tight budgets for television productions that make no provision for trainee grades. As expressed by one production company manager:

"I despair for young people that are bright or whatever that are coming to the industry and want to learn because the budgets aren't constructed in the way that you can say you are a great researcher, you have got 6 years experience behind you, but with you I would like to put these two because they have got lots of ideas and they are very bright and under your wing they could learn a lot and they could come on. You can't do that because who is paying them?"

Production firms feel the need to minimise operational mistakes to ensure the reliability necessary to build buyer confidence. This necessity to avoid mistakes may be impinging on the ability of organisations to provide safe space to novice learners. Yet, the making of mistakes and learning from them can lead not just to individual learning, but perhaps more importantly in strategic terms to innovation (Leonard, 1998). It has been noted by other commentators that some mistakes may be better conceptualised as the by-product of experimentation, rather than the outcome of incompetence (Leonard, 1998).

The need for commissions to pass to a safe pair of hands may be driving out experimentation, in terms of production ideas and techniques. Several managers from both independent production firms and producer-broadcasters noted that allowing people to make mistakes was becoming harder:

"But it takes time for people to learn. You know, it isn't something that you pick up over night and you have to have the opportunity to make mistakes. And I think that is going out of this business, the right to fail is terribly important in television it really is."

The increasing pace of the industry and the problems this creates in allowing people the time and space from operational deadlines to learn was also noted by several informants as expressed by this manager:

"Allowing people to make mistakes is much harder. We have never been very good at that though. But it was much easier to put people in jobs where the pace was slow enough to allow people to work it through carefully and that is much harder now."

Clearly no business can afford to have people constantly making mistakes and so the importance of rapid learning from mistakes by individuals and organisations is key. Again this means reflecting on what has gone wrong and why.

Individuals also need time to reflect on what they have learnt from working with a crew on a production. Informants reported that learning, at the individual level, arises from a mixture of learning from experience, safe space opportunities, shadowing and formal training. According to one informant there is no formalised way of learning but knowledge exchange, combination and reflection are all key components of learning:

"I don't think that there is any formalised way of doing it and it done on a kind of individual basis, so I have learnt a huge amount from this job and from my London job.....I mean even in my position here people learn from me and my experience and then I will pass that onto them and the only way that that is done in a formalised sense is through kind of seminars that we do with ...Otherwise it is purely, you know, walking round with the crew somebody will say ... and you will go back and think about it."

The ability to go back and think about it appears to be under threat. As work schedules become more hectic it may be in firms' interests to consider ways of incorporating safe space for 'thinking time' into busy schedules.

However, creating safe space is not just about thinking time, it is also about psychological safety in the sense of establishing an environment where people working in an organisation feel able to express their problems, ideas and criticisms of the status quo without vilification. This returns to the role of managers in creating effective learning contexts in terms of the culture and working environment of a firm. A culture that tolerates criticism and debate may help individuals to solve their problems collaboratively, and workers and managers to learn from each other about emerging strategic issues. It was suggested by several managers that putting some physical space between strategic thinking and operations through off site meetings and social gatherings can encourage individuals to vocalise their ideas, thus improving organisational learning and strategic thinking.

Safe space learning is about creating meta-knowledge (Glazer, 1998: 185) in other words it is about "knowing what is known" by individuals and the organisation. The value of safe space learning is it facilitates the processing and linking of knowledge obtained from network production. The firm can take time out to consider what is new knowledge and warrants a change of strategic direction; what is particular context-dependent knowledge and what has more general application. Safe space learning thus facilitates incorporating new insights into a firm's strategic thinking.

8.4 Knowledge outputs

The next stage of the Knowledge Chain is the knowledge outputs arising from the production process and resultant learning. The most immediate concern for a firm is whether the programme fulfils its anticipated performance criteria. Effective programme performance will enhance the relationship with the programme buyer and the contracted in workers thereby generating further relational and creative advantage.

The performance of television programmes can be assessed in various ways and was argued by programme makers and buyers to be a multi-faceted and inexact art. The programme buyers need to satisfy their customers; that might mean delivering a target audience to satisfy advertisers or subscribers, it might mean delivering high levels of viewer satisfaction as expressed by the British Audience Research Bureau Appreciation Index that measures the degree to which the audience enjoyed the programme as opposed to whether they merely watched it; or creating wider excitement within the industry reflected by press

coverage and critical acclaim or recognition through awards or fulfilling their regulatory obligations on programme content.

The key criteria reported by production companies for assessing the success of a programme was its ability to deliver a volume audience or the targeted audience, in the case of niche productions. The views of this independent producer was representative of many informants:

"Most important is that it is watched by a large number of people.

That is the most important thing for us as a company. Secondly, and related to that is that the broadcaster likes it."

Popularity with the audience usually led to popularity with the broadcaster. Programme sellers are concerned to satisfy clients by reliably delivering what was promised usually by offering distinctive programming that made an impact with the viewer and differentiated the company. The aim being to get further commissions or sales from a given programme idea and thereby maximise the cash-flows from given intellectual capital as noted by one manager:

"Obviously, the main aim when you get a commission, say you get a 6 part commission is to think, OK, we have got to make sure that we get series 2, 3, 4, 5 & 6 because one series there is no money in it.

So [the company's] real bugbear is to produce clever stuff..."

A key aspect of being clever appears to be fulfilling the broadcaster's expectations when the programme was commissioned:

"But in the scale of things is a programme clever, to me does it meet what the broadcaster wanted? You know, whoever bought this programme, does it deliver what they want because you can't forget. You know, a lot of programme makers think well I am making a programme I really don't care what [the broadcaster] think, actually, because I think this is far better than what they are asking for, but you know at the end of the day if they are not happy with what you have delivered, you are not going to get another order are you? So you have to deliver to the broadcaster. You obviously have to deliver in terms of programme content and if it meets their target audience."

Professional pride is also a performance consideration for production companies. Given the mobility of production workers, individual workers took a very personal interest in the quality of the projects they work on because these become part of the valuable portfolio of credits that is the passport to future work in television.

"We want clever people and then they want to make clever programmes or they won't put their name to it. So you have to deliver to the people inside. ...I am telling you if they don't like the programmes they won't stay. It is very important pride, sort of professional pride, to them that they work on something clever."

Having fulfilled the immediate performance criteria of the programme, production firms try and secure specific knowledge outputs from the production process. The first of these is new knowledge. New knowledge in the context of television production can take many forms, but can be categorised into enhanced specialist knowledge that builds or extends the knowledge reputation of the firm; relational knowledge that develops the firm's relational advantage, or creative knowledge about how to undertake ideas realisation more effectively, as previously discussed. Working on new productions may extend the knowledge base of a firm in terms of particular techniques, or provide new insights into how to maximise production value. Meeting new production crew members may lead to new relationships with talented television freelancers. Reflecting on the management of the creative process may provide insights into how the process of ideas realisation can be improved next time. All of this new knowledge if used effectively can improve the firm's understanding of television production in its chosen genres.

The second key type of knowledge output is the resultant intellectual property from production ideas. Intellectual property rewards a firm for successfully unlocking knowledge to produce commercial products. Television programmes and formats, in many, but not all genres (live flow programmes may only have a life of the transmission) represent valuable intellectual property. It is the owners of this intellectual property that enjoy the future earnings from a production idea. The ownership of rights is an important issue in the television industry. As expressed by one senior production manager:

"I think the real added value is building a catalogue of programming.... What used to happen was that you made a programme, it went out, on a very rare occasion it got repeated if it was of a certain type. Now people are thinking virtually everything that we make might have a life-cycle beyond its first, second or even third transmission. Hum, you know we are going to be 500 channels and so that little show that you made back in 1997 will probably be appearing somewhere in the world, in some language 15 years from now still earning some money...the demand for, that appalling word, 'software' is only at the genesis."

Intellectual assets provide a value to a production business. The importance of the ownership of rights to production firms is expressed below:

".. it is critical to give you an asset value to your company. If someone wanted to buy our company tomorrow we could say we own X number of programmes and they will bring in [x] this year, [y] next year and [z] the year after and that is very important when it comes to cash-flow for example. It is equally important that we have the viability to persuade those key talents to work for us."

Intellectual assets in television are things such as content exploitation rights, formats, character rights. These are potentially an important source of additional value for firms in many genres. Rights as the previous informant noted provide the possibility of further cash-flows from a programme library, place an asset value on a company and attract talent by reinforcing the knowledge reputation of

the firm. Traditionally the broadcaster retained the copyright in the programme and so the independent programme maker did not participate in subsequent programme sales. The rights would pass to the broadcaster with the independent production firm getting a production fee. However, there was some evidence of hybrid rights arrangements emerging in the industry. So for example, a broadcaster may get a license to show the programme a certain number of times and split any income from secondary export markets with the production firm. Many informants felt that rights would become even more of a strategic issue if multi-channel viewing increases the demand for content. Clearly fragmenting value chains, as production separates from broadcasting, combined with greater opportunities to exploit intellectual assets has altered the competitive forces of the industry (Porter, 1980). There was some evidence that the larger, successful production firms were trying to improve their position over rights ownership as expressed by this informant:

"Those of us who are the larger ones [independent production firms], who have got more muscle have to use that muscle to change the terms on which we do business with the broadcasters to get a better grasp on rights and a better grasp on our share of the money earned from the exploitation of rights and thereby creating real value in our companies."

In a knowledge industry, those with sought after intellectual assets are in a powerful position. Intellectual assets provide supplier power. For example, Time Warner was in a powerful position when negotiating with Channel 4 over the

rights to broadcast *ER* in the UK because of the popularity of *ER* with viewers. Rupert Murdoch in building his media empire News Corporation has invested heavily in software ownership. A representative from a global production firm highlights the importance of rights in its development:

"We don't do anything unless we own it. There are occasional exceptions but we own all the characters that we design. We own all the shows that we produce. We own every intellectual and every assignable right and every form of end form of exploitation of rights etc or we don't do it... We can't produce something just for production fees. We have to evolve around international revenues."

The global market for formats in some genres is quite strong. The notion of adding value building on programme catalogues is in its infancy, but many informants were exploring global opportunities to broaden returns on their intellectual assets. For example, one small company was making small amounts of money from selling the options on rights to programme formats to different national markets.

"...we sold options on formats. So for example, there is a German company who has an option on a format that we made for the [broadcaster].... I can sell that format to Sweden, to France, to Italy but I can't sell it again in Germany at the moment because they have the right to try and get it off the ground in Germany for as long as they hold the option and they are this summer going to be making a

pilot for a series of 26 programmes sponsored by IKEA. Now this has been great because I have been able to go to the Swedish people and go 'hey IKEA', you know, and so instead of making one show for Europe we get paid for each one that is made."

The programme makers are making inroads into selling their expertise abroad via format sales. Such operations can be thought of as a sort of franchise arrangement that provides additional income streams from a programme idea. The format purchaser is buying both the programme concept and the knowledge that is necessary to realise the idea. As described by a senior production manager for a producer-broadcaster:

".. they [an Indian satellite channel] want to buy shows made in Calcutta. So we will probably send people who develop programmes here across to Bombay or Calcutta, for a month or two set up the production line if you like and say 'This is how it works, this is the basic grammar, here's the style book.' and it becomes in that case a kind of franchising exercise.

Er, it is very different to a sort of McDonalds colonising of the world, you know. But in the case of television, you have to alter the flavour, you don't export the same beef burger around the world you say 'No, how do we make this programme suit that domestic audience?' There appears to be one eternal truth that it is domestic programming that works best in its own market and is always most popular in its own market. ...So as I say you start a franchise to sell

off your formats and then you use your production skills to show people how to make them."

With such arrangements the format purchaser is buying the programme and the knowledge base of the format seller in terms of its creative knowledge of how to make the idea a reality, whilst retaining the power to adapt the idea to local market-a key issue in global strategy (Bartlett and Ghoshal, 1989). Protecting intellectual property whilst at the same time teaching customers how to maximise the value of that property is a challenge in global markets where language and cultural differences in business practice have to be worked round. Several informants expressed this issue in terms of teaching people what the programme concept was about. As expressed by one informant:

"I went to MIP Asia, which was the first time that they had ever had a TV conference in Asia and it was held in Hong Kong and loads of people, because the market in China is just opening up now, were coming up to our stand and they said "Well what are you selling?" And we said "Well formats, the ideas for a show;" and they said "Well we will just copy it;" and they are sitting there with their pens taking notes whilst watching the tapes. ... but, what we are selling is the expertise - how to do it."

Production firms are selling expertise, not an off-the-shelf product. The ideas behind television programmes are now being used by production firms to diversify. The television broadcast increasingly is becoming the shop window from which to sell a range of products. These products might be books, videos,

magazines, and other merchandise such as toys or household items. The broadcast programme or increasingly the programme's internet web site provide an electronic shop window for marketing programme related goods and services. Production companies are establishing their brand identity using 'the shop within a shop logic' that has for many years enabled smaller, specialist retailers to develop their brand drawing on the scale and scope of the larger department store. For television production companies, diversification is now developing from ideas not programmes. The programme acts as the platform to launch the wider concept collection as expressed by one informant.

"Now we don't invent TV programmes anymore. We define ourselves now - we come up with ideas...we are the makers of intellectual property and we exploit those in 6 or 7 ways those ideas, one of which happens to be a TV show and a TV show is a good shop window for all the other stuff."

After knowledge outputs, the next key process of the Knowledge Chain is building learning relationships to enhance the knowledge hub and learning context of the firm.

8.5 Building Learning Relationships

Building learning relationships in the television industry is about deciding: which production talents, buyers, partners or viewer groups warrant a primary level network relationship with the firm because their insights are crucial to the firm's strategic development; which relationships can be maintained through secondary level knowledge brokers, who the key knowledge brokers are for

given relationships and which combinations of knowledge rich workers are particularly innovative. This involves creating and structuring multi-level learning networks as discussed in Chapter Seven to support the ongoing learning of the firm that underpins its strategic management.

It has been argued herein, that in the network contexts of television production, a firm seeks to forge learning relationships rather than amassing internal knowledge stocks. Therefore, it is strategically imperative that such firms forge learning relationships with knowledge rich human resources if organisational learning is to be ongoing. Building learning relationships is about bringing together the strategically important skills and knowledge of a range of contracted workers and other external parties to develop the organisation's internal knowledge hub and the effectiveness of the learning context it provides.

The nature of such relationships has already been discussed in Chapters Six and Seven. Other commentators have stressed the power of learning relationships for strategic success. Indeed, in Chapter Two, work by other commentators on the role of 'architecture' for organisational learning was noted. However, it is argued herein that, given the reliance of firms in the television industry on building learning relationships to support their strategy process, building learning relationships warrants more explicitly incorporating into the knowledge development processes of such firms as depicted in the Knowledge Chain that is illustrated in Chapter Six.

The power of the television production firm derives from its overview of who knows what within the industry and how that diverse knowledge can be best combined for innovative programming solutions. Through investing in learning relationships rather than in knowledge <u>per se</u>, firms in network contexts can contain the costs of their internal knowledge base and remain adaptive to external change as technology and customers' demands change.

It is questionable to what extent senior managers in television production could be described as 'knowledge managers' given that they exert very little direct control over their knowledge workers. The role of senior managers is more akin to an architect, but in this case a learning architect who designs and builds contexts for effective learning and structures the knowledge of others into new strategies for product and market development. A key role of the firm in knowledge development (Brown and Duguid, 1998) is creating relationships between communities of practice that emerge within a firm. In flexible production contexts because so much expertise is outsourced, the community of practice - the production team straddles organisational divides.

However, it has been argued, in Chapter Two that resource based theorists stress the importance of the ownership of the key resources that underpin the capabilities of the firm for competitive advantage (Grant, 1991). Yet, there appear to be powerful arguments of cost efficiency and knowledge uncertainty as to why such ownership of resources may not be advantageous in the television industry. Firms that can build learning relationships with external knowledge brokers have the luxury of profiting from the learning of communities of

practice that straddle internal and external knowledge bases without the cost and inflexibility of outright ownership. A firm that relies on effective learning relationships can still profit from organisational learning provided that the focus is on extracting new insights from a range of sources in order to be adaptive, to cope with change, and generative in creating new strategic opportunities (Senge, 1990). Whereas Kay (1993) contends that it is the ability to codify knowledge that is key to profiting from learning architecture, the findings of this research suggest that it is the ability to build new communities of practice for developing new products/markets that determines the value to be derived from learning relationships. The value of bringing together disparate knowledge lies not in being able to record the detail of what that knowledge is, but rather being able to envision the spatial connections that will give existent knowledge new forms via innovative knowledge combinations embodied in new programme ideas, new partnership relationships or new product/market ventures. Building learning relationships is about the ability to harness the knowledge of a wide range of actors in new ways to provide competitive gain. The firm through its position in a wider multi-level learning network has a unique meta-knowledge of how the knowledge and skill of external actors can be combined in differentiating ways. In this way, the firm acts on the knowledge outputs that it has derived from the production process and safe space learning and starts to put that knowledge to work to develop its knowledge hub and learning context.

8.5.1 The knowledge hub and learning context

The knowledge hub of the firm and the importance of learning contexts have been discussed within previous sections of this thesis. However, given their central role in the Knowledge Chain of learning in network contexts it is helpful to summarise their contribution to organisational learning.

The knowledge hub of the firm is what can be described as organisational knowledge. The knowledge hub is the core knowledge of the firm and includes the specialist knowledge, relational knowledge and creative knowledge internal to the firm, any intellectual assets, and the meta-knowledge of what the firm knows from brokering diverse communities of practice that straddle the boundaries of the firm and the implications this knowledge has for future strategy. The knowledge hub only represents a small proportion of the total knowledge that a firm has at its disposal, but can act as a powerful force to attract knowledgeable workers to the firm.

The learning context or environment that the firm provides for its production teams can also act as the catalyst to attract knowledge actors to work in partnership with the firm and to unlock their knowledge behind new product and market ideas. This research found that learning contexts facilitate: the unlocking of knowledge, experiential learning, and safe space learning through knowledge combination and development. The dimensions of what constitutes an effective learning context requires further research in a range of industries.

Learning contexts appear to be built from environments that create effective social dynamics between people. Some of the key dimensions in the television industry appear to be creating creative cultures that are inclusive, open to new ideas and where trust is high for effective social interaction and genuine

communication. Bringing together diverse teams that not only facilitate new combinations of bright individuals, but also mix more and less experienced individuals to mobilise dormant knowledge. Providing challenging objectives was also reported to encourage knowledge sharing and learning.

The magnetic power of a focused knowledge hub combined with an effective learning context attracts knowledge rich workers to the firm to leverage learning. In time the firm becomes associated with the wider learning community that it has created. Although it only owns a small proportion of this community, its knowledge reputation reflects the wider knowledge base at its disposal because it is the resultant innovative programmes that attracts programme buyers, workers, collaborative business partners and viewers to the firm. Just as Oxford and Cambridge universities have survived down the centuries by fostering a much wider learning community than the knowledge base of their immediate students and staff, so too can firms aspire to create a wider learning community that supports their strategic management. Effective learning contexts leverage the knowledge base of the firm in a way that enables small and large organisations alike to profit from organisational learning, because they do not necessitate knowledge encoding technology and information departments.

8.6 Knowledge Marketing for Knowledge Reputation

The final process of the Knowledge Chain is knowledge marketing. It has been noted in previous chapters that establishing a differentiated position was an important feature of production firms' strategies. Branding was expressed as important by several television production firms in order to establish a competence reputation with programme buyers, talent and viewers. The

programme buyers are looking for unique and viable scheduling solutions that fit with their broad programming strategy. Talent is looking for opportunities to learn from other workers whilst enhancing their CV with a credit for a successful show. Viewers want to know that a programme from a certain firm can be relied upon to entertain, educate or inform depending on the knowledge base of the firm. Knowledge marketing promotes the knowledge hub and the wider networked knowledge to key stakeholders.

Such marketing is particularly important in developing perceptions of credibility and output reliability amongst programme buyers and key workers. These being the pre-requisites to the development of mutual trust on which effective commissioning relationships and production contracts are based. Some informants suggested that commissioning editors become nervous if independent firms diversify fearing that this may dilute their core capability. It has been noted in Chapter Seven that the clarity of the brand and what it represents has made some firms consider carefully their method of expansion and how it is presented to broadcasters.

Having forged new learning relationships with talent, programme buyers, partners or viewers a firm can use these relational connections, as noted in Chapter Five, to spread the knowledge reputation of the firm within the industry and marketplace. Forging a knowledge reputation establishes the legitimacy of a firm's unique knowledge position, reduces perceptions of immediate competition and reinforces the knowledge hub and learning context on which the firm relies to attract knowledgeable workers for product and market

development. Firms that appear to be succeeding in television production recognise that external relationships provide valuable knowledge marketing opportunities.

8.7 Challenges of Knowledge Development under Flexible Production

This thesis does not seek to advocate flexible production networks as a panacea for organisational learning. Rather than be normative in approach, this study attempts to outline the features of organisational learning found in the network contexts of television production. Therefore, the last section of this chapter highlights various knowledge development challenges identified by this study.

8.7.1 The costs of teaching

It has been shown that knowledge based competition, such as that found in television production entails adopting responsibility for the teaching and learning that supports product/market development and brand reputation. For example, creating effective learning contexts requires a very hands-on management style for motivation and quality control. International market development requires teaching local workers or buyers the ideas, production values and performance standards behind the programme concept.

Making one's knowledge reputation the basis for differentiation can raise customer expectations about what the seller should deliver. For example, one informant from a post-production firm described how the responsibility for knowledge had shifted from the buyer to the supplier of post-production facilities and this had introduced new costs for such businesses:

"...one of the reasons the term facilities has stuck was that a client that wanted something done would call us. That client would have sufficient knowledge to know what technology he wanted to use, what person he wanted to use and how long he wanted to use him for. ... he [the client] was the one who was responsible for getting the job done within that time, ...and he was responsible for managing that job through the company... Now, that client no longer takes responsibility, in the main, and simply presents us with the concept of what is required and expects us to take the responsibility of saying who should do it; which equipment should be used, how long it is going to take and what it is going to cost.

...We thought that we were clever, well we were being clever by filling in those gaps and improving the service that we provided. But to some extent our customer base has turned that around on its head now and therefore, we are the ones that have to supply or have to underwrite the delivery of the product. ...So they no longer have the knowledge to be able to manage these processes themselves...."

This suggests that strategy built on a firm's knowledge base can raise customer expectations and a firm's costs. The previous quote highlights the potential problem of a buyer believing they are buying knowledge and expertise investing less in specific knowledge bases. In the case of post-production, the client has become more reliant on the specialist knowledge of the post-production firm. Whilst this may make the providers of such services more powerful (Porter,

1980), it also means that more time has to be invested in developing a shared understanding between buyer and seller of what is possible on a project.

The disaggregation of value chains, as broadcasters outsource more content raises challenges of how best to maintain shared understanding of production values and programme quality with primary network brokers. It has been previously noted that managers believe they already have to spend considerable time as 'teachers' or 'translators' to key buyers. In small firms, it is very hard for managers to spare the time or resources to leave their immediate production commitments to undertake such learning support. This is likely to be a growing responsibility as the managers of production firms become less likely to have experience of working within a broadcasting firm, as more production industry entrants go directly into dedicated production firms, as opposed to entering the industry by working for a vertically integrated producer-broadcaster where the linkage between production and broadcasting was clear.

8.7.2 Skills relevance

Another key issue to emerge from the interviews was the challenge of maintaining skills relevance following the restructuring of the large television firms and greater production outsourcing. In the pressurised television industry where clients are buying confidence, reliability and competence, there was some concern expressed about learning inequalities. Several informants noted that these performance pressures often lead to proven talent getting more and richer experience and thereby the greatest opportunities to learn. This raises the

problem of learning inequalities in flexible, network based, knowledge economies.

Under flexible production, contextual knowledge of different firms is gained from a diverse portfolio of work experiences. Individual workers seeking contracts need to be able to demonstrate diverse learning experiences. In a knowledge economy, equality of access to learning opportunities in work is the basis of genuine, equal opportunity. If knowledge and learning resources are concentrated on the few proven experts, in time, a firm will be forced to pay more for such individuals through wage inflation and will face problems of supply of knowledge rich workers. The firm that can offer a learning environment to a wide range of workers of varying levels of experience will facilitate network relationships not just with today's talent, but also tomorrow's talent thereby securing access to a key strategic resource.

Research by the industry's training organisation Skillset (1994) identified maintaining relevant training as a key issue. New flexible work practices mean that on-going training for freelancers and new entry training is a real challenge for firms. The combination of more mobile workers and commercial pressures may encourage firms to free-ride in terms of training provision. Short-term opportunism may result in long-term skill shortages and knowledge gaps. Individual firms may perceive no real incentive to train in a contractual environment where knowledge can be contracted in. Individual managers varied in their views on this issue. The larger producer-broadcasters and some smaller firms still appeared to train, particularly in their areas of core knowledge. However, some managers expressed concern that contractual pressures might be

squeezing out training. Independents that had security of income from a large, regular programme appeared more able to train, as a manager from one such firm noted:

"...I think that we are again in quite a lucky position because we have got such a large contract and it is in its fifth year and it allows you to do more than other companies. I also think that we have a more positive approach than other companies in that we think we have a duty to train everyone. But I don't think that the other companies can afford to unless the broadcasters change their attitude."

Individual firms may lack the time or margins to train. However, some firms were capitalising on their specialist knowledge to provide training to other firms including larger producer broadcasters and thereby deriving further income from their knowledge base.

Considerable concern was expressed about the level and relevance of training and the associated problem of specific skill shortages. Training is part of the apprenticeship process of any living profession reliant on intergenerational knowledge transfer to foster knowledge development and avoid knowledge erosion. Skillset (1994) has undertaken research that points to the problems of specific skill shortages in the industry.

Multi-skilling provides functional flexibility and may be one way round skill shortages as expressed by a senior manager in a producer-broadcaster:

".. the arrival of new technology which has meant that television is not so much about engineering and much more about technology. Hum, in the past you used to employ television cameramen from engineering colleges because it was important that they could mend their cameras. It is not important anymore that they can mend their cameras because when their cameras are broken they are so cheap that you throw them away and give them a new one. And this has brought a complete change. So there has been a complete revolution in working practices. There has been the arrival of the concept of multi-skilling where young people coming into the business train to be cameramen, soundmen, lightmen often journalists as well ..."

As the industry moves towards greater use of multi-skilling individuals are developing a breadth of skills, but there was some concern expressed that this may be at the expense of the highly skilled specialists of the future. Again intergenerational learning may be beneficial in marrying different sorts of knowledge in the future. For example, young people often have the expertise of computer editing, but may lack the aesthetic knowledge of older people. Multiskilling is sometimes portrayed as the antithesis of specialist knowledge; the former being about breadth of knowledge, and the latter about depth of knowledge. However, in practice one informant suggested multi-skilling is about shared responsibility. This conception captures the situation faced by more companies as they de-layer, outsource and drive the slack out of their businesses.

One way for organisations to cope with fewer resources is asking people to readily change roles as required and share in learning responsibilities.

Technology has enabled hybrid jobs that mix the skills of previously distinct roles. For example, the graphic artist used to use paint brush, pen and pencil but today they are technicians in their use of the computer but artists in their creative output. More jobs are hybrid forms blending technical and creative skills. The role of multi-skilling was highlighted by one production manager.

".. if you are a news cameraman it is quite possible to be a news cameraman and a brilliant news editor. You don't have to restrict yourself - to one particular trade. And that is what I think a lot of people misunderstand, they think multi-skilling means not being as good as you should at everything. Whereas because of the way we work, because of the speed you can work now, you don't have to do endless lights to set up when you are just doing an interview. You don't have to take the lost tribe of Israel out on location. It is not a massive engineering venture that is why I say you can be a very good news cameraman in the morning and a very good editor in the afternoon...."

Several companies indicated that for certain prestige programming, such as drama, greater use was still made of the specialist skilled individual. Expert sound engineers, cameraman and so on offered specialist skills. However, more role flexibility and a broader knowledge base from multi-skilling may enable individuals to explore more varied career paths in the future. Several of the

independent production companies cited examples of receptionists rapidly learning the breadth of the industry and moving on to more senior and challenging production roles that might not have been possible under the more rigid hierarchy of the larger production companies, as noted by one manager.

"[the person] was our receptionist, she started as a runner and she was production secretary of the last series. She is learning the whole breadth of the industry, but she doesn't know where she wants to be. She doesn't know whether she wants to be a production manager and manage a team or a researcher finding new items, or a director, or an editor, but in a company like this you have the facilities to seize or the chance for that breadth of experience because if she was production secretary at the BBC all she would be doing would be typing letters and doing memos.."

This highlights the danger of dividing people into 'knowledge workers' (Drucker, 1955) and 'other workers' because it implies some people are not worth investing in. Such labelling, therefore, may prevent the firm from exploiting the full potential of all the people within it- a key requirement of a learning organisation (Senge, 1990).

Some informants pointed to the fact that many of the top people in television today had benefited from a structured trainee scheme, such as that offered by the BBC, and questioned where the future specialists would come from. Others however, pointed to the fact that some of the great talents of the industry had

come up through unconventional routes and that it was their passion for their work and talent that got them work.

"You see if you look back over the last 10-20 years you had the large broadcasters, the broadcasters-producers; the ITV and the BBC who had something between very good in-house training schemes, and old fashioned apprenticeships, and slave labour, you know, a mixture of those three and sometimes that was wonderful and sometimes it was awful, in that you could spend 5 years making tea for somebody who actually knows bugger all and basically they gave the impression they knew bugger all anyway and that was always the problem."

Several specific areas of skill shortage were, however, mentioned by informants. In particular a shortage of line drama producers and directors who were crucial to ideas realisation. Such specialists had skills that took time to learn and, in the case of producers, brought together a diverse mix of both creative and financial skills. As described by another senior manager of a producer-broadcaster:

"There are certain skills like line producing which are becoming quite rare. It takes quite a long time to train somebody to be a very good line-drama producer, for example they have to have very strong financial skills as well as very strong creative skills; they are managing very major productions, often spending 6, 7 million pounds these are in account terms massive accounts; they are

dealing often with very difficult people who aren't always happy and it takes a certain type of mindset to be able to keep all that going. So these are the people who have become kind of gold-dust and what you do is that you hang onto them; you know, fund them through a lean period if necessary to make sure you have them there when you next need them."

As the industry becomes more competitive training in management was also a key issue in maintaining skills relevance. The ability to manage people and change was seen as important for managers in the industry by several respondents as expressed below:

"The other areas that have recently come into play is this vast expansion of things like merchandising, business affairs - the business end of television is now totally different from what it was 10 years ago and "creative people" in inverted commas didn't really have to within broadcasting know about: putting a deal together; about finding co-production money about money really...But now it is not enough to just have the idea for the programme. You know we are all learning a lot about business affairs really and the top executives ...got bundled off to Harvard Business School about 5 years ago...So you now have to learn about sponsorship, you have to learn how to put a sponsorship deal together with a barter syndication deal that would work in Europe but wouldn't work here. ...So there is a massive business

affairs/ancillary business areas which has been a learning curve certainly I think for people at a more senior level."

The evidence suggests that maintaining skills relevance is a major challenge under flexible, network production.

8.7.3 Knowledge uncertainty

In days when grades were universally recognised, job titles had a clear meaning. With the fragmentation of the industry, there was some concern expressed that in the late 1990s, job titles were being used in response to demands for status or in compensation for low salaries by some firms. This meant that assessing someone's prior experience from their job title was problematic giving rise to *knowledge uncertainty* in terms of what knowledge the firm would gain access to from contracting in a given individual. Knowledge uncertainty appeared a problem for firms reliant on mobile labour. As one manager of a production company noted:

"You employ people now and they are called APs and you get them and they are not APs. They are all mad about job titles. They think after they have researched for 3 or 6 months they should be assistant producers.....they call themselves these glamorous job titles and they can't do the most basic thing."

One way of trying to build some degree of knowledge certainty for those individuals acting as knowledge brokers at production firms is to have a system that accurately represents a person's knowledge base. This might be by

qualifications or a record of work experience in the form of a CV of credits.

Some informants felt that qualifications alone might not provide a clear guide to the level of practically relevant experience that an individual has obtained.

"I get lots of cvs in from media students and I feel like writing to their course tutors and saying you are a disgrace because they come out with no skills, no practical technical skills. They can tell you about the semiotics of Coronation Street, but you know, you look at what they have done at university and they have had all that access to all of that equipment, but they have not made a film or they have not written for a newspaper or a magazine or they have not started a magazine or they have not designed a website or- and if you are not a self-starter in this industry you will just not survive."

Flexible production builds on individuals with tenacity and initiative in seeking imaginative solutions. Given the crucial role of experience in knowledge development in television production, the credits system that works as the production workers CV is seen by many as the best way to continue to deal with this problem of knowledge uncertainty. One manager describes the view of others who favour the credits system:

"....in the television and film industry we have a thing we give people called credits. You can sit and watch the credits on the screen. I can't think of a better way of describing what NVQs are....
...The real point is that what this industry desperately needs is base

level training. It needs qualifications that are relevant to people up to the age of about 23/25 where we can take it as far as read that if someone has got this qualification then they understand what teamwork means, they understand what coming to work on time means, honest in terms of not giving you bullshit in terms of what they know and what they don't know. And what we don't need is people between the age of 23-25 coming in saying I am a director or I am a sound recordist because I have this piece of paper because that is a complete turn-off."

For firms looking to assess the capabilities and skills of individuals CV credits are a passport to work. Several informants suggested that flexible production was also creating problems of people being put into jobs that were well ahead of their knowledge base. This problem was expressed by one informant:

"You have got to be mature enough to restructure the show and get it on air in an hour and that is what is lacking because people aren't mature enough, they haven't got enough experience. They are progressing far too fast, you know they just can't. You know they can just about do their job and you have to promote them sometimes more quickly than you want because there is no one around. But they lack that maturity to deal with a situation if something goes wrong."

Young people may be progressing too fast and being promoted well beyond what they have learnt from experience.

More experienced people were sometimes seen to have a unique mix of work experience and contacts that made their capabilities non-clonable and highly sought after. Creating relationships that provide greater knowledge certainty and link with people that offer unique mixes of skills is a key part of building learning relationships thereby providing insurance against knowledge uncertainty under network production.

8.7.4 Ideas theft

Finally, some anecdotal evidence suggested that ideas theft may be a problem in contexts of flexible network production where workers are mobile and producerbroadcasters act as programme buyers in competition with programme sellers. Given the power of an ideas advantage in television, it is important to have methods for protecting one's ideas. Ideas protection may be an issue that warrants further research in network contexts. In the television industry, ideas were being protected by firms forging exclusive knowledge or an exclusive relationship with key knowledge rich individuals. For example, one programme maker used research and unique contacts to protect the firm's ideas, thereby, access to unique knowledge established the firm as the only organisation capable of realising the programme concept. This takes us back to the power of a relational advantage. In other words, yes, your idea can be stolen, but if another organisation cannot realise that idea into a completed programme your idea has no value to that firm. This really is akin to the principle of the car immobiliser, yes you can still break into the car, but the car cannot readily be driven or used to fulfil its purpose and so its value in other's hands is reduced.

8.8 Conclusions

This research suggests that in fluid network contexts organisations have a vital role to play in facilitating a creative environment for shared learning, but that knowledge, even though it is shared, still resides largely with individuals. It is creating an attractive learning context that enables a firm to leverage its learning and grow an attached learning community. The Knowledge Chain provides a framework for understanding the process of learning and knowledge utilisation in fluid network based production contexts.

The management of the creative process and the creative environment are key to knowledge sharing and application. Learning requires space and reflection if new knowledge is to be used as part of an organisation's strategic armoury. Knowledge marketing is a key aspect of maintaining a firm's knowledge base. It is contended herein that creating a learning context in fluid network contexts maybe more important than knowledge ownership. The area where ownership is important, in the television industry, is over intellectual assets arising from programme production. These are the reward for providing an effective learning context for ideas realisation and provide further income streams from a given idea.

Finally, it has been shown that flexible production is not without its problems given the challenges of teaching, maintaining knowledge relevance, knowledge uncertainty and protecting the firm from ideas theft. These issues warrant further research to avoid organisational learning and knowledge based competition being presented as a generic, win-win panacea to practising managers.

CHAPTER NINE

CONCLUSION

9.1 Introduction

This thesis has investigated the learning processes and learning challenges arising in the UK television production industry in the mid-to late-1990s. As television production is organised around flexible network organisations in the form of production teams, the television industry provided an opportunity to study the learning processes emerging in such fluid production settings. The strategic and organisational issues raised by the managers operating within television production firms have been incorporated into an organising framework - the Knowledge Chain as illustrated in Chapter Seven. This framework summarises the key learning processes identified in this study for effective organisational learning in network contexts. The findings of the study centre on the centrality of relational issues to learning in network contexts and the key role of appropriate work environments for learning across firm boundaries.

In this chapter, the main conclusions reached in this study are summarised. In section 9.2, the key relational issues of learning in the television production industry are discussed. In section 9.3, the key knowledge resources that differentiate firms and the tasks of managers as knowledge brokers in facilitating learning in the network contexts of television production are summarised. In section 9.4, the role of learning contexts in creative advantage are explored. In section 9.5, a self-assessment is made of the study, its method, its limitations

and suggestions provided for future research. In section 9.6, the contributions of this study to theory development in the field of strategic management are summarised.

9.2 Relational Issues of Learning in Network Contexts

In Chapter Six, it was found that the firms that were developing their production businesses were using their relationships with customers, talent, production partners and viewers to achieve access to key knowledge for leveraged learning. It appeared that relationships with strategically important external individuals offered opportunities for a firm to learn from more individuals than it could afford to employ. This provided valuable opportunities for resource leverage and knowledge flexibility. A firm could thereby effectively co-opt the knowledge of others through judicious relationships. This architecture (Kay, 1993) provided a broader knowledge base from which the firm could draw strategic knowledge than would have been possible by relying exclusively on internal workers. Such arrangements, also provided crucial knowledge flexibility because firms were able to adapt their relational armoury as the relevant knowledge for strategic development changed over time. For example, firms were developing closer links with satellite channels and international customers as new commercial opportunities unfolded. It has been shown that relational advantage can help firms to focus their strategic development on programmes and related products that will make most impact in the marketplace and waste least resources in nonrecoverable development costs.

It was also demonstrated that relational advantage can provide valuable opportunities to promote the expertise of the firm to a wide external constituency, that will ultimately determine the future success, or otherwise, of a production firm. The workers, customers, business partners and viewers through their affiliations to specific firms, and/or purchasing decisions, determine which firms develop and grow and which wither on the vine.

9.3 Differentiating Knowledge Resources and the Knowledge Brokering Tasks

In Chapter Seven, it was noted that the key differentiating knowledge resources for production firms were: the specialist knowledge base of the firm; the relational advantage that enabled a firm to rapidly broker external knowledge for product/market development; the creative advantage of the firm that enabled knowledge to be unlocked for effective creative production and shared learning, and the knowledge reputation of the firm, built on previous production successes that attracts new network partners. These knowledge resources take time and effort to develop because of their relational underpinning and so offer sustainable learning advantages to incumbents over newer industry entrants.

It was noted, in Chapter Two, that extant research had identified uncertainty by managers about what their role might be in developing knowledge in their organisations and they therefore sought more research into this issue (Ruggles, 1998). The findings of this thesis start to provide some insight into the tasks that managers might perform when acting in a specific knowledge development role as a 'knowledge broker' for their firm. The key responsibility of the manager

acting as a knowledge broker in network settings appears to be forging multilevel learning networks for leveraged organisational learning.

Three key knowledge tasks were identified for managers acting as knowledge brokers in television production firms, each of which facilitated the learning of a firm by, firstly, growing the range of knowledge options a firm had and secondly, reducing the risk of over investing in a particular source/type of knowledge - a key issues in dynamic environments. One key role of knowledge brokers was found to be that of locating and linking knowledge. This supports the findings of others into the role of knowledge brokers in knowledge identification and combination (Hargadon, 1998; Miles and Snow, 1986; Nonaka, 1991). Another key knowledge brokering task identified in this study was that of identifying and investing in new knowledge firms. Such activity enables production firms to diversify into new knowledge bases without jeopardising the strength of the existing knowledge reputation of the incumbent firm.

The third key knowledge brokering task identified for managers of production firms was forging knowledge attachments. This involved facilitating ongoing relationships with key knowledge rich workers, supported by a range of incentives to encourage talent to work on a more enduring and closer basis with the firm. This suggests that it is possible to work in partnership with independent and mobile knowledge rich workers on a more enduring basis if appropriate inducements are offered. However, effective relationships are a pre-requisite to

attachments with external actors making effective inter-personal skills key for managers in the television production industry.

Attachment appears to run counter to the numeric and functional flexibility associated with dynamic networks (Miles and Snow, 1986) because such arrangements are based on trying to tie in key workers to work with the firm on a more regular or ongoing basis. However, one explanation for these emerging attachments, in the television industry, may be traced to the question raised in Chapter Three, namely to what extent the shared understanding of standards, goals and values that Wickstrom and Normann (1994) argue are key to developing capabilities within firms are possible to develop in dynamic network contexts? The prevalence of attachments found in the television industry suggests that enduring attachment relationships provide the basis for such shared understanding to develop in more fluid network contexts. This suggests that, despite dynamic, transient networks being the preferred mode of organising in television production, this organisational flexibility is balanced by an architecture (Kay, 1993) of more enduring learning relationships between certain external, knowledge rich workers and production firms. One key way of forging attachments besides offering inducements appears to be to offer a compelling learning environment to which knowledgeable workers are drawn.

9.4 The Importance of Learning Context

Having identified knowledge rich partners, television production firms have to find ways of unlocking that expertise and insight for commercial gain. Knowledge application for innovative and creative outcomes is problematic to 'manage'. In Chapter Eight, it was demonstrated that the way this appears to being handled in the television industry is through the effective management of the creative process for short-term innovation, experiential learning and strategic knowledge outputs. A key element of this process was the creative culture provided by the firm that influenced the working environment surrounding the production team. It was this creative culture combined with the way the various stages of the production cycle were managed that comprised the learning context offered by the firm. This setting appeared to influence the likelihood of innovation, creativity and learning arising within a given production team.

The ability to forge an effective learning context, appropriate to the strategic objectives of the firm, appears to be a key way of handling the difficult task of balancing the tight-rope faced by managers in television production between the need to manage and the need for creative freedom. Indeed, King and Anderson (1995) warn that whilst elicitation techniques based on analogy and metaphor, training, selection and assessment and organisational change can facilitate creativity, academics and practitioners should be mindful of the "illusion of manageability". Managers need to recognise their own limits and that much of what is truly innovative is not predictable nor can readily be controlled. Thus, this research by discussing some of the key features and challenges, of the creative process of television production, may provide some insight into how firms may, in practice, tackle this juggling act between managerial control and creative freedom characteristic of ideas work.

The effective learning contexts provided by some television production firms supported both individual learning and social learning for competitive advantage. Creating effective learning contexts appeared to a large extent to be about providing appropriate socio-psychological environments for experimentation and learning. The firm's management style, values and norms and working practices appeared key here. It is contended, herein, that the ability to build effective learning contexts is a key knowledge development issue for organisations reliant on network relationships.

After the frenzied activity of the production cycle, some firms argued it was helpful to reflect on any lessons learnt. This learning process is termed, herein, 'safe space learning' to capture the time and space necessary for firms to reflect on the key strategic insights that they have gained following a production and for individual workers to assess the value of new skills, ideas, techniques and contacts they have obtained. There was considerable concern that for firms and individuals alike, this valuable stage of the production process was under threat from the time pressures imposed by the operational demands of flexible network production, following the disaggregation of production from broadcasting. There was some evidence to suggest that the flexible production methods, adopted by the television industry, may be squeezing out thinking time for firms and, thereby, threatening their longer term prospects of success.

One solution might be to incorporate learning into the strategic planning cycle given that some have argued, that this time-tabling of strategic thinking at least ensures that strategy is not driven out by the demands of operations (Ansoff,

1965). However, such an approach to learning would be unlikely to be effective, in practice, because theory suggests that reflection needs to quickly follow a given insightful incident (Kolb, 1984) for learning to occur. This suggests that it may be more effective for firms to try and schedule some time for reflection into the end of production cycles if firms and individuals are to be offered the space to learn in frenetic, delayered and downsized competitive industries.

Focusing on the process of building effective learning contexts for rapid knowledge development and knowledge utilisation draws more on the social issues of organisational learning than it does on the positivistic approach to knowledge development that dominates much of the knowledge management literature. The knowledge management literature focuses on trying to control knowledge by codifying, measuring and stockpiling knowledge (Davenport and Prusak, 1998). The organisational learning literature, recognises that strategic knowledge development is a social process (Argyris and Schon, 1978) rather than simply an information technology issue or an accounting exercise. Information technology and financial measures can help firms organise and value the firm's knowledge, but such systems and processes are not a substitute for the learning that can be gained from social interaction.

9.5 Assessment of the Study and Suggestions for Future Research

This study begins to explore the organisational learning issues facing firms reliant on network production organised around teams of highly mobile workers in the UK television industry. By presenting a framework that captures the key learning processes uncovered by the research, the thesis seeks to contribute to

our understanding of how firms can learn from a diverse range of network partners in the fluid organisational settings characteristic of network based ideas work. This work is particularly timely as more firms in a range of industries look to the efficiency and specialisation benefits of network forms of organisation. The findings of this study add to the organisational learning literature emerging in strategic management and raise critical issues about the challenges of organisational learning for managers reliant on network forms of organisation.

The research explores organisational learning issues in a 'creative industry' again this represents a departure from many studies that focus on manufacturing, high-tech or consultancy firms. This research is particularly relevant in the late 1990s because the creative industries are being promoted by policy makers as a key source of competitiveness for the UK (DTI, 1998). Consequently, a better understanding of the management of the creative industries for competitive success may render useful information to help inform future debates about economic development policy in the UK.

This research was exploratory in nature and so the qualitative methodology adopted for this study was appropriate for soliciting the key factors that managers felt to be important in learning and developing knowledge in network contexts. The qualitative methodology, involving face to face interviews, was helpful in uncovering the challenges facing production firms in terms of knowledge development and learning by enabling interviewer and informant to explore interesting findings and areas of ambiguity. Such insights would not have been possible from a more arms length research methodology. However,

following this study, further research is now recommended into the learning processes of the Knowledge Chain to see to what extent they can be applied to other industries that draw on network production. Such industries might include construction, fashion, advertising and publishing industries.

The constituent parts of the Knowledge Chain could also be explored, in more detail, in the television industry to develop our understanding of its constituent processes further. For example, it might be useful to investigate both sides of a learning relationship or the specific features of different learning contexts to provide more detailed insight for managers seeking to foster effective organisational learning in network settings. A longitudinal study involving both interviews and detailed case based observations may be beneficial for monitoring how learning relationships evolve over time.

One limitation that could be raised of the study is that it does not explicitly explore the power issues raised by organisational learning. Several commentators argue that more work is required on the power issues that organisational learning raises. For example, Easterby-Smith et al. (1998) argue that much more empirical work needs to be done into whether the learning organisation is mere rhetoric to achieve compliance by employees or represents a real partnership for collective learning. Such questions raise important issues of ethics and power. Snell and Chak (1998: 338-9) argue that more work needs to be done on the power issues surrounding the learning organisation to investigate whether it is a "Utopian sunshine (where everyone learns and wins) or Foucaultian gloom (where only the heavyweights learn and win)." The work

of Senge (1990) on the learning organisation implies a world of empowerment and participation. Other commentators are more pessimistic about what the learning organisation means for workers. For example, Coopey (1995) envisages an alternative scenario where the top managers and experts hold the power though their knowledge advantage at the apex of the organisation and control over learning processes and opportunities.

The shifting industry structure of the television industry, at the time of the research, was altering where knowledge was held and by whom, raising issues of power within the industry for the future. However, it was felt that at the time of the study, the changing power dynamics within the television industry were still in a state of flux, making it too early to say where the power advantage from learning and knowledge would eventually lie. One observation of the powerbased criticisms of the learning organisation is that they are rather dichotomous, portraying organisational learning as either empowering or exploitative. Where power and reward from learning will lie in the Information Age are key questions, but it is contended herein that the answer is unlikely to be found in a dichotomous industrial relations model that assumes employees are subservient to the managers and reliant on the organisation. Much of the organisational learning theory purports to offer guidance for managers seeking a knowledge advantage in the new Information Age of mass customisation, yet much of the discussion of power in the literature on organisational learning builds on a view of organisations and labour markets that is rooted in the assumptions of the age of scientific mass production where workers were viewed as interchangeable units of labour.

At the end of the Twentieth Century there exists, in practice, a diverse range of organisational forms and a plurality of positions held by workers competing in increasingly flexible labour markets. It has been argued herein, that although there are still many large hierarchical organisations run on top-down principles. there are equally many organisations that are outsourcing activities or coproducing with partners via network forms of organisation, alliances or jointventures. Workers are increasingly mobile, often working on a contract basis. This thesis does not dispute that many workers remain dependent on firms for their immediate living. However, the relative power issues between knowledge rich workers and firms appears to be far more complex and contingent than some commentators suggest and warrants more research in the future as flexible working practices evolve in various industries. For example, an emphasis on knowledge might suggest the primacy of the expert in firms, yet this implies there is a right knowledge, or one best way of doing things that everyone else should follow. This implies expert-down knowledge development endorsed by top down management but it has been suggested from this research that this may actually undermine organisational learning. Indeed, this seems at odds with the practice of thriving, innovative organisations like 3M and Intel where all workers are seen as sources of ideas and constructive conflict is embraced even if it challenges the supremacy of the 'expert'.

One final limitation of this study is that it is based on the views of managers.

Consideration of the key learning issues from the perspective of other workers in the television industry, including in particular those of freelance knowledge rich

workers would also be beneficial. For example, what do they seek from an effective learning context? What in their view is key in forming an attachment with a given firm? What incentives do they particularly seek for knowledge sharing?

Another topic for further research is exploring what constitutes an optimal constitution of team members for maximising intergenerational learning. Such research would facilitate our understanding of team dynamics. Finally, in Chapter Nine, various challenges for knowledge development in network contexts were raised, drawing on the experience of television production. These challenges included: the costs of teaching for managers; the challenge of sustaining skills relevance within the industry and the associated problem of knowledge uncertainty, and the potential threat of ideas theft. It is imperative that managers are better informed about the challenges of knowledge development under different organisational settings, especially given that much of the organisational learning literature, at the time of this study, built from the assumption that production was contained within neatly bounded firms. This is clearly a major abstraction from reality, in an Information Age, when more industries are embracing flexible production drawing on dynamic networks made up of mobile workers. Managers need a better understanding of not just the potential benefits, but also the real costs, of using learning and knowledge as the basis for competitive advantage. Further research is advocated into such costs.

9.6 The Contribution of this Study to Theory Development

Finally it is necessary to highlight how the findings of this research contribute to the development of the theory of organisational learning, emerging in the field of strategic management. In the review of the literature on organisational learning, in Chapter Two, the promise of organisational learning for achieving competitive advantage was noted. However, the extent to which the theories of organisational learning developed from research into neatly bounded firms could be readily applied by firms operating in more fluid contexts of network production that cut across organisational boundaries was questioned.

The contribution of this study is that, firstly, through the framework of the Knowledge Chain, a number of key learning processes have been identified as helpful to learning for television production firms. These processes provide a basis for further research in other network based industries. Secondly, the particular importance of relational advantage to learning in network contexts in television production suggests that, in network settings, it may be the psychological and organisational theory disciplines of organisational learning that offer more insight into how to facilitate learning than management science. with its emphasis on information processing (Easterby-Smith et al., 1998). The findings of this study endorse the importance being given to strategic architecture (Kay, 1993; Hamel and Prahalad, 1994), communities of practice (Brown and Duguid, 1991) and social capital in the strategic learning literature and the particular relevance of such concepts in network settings. In the fluid production contexts of transient network production, characteristic of television production in the 1990s, the role of the firm may be more that of a creator and

caretaker of a learning community, than that of knowledge resource controller. Firms thriving in such fluid contexts appear to recognise the powerful role the firm retains as a social institution for facilitating both individual learning and social, strategic learning.

Thirdly, this study provides insight into the different knowledge brokering roles managers can play in network contexts in the television industry and highlights the key role that managers have in identifying more or less useful knowledge and its effective combination. Such work involves forging learning grapevines and accessing reliable knowledge bases. Managers here treat knowledge rather like books from a library something to be borrowed, shared and used, rather than bought and frequently forgotten about.

Fourthly, this research provides some insight into how the creative process can be handled for innovation and strategic learning. This again highlights the importance of unlocking knowledge and utilising knowledge rather than owning it. Production firms work on relational principles. This thesis contends that in contexts such as television production, where many individuals are freelance mavericks, it is the quality of relational connection that is key to learning rather than knowledge ownership drawing on employees. Providing effective learning contexts is central to ongoing relationships between the managers in the organisation and external knowledge rich human resources. Individuals reliant on temporary work contracts, are trying to learn and upgrade their skills to successfully compete in flexible labour markets. Firms that can offer effective learning contexts are attractive to work with because they offer valuable learning

opportunities, that ensure continuing professional development. Firms seeking competitive advantage in such contexts, appear to rely less on knowledge management as it is frequently conceptualised, as a technical process (for example Sveiby, 1996) and more on organisational learning as categorised by Pedler et al. (1991). The importance of the environment created by the firm, in network settings, suggests that the work of other commentators on contexts for learning may be a particularly relevant stream of literature for firms that organise their projects around networks (Cohen, 1998; Nonaka and Konno, 1998).

Creating effective learning contexts in television is about managing learning in the sense of providing the best opportunity for social interaction, dialogue and debate and then ensuring that any resultant strategic learning is expediently put to work. Drucker (1955: 234) noted that:

"Work must always be organised in such a manner that whatever strengths, initiative, responsibility and competence there is in individuals becomes a source of strength and performance for the entire group."

It has been shown, herein, that network production can provide rich settings for shared learning and overcoming the group-think problematic in large organisations. However, it would be wrong to urge all firms faced with network production to embrace organisational learning as a means to competitive success without individual managers first considering whether they and their firms are

capable of sustaining the considerable management effort, relational expertise and contextual understanding necessary to foster learning in network contexts.

APPENDICES

APPENDIX A

LETTER TO REQUEST INTERVIEW

Dear....

I am undertaking doctoral research at the University of Nottingham into the strategic management issues arising from the flexible and collaborative production arrangements in the television industry. The study focuses on knowledge development, core competence and innovation. As part of this research I am interviewing a range of industry representatives.

As ...has a reputation for...I would be very grateful if I could meet with you as part of my study to obtain your views on the key strategic issues facing your organisation. The interview would last approximately one hour. You are assured complete confidentiality. I can be flexible in terms of arranging a date, time and venue convenient to you.

Your contribution to the study would be extremely valued. I will call your office in the next few days. I hope that you will be able to spare the time to participate.

Yours sincerely,

Sue Tempest

APPENDIX B

INTERVIEW GUIDE

1. Strategic Issues

What are the key strategic issues in the television industry/ facing your firm? How do you develop your strategy? i.e. the process-planning, opportunistic, no real strategy, back of core competencies etc.

2. Knowledge, Learning & Innovation

Could you describe how (i.e. the process) you manage to encourage innovation and creativity? Could you talk me through an e.g. of creative success?

Is it possible to manage for recurring success in tv production? If so how?

Can you describe the learning process for individuals/& or firms under flexible production?

How is knowledge shared?

Does collaborative production involving freelancers, contract workers have any implications for the learning process?

Is new technology having an impact on the knowledge base required by the industry?

Does new technology alter the learning processes? How?

How is knowledge acquired and harnessed in your organisation?

Does your organisation have an intellectual asset management strategy?

Do you have a personal knowledge development strategy?

3. Core Competence

In you experience how are resources (talent, finance, technology) converted to core competence for competitive advantage under flexible production?

4. Relationships

Which external relationships are particularly important for the development of your business?

How do you identify potential crew or production partners?

Are those relationships transient or recurring?

Do these relationship require physical proximity?

Are you involved in any strategic alliances? Do you plan to be?

5. Performance

What is the key source of value added for your business?

What is the key performance measure for your business? financial, market share, sales, other-awards, ratings etc.

6. Infrastructure/LA initiatives

Do LA media strategies help your business?-If so how?

What regulatory or infrastructure change could most help your business?

7. Concluding question

Is there anything else that you would like to raise or that you feel is important that we have not already covered?

APPENDIX C

A chronology of the key developments in UK television

1922	Formation of the British Broadcasting Company - a consortium of wireless manufacturers under the control of the Post Office. General Manager John Reith.	
1923	Sykes Committee - state defined broadcasting as a public utility.	
1925	Baird demonstrates first recognisable television picture, Crawford Committee recommend BBC become a public corporation.	
1927	British Broadcasting Corporation established 1st of January as a public corporation. Reith first Director General.	
1929	Baird Television Development Company began regular experimental 30-line broadcasts from BBC.	
1930s	Earliest cable systems to improve reception for those unable to benefit from terrestrial services due to poor reception (narrowband systems).	
1932	BBC began low definition television service using Baird equipment.	
1936	Ullswater Committee recommends more decentralisation and greater regional emphasis at BBC.	
1937	Marconi-EMI system adopted by BBC. Transmission of the coronation of King George VI.	
1950s	Non-geostationary orbits relay TV signals.	
1951	Beveridge Committee Report - examines monopoly of BBC.	
1954	Television Act 1954 - Conservative government provides for the creation of commercial television under the Independent Television Authority (ITA)	
1955	ITV begins 22 September. Full ITV coverage not complete until 7 years later. Network contractors for the London, Midlands, and North of England have federal responsibility for network programming.	
1960	Pilkington Committee set up to look at the future of broadcasting	
1962	Report of the Pilkington Committee- concerned at the triviality of ITV programmes. AT&T Telstar satellite relayed television across the Atlantic.	
1963	Television Act- introduces more formal control of the programme arrangements for ITV.	
1964	BBC2 launched.	
1967	First regular colour TV service begins 1st of July.	
1968	New ITV contracts awarded - new contractors Thames, LWT, Harlech, & Yorkshire.	
1972	IBA regulatory body for ITV & commercial radio.	

- 1973 IBA announces teletext system -ORACLE. Responsibility for broadcasting passes to the Home Office. Annan Committee set up 1974 looking into the future of broadcasting. BBC teletext service CEEFAX. Annan Committee reports-criticises the duopoly, seeks greater diversity, recommends 1977 fourth channel. World Administrative Radio Conference (WARC) UK allocated 5 DBS channels for future satellite services. 1979 Conservatives win election. Queen's Speech announces fourth channel under the IBA. 1980s Satellites and their launchers increase in size and range. 1980 Broadcasting Act 1980 - redefines the role of the IBA including responsibility for fourth channel. New ITV contracts announced to run from 1982-1989. Southern & Westward not renewed. Associated Television (ATV) required to restructure and base in the Midlands-change to Central Independent Television. IBA agree to breakfast franchise TV-am. 1981 New broadcasting research body for research of BBC and ITV established, The Broadcasters' Audience Research Board (BARB). 1982 Channel Four launched as publisher-broadcaster wholly owned subsidiary of IBA remit to cater for minority and diverse tastes not dealt with elsewhere by television. Report of the inquiry into Cable Expansion and Broadcasting Policy (Hunt Report)-urge early start on DBS distributed by cable. Two DBS services allocated to the BBC with the objective of having them in service by 1986. Joint company of BT, British Aerospace and Marconi set up to provide the services. Government White paper on Cable TV published. Breakfast Time BBC & TV-am 1983 launched. 11 pilot broadband cable franchises announced by the Government. Sky Channel - the first satellite TV Programme channel in the UK launched, 1984 owned by Rupert Murdoch. Cable and Broadcasting Act 1984- legislation for the expansion of cable and its control under the Cable Authority with the power to grant franchises, regulate and promote the industry. Legislation for DBS. BBC initiates the Club of 21 consortium for DBS - BBC, ITV cos, Consolidated Satellite Broadcasting, Granada TV Rental, Pearson, Thorn-EMI& Virgin. Budget destroys capital allowances for cable construction & high interest rates bring cable to stagnation. 1985 Club of 21 tells Government that the requirement to buy British equipment is too costly. Peacock Report- looks at BBC's role & funding -rejects TV advertising as form of 1986 funding for BBC, suggests competitive tender of ITV franchises. Recommends * Freedom of entry of programme makers and transmission * Wide range of distribution methods financed by direct payment. DBS contract awarded to British Satellite Broadcasting, a consortium of Granada Group, Anglia TV, Virgin Group, Amstrad and Pearson plc.
- 1987 Broadcasting Act extends ITV contracts to 1992 to give more time to consider a franchise system. Conservative government proposes a Broadcasting Bill to enable broadcasters to take advantage of the technical opportunities and extend consumer choice.

Broadcasting White Paper- proposes the replacement of the IBA with a different regulatory body operating with a "lighter touch", award of ITV franchises by competitive tender. First European Direct Broadcast satellite "Astra" launched-direct reception of satellite at affordable price-Sky television beats DBS to direct home market in UK

1989 Boost to cable industry-

- * removal of ban on significant US investment in the cable industry
- * maturity US cable industry- large revenues to invest
- * liberalisation cable sector in the UK BSB DBS system launched.

1990 Broadcasting Act 1990

- * Competitive tender proposals for the ITV licences.
- * Requirement for 25% of new programming commissioned from independent producers for terrestrial channels.

 BSB and Sky merger to form British Sky Broadcasting (BSkyB).
- Independent Television Commission (ITC) formed incorporating the Cable
 Authority consolidating the regulatory framework for the whole commercial
 sector into one body. Invitations to bid for ITV licences published. 40 bids for 16
 licences. Carlton, Meridian, Westcountry and Sunrise are the new winners.
 Thames, TVS, TSW, and TV-am lose. EC Broadcasting Directive & Convention on
 Transfrontier Television-Removal of retransmission restrictions of programmes within
 the community, minimum standards on advertising, sponsorship, taste and decency for
 programmes.
- Government discussion Paper "The Future of the BBC: A consultation document" sets the framework of debate for the future of the BBC. BBC discussion paper "Extending Choice: The BBC's role in the New Broadcasting Age"
- The new licensees begin broadcasting on ITV. Channel Four Television Corporation becomes independent licensed service taking its own advertising. BBC announces Producer Choice- internal market created.
- BBC awarded new Charter for next 10 years- enables BBC to expand its commercial a activities.
- 1996 Major reorganisation at the BBC
- BBC Governors agree to BBC Resources Ltd as separate firm. New structure of BBC splits production and broadcast functions. March Channel 5 launched. British Interactive Broadcasting a consortium of BSkyB, BT, Midland Bank, & Matsushita announced.
- 1998 Digital services begin in UK.

APPENDIX D

ITV contractors (1954)

ITA Regions	Companies
London	
weekdays	Broadcast Relay Services/Associated Newspapers (later to operate as Associated-Rediffusion)
weekends	Associated Broadcasting Development Co. Ltd. (later to operate as Associated Television)
Midlands	
weekdays	Associated Broadcasting Development Co. Ltd.
weekends	Kemsley-Winnick Group (later withdrawn and offered to Associated British Picture Corporation later to operate as ABC Television)
Northern areas	
weekdays	Granada (TVNetwork) Ltd.
weekends	Kemsley-Winnick Group

APPENDIX E

The completed ITV federation (1962-67)

	ITA Regions	Companies	
London	(weekdays) (weekends)	Associated -Rediffusion Associated Television	
Midlands	(weekdays) (weekends)	Associated Television ABC Television	
The North	(weekdays) (weekends)	Granada TV Network ABC Television	
Central Scotland		Scottish Television	
South Wales & West of England		Wales & The West Television	
Southern England		Southern Television	
North East England		Tyne Tees Television	
East Anglia		Anglia Television	
Northern Ireland		Ulster Television	
South West England		Westward Television	
Borders		Border Television	
North East Scotland		Grampian Television	
Channel Islands		Channel Television	
West & North Wales		Wales (West & North) Television	

APPENDIX F

The ITV federation (1968-81)

	ITA Regions	Companies
London	(weekdays) (weekends)	Thames Television (merger of Rediffusion & ABC) * London Weekend Television
Midlands		ATV Network
Lancashire		Granada Television
Yorkshire		Yorkshire Television *
Central Scotland		Scottish Television
Wales & West of England		Harlech Television (later HTV) *
South of England		Southern Independent Television
North-East England		Tyne Tees Television
East of England		Anglia Television
Northern Ireland		Ulster Television
South-West England		Westward Television
The Borders & Isle of Man		Border Television
North-East Scotland		Grampian Television
Channel Islands		Channel Television

^{*} new contractors

APPENDIX G

The federation of ITV companies (1982-1992)

IBA Regions		Companies
London	(weekdays) (weekend)	Thames Television London Weekend Television (LWT)
East & Wes	t Midlands	Central Independent Television *
North-West England		Granada Television
Yorkshire		Yorkshire Television
Central Scotland		Scottish Television
Wales & West of England		HTV
South & South-East England		TVS Television *
North-East England		Tyne Tees Television
South-West England		TSW- Television South West *
Northern Ireland		Ulster Television
North Scotland		Grampian Television
East of England		Anglia Television
Channel Islands		Channel Television
The Borders		Border Television
Breakfast		TV-am

^{*} new contractors

APPENDIX H

APPENDIX I

APPENDIX J

REFERENCES

Ahmed, K. (1997) 'ITV may dump its shows in the face of viewing slump', *The Guardian*, 1.10.97: 12.

Ambrosini, V. & Bowman, C. (1998) 'The Dilemma of Tacit Knowledge: Tacit Routines as a Source of Sustainable Competitive Advantage', paper presented to *British Academy of Management Conference*, at University of Nottingham, Sept.

Andrews, K. R. (1971) The concepts of corporate strategy, Homewood, Dow Jones Irwin.

Annan Committee, (1977) Report of the Committee on the future of Broadcasting, Home Office, London, HMSO.

Ansoff. H. I. (1965) Corporate Strategy, New York, McGraw-Hill.

Araujo, L. (1998) 'Knowing and Learning as Networking', *Management Learning*, Vol. 29, No. 3, September, 317-336.

Argyris, C. and Schon, D. A. (1978) *Organisational Learning*, Reading, Addison-Wesley.

Armbruster, B. B. (1989) 'Metacognition in Creativity,' in Glover, J. A., Ronning, R. R., & Reynolds, C. R. (ed.) *Handbook of Creativity*, New York, Plenum Press.

Bacharach S. B. (1989) Organisational Theories: Some Criteria for Evaluation, *Academy of Management Review*, 14 (4), 496-515.

Badaracco, J. L. (1991) The Knowledge Link: How firms compete through strategic alliances, Boston, Harvard Business School.

Barnatt, C. (1999) Valueware: Technology, Humanity and Organisation, Twickenham, Adamantine Press Ltd.

Barnatt, C. & Starkey, K. (1994) 'The Emergence of Flexible Networks in the UK TV industry, *British Journal of Management*, 5 (4), 251-260.

Barney, J. B. (1986) 'Types of competition and the theory of strategy: Toward an integrative framework', *Academy of Management Review*, 11, 791-800.

Barney, J. B. (1991) 'Firm resources and sustained competitive advantage', *Journal of Management*, 17, 1, 99-120.

Bartlett, C. A. and Ghoshal, S. (1989) Managing Across Borders: The Transnational Solution, London, Century Business.

Batelle, J. (1995) 'Viacom Doesn't Suck!', Wired, April, 89-111.

Berger, P. L. & Luckmann, T. (1966) The Social Construction of Reality, Garden City, Doubleday.

Best, M. H. (1990) The New Competition: Institutions of Industrial Restructuring, Cambridge, Policy Press.

Bettis, R. A. & Hitt, M. A. (1995) 'The New Competitive Landscape', Strategic Management Journal, Vol. 16, 7-20.

Beveridge Committee, (1951) Report of the Broadcasting Committee 1949, Cmnd 8116, London, HMSO.

BFI (1995) Film and Television Handbook 1996, London, British Film Institute.

BFI (1998) Film and Television Handbook 1999, London, British Film Institute.

Bowland, R. J. Jr & Tenkasi, R. V. (1995) 'Perspective Making and Perspective Taking in Communities of Knowing,' *Organization Science*, 6 (4), 350-372.

Brenner, M. (1985) 'Intensive Interviewing', in Brenner, M., Brown, J., & Canter, D., (ed.) (1985) *The Research Interview: Uses and Approaches*, London, Academic Press.

Brenner, M., Brown, J., & Canter, D., (ed.) (1985) The Research Interview: Uses and Approaches, London, Academic Press.

Briggs, A. (1961) The History of Broadcasting in the United Kingdom, Vol 1: The Birth of Broadcasting, London, Oxford University Press.

Brown, J. & Canter, D. (1985) 'The Uses of Explanation in the Research Interview', in Brenner, M., Brown, J., & Canter, D., (ed.) (1985) *The Research Interview: Uses and Approaches*, London, Academic Press.

Brown, J. S. & Duguid, P. (1991) 'Organisational Learning & Communities-of-Practice: Towards a unified view of working, learning and innovation', *Organization Science*, Vol.2, No.1, 40-57.

Brown, J. S. & Duguid, P. (1998) 'Organizing Knowledge', *California Management Review*, Vol. 40, No. 3, 90-111.

Brown, M. (1997) 'Yesterday, the world', The Guardian, 16.6.97: Media, 8-9.

Berger, P. L. & Luckmann, T. (1966) The Social Construction of Reality, Garden City, Doubleday.

Burgess, R. (1984) In the Field: An introduction to Field Research, London, Allen & Unwin.

Burns, T. (1977) The BBC: Public Institution & Private World, Macmillan Press Ltd, London.

Burns, T. & Stalker, G. M. (1961) The Management of Innovation, London, Tavistock

Campling, J. T. & Michelson, G. (1997) 'Trade Union Mergers in British and Australian Television Broadcasting', *British Journal of Industrial Relations*, 35: 2, 215-242.

Carnall (1990) Managing change in organisations, London, Prentice Hall.

Castells, M. (1989) The Informational City, Oxford, Basil Blackwell.

Central Statistical Office (CSO) (1995) 220 - 'Overseas transactions of the film and television industry 1994', *News Release*, 9th October 1995.

Clarke, G. (1992) "Quality Investment", Spectrum, No. 7, 6-10, ITC.

Cohen, D. (1998) 'Toward a Knowledge Context: Report on the First Annual U.C. Berkeley Forum on Knowledge and the Firm', *California Management Review*, Vol. 40, No. 3, 22-39.

Cohen, W. M. & Levinthal, D. A. (1990) 'Absorptive Capacity: A new perspective on learning and innovation,' *Administrative Science Quarterly*, 35 (1), 128-152.

Cole, R. E. (1998) 'Introduction', California Management Review Special Issue on Knowledge and the Firm, Vol. 40, No. 3, 15-21.

Collins, J. C. & Porras, J. I. (1996) Built to Last: Successful habits of visionary companies, London, Century Ltd.

Collins, R. (1993), 'Public Service versus the market ten years on: reflections on Critical Theory and the debate on broadcasting policy in the UK.', *Screen*, 34:3, 243-259.

Collins, R., Garnham, N. & Locksley, G. (1988) The Economics of Television: The UK Case, London, Sage Publications.

Commission of the European Communities (1994) Strategy Options to Strengthen the European Programme Industry in the Context of the Audiovisual Policy of the European Union, Green Paper, Com (94) 96, Brussels.

Cook, S. D. N. & Yanow, D. (1993) 'Culture and Organisational Learning', *Journal of Management Inquiry*, 2 (4), 373-390.

Coopey, J. (1995) 'The learning Organization: Power, Politics and Ideology', *Management Learning*, 26 (2), 193-214.

Coopey, J. (1998) 'Learning to Trust and Trsuting to Learn: A role for Radical Theatre', *Management Learning*, 29 (3), 365-382.

Cornfield, J. & Gillespie, A (1993) 'Cable systems, telephony and local economic development in the UK', *Telecommunications Policy*, 17, 8, 589-602.

Crawford Committee (1926) Report of the Broadcasting Committee, Cmd 2599, London, HMSO.

Csaky, M. (1997) How to get into TV, London, Boxtree.

Cyert, R. M. & March, J. G. (1963) A Behavioural Theory of the Firm, New York: Prentice Hall.

D'Aveni, R. (1994) Hypercompetition: The Dynamics of Strategic Maneuvering, New York, Basic Books.

Datamonitor (1992) UK Television, Datamonitor Market Report.

Davenport, T. H. & Prusak, L. (1998) Working Knowledge, Harvard Business School Press, Boston.

Davis, H. & Levy, C. (1992) 'The regulation and deregulation of television: a British/West European comparison', *Economy and Society*, Volume 21, No. 4, 453-482.

Davis, J. (1991) TV UK A special Report, Peterborough, Knowledge Publications.

de Geus, A. (1997) The Living Company: Growth, Learning and Longevity in Business, London, Nicholas Brealey Publishing.

Department of Trade and Industry (DTI) (1994) Competiviness: Helping Business to Win, London, HMSO.

Department of Trade and Industry (DTI) (1998) The Knowledge Economy, London, HMSO.

Drucker, P. F. (1955) The Practice of Management, London, Heinemann.

Drucker, P. F. (1964) Managing for Results, London, Heinemann.

Drucker, P. F. (1969) The Age of Discontinuity, London, Heinemann.

Drucker, P. F. (1993) Post-Capitalist Society, New York, Harper Collins.

Drucker, P. F. (1994) 'Introduction', in Graham, P. (ed.) (1994) Mary Parker Follett - Prophet of Management, A Celebration of Writings from the 1920s, Harvard Business School Press, Boston, 4-12.

Easterby-Smith, M., Snell, R. & Gherardi, S. (1998) 'Organisational learning: Diverging Communities of Practice?', *Management Learning*, Vol. 29, No. 3, Sept, 259-272.

Edvinsson, L. (1997) 'Developing Intellectual Capital at Skandia', Long Range Planning, Vol 30, Issue 3, June, 366-373.

Edvinsson, L. & Sullivan, P. (1996) 'Developing a Model for Managing Intellectual Capital, *European Management Journal*, Vol. 14, No. 4, 356-364.

Eisenhardt, K. M. (1991) 'Better Stories and Better Constructs: The case for rigor and comparative logic', *Academy of Management Review*, Vol. 16, No. 3. 620-627.

European Audiovisual Observatory (1996) Statistical Yearbook 96: cinema, television, video and new media in Europe, Council of Europe.

European Union (1994) EC Panorama of EU Industry 1994, Eurostat DGIII.

Evans, D. R., Hearn, M. T., Uhlemann, M. R. & Ivey, A. E. (1979) Essential Interviewing: a programmed approach to effective communicating, Monterey, Brooks/Cole Publishing Company.

Fahey, L. & Prusak, L. (1998) 'The Eleven Deadliest Sins of Knowledge Management', *California Management Review*, Vol. 40, No. 3, 265-276.

Florida, R. & Kenney, M. (1993) 'The New Age of Capitalism: Innovation-Mediated Production', *Futures*, July/August, 637-651.

Francis, A. (1992) 'The Process of National Industrial Regeneration and Competitiveness, *Strategic Management Journal*, 13, 61-78.

Garud, R. & Nayyar, P. R. (1994) 'Transformative Capacity: Continual Structuring by Intertemporal Technology Transfer', *Strategic Management Journal*, 15, 365-385.

Geddes, K. (1972) Broadcasting in Britain, 1922-1972, London, HMSO.

Gibb, A. A. (1997) 'Small Firms' Training & Competitiveness: Building Upon the Small Firm as a Learning Organisation', *International Small Business Journal*, Vol. 15, No. 3, Issue No. 59, 13-29.

Giddens, A. (1981) Capitalism and Modern Social Theory: An analysis of the writings of Marx, Weber and Durkheim, New York, Cambridge University Press.

Giddens, A. (1984) The Constitution of Society, Cambridge, Polity Press.

Glaser, B. G. & Strauss, A. L. (1967) The Discovery of Grounded Theory: Strategies for Qualitative Research, Chicago: Aldine.

Glazer, R. (1998) 'Measuring The Knower', *California Management Review*, Vol. 40, No. 3, 175-194.

Godfrey, P. C. & Hill. C. W. L. (1995) 'The problem of unobservables in strategic management research', *Strategic Management Journal*, 16, 519-533.

Goleman, D. (1996) Emotional Intelligence, Bloomsbury, London.

Goodman, R. A. & Goodman, L. P. (1976) 'Some Management Issues in Temporary Systems: A study of Professional Development and Manpower - The Theatre Case', *Administrative Science Quarterly*, Vol. 21, 494-501.

Graham, A. & Pizzo, V. (1996) 'A Question of Balance: Strategic Knowledge Management', *European Management Journal*, Vol. 14, No. 4, 338-346.

Graham, P. (ed.) (1994) Mary Parker Follett - Prophet of Management, A Celebration of Writings from the 1920s, Harvard Business School Press, Boston.

Granovetter, M. S. (1992) 'Problems of explanation in economic sociology', in Nohria, N. & Eccles, R. (eds.) *Networks and organizations: Structure, form and action*, Boston, Harvard Business School Press, 25-56.

Grant, R. M. (1991) 'The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation', *California Management Review*, 33, Spring, 114-135.

Hamel, G. (1991) 'Competition for Competence and Inter-partner Learning within International Strategic Alliance, *Strategic Management Journal*, 12, 83-103.

Hamel, G. (1997) 'Killer Strategies that Make Shareholders Rich', Fortune, June 23, 70-88.

Hamel, G., Doz, Y. L. & Prahalad, C. K. (1989) 'Collaborate with your Competitors and Win', *Harvard Business Review*, Jan-Feb, 133-139.

Hamel, G., & Prahalad, C. K. (1989) 'Strategic Intent', Harvard Business Review, 67, No.3, 63-67.

Hamel, G. & Prahalad, C. K. (1994) Competing for the Future, Boston, Harvard Business School Press.

Hammersley, N. & Atkinson, J. (1983) Ethnography: Principles in Practice, London, Tavistock.

Handy, C. (1997) The Hungry Spirit, London, Hutchison.

Hargadon, A. B. (1998) 'Firms as Knowledge Brokers: Lessons in Pursuing Continous Innovation', *California Management Review*, Vol. 40, No. 3, 209-227.

Harre, R. & Second, P. F. (1972) The Explanation of Social Behaviour, Oxford, Blackwell.

Harrigan, K. R. (1985) Strategies for Joint Ventures, Lexington, MA, Lexington.

Harrigan, K. R. (1988) 'Joint Ventures and Competitive Strategy', Strategic Management Journal, 9. 141-158.

Hedberg, R. (1981) 'How organisations learn and unlearn', in Nystrom, N. C. and W. H. Starbuck (eds), *Handbook of Organisational Design*, Oxford, Oxford University Press.

Hedlund, G. (1994) 'A model of Knowledge Management and the N-Form Corporation', *Strategic Management Journal*, Vol. 15, 73-90.

Holstein, J. A. & Gubrium, J. F. (1995) *The Active Interview*, Qualitative Research Methods Volume 37, London: Sage Publications.

Horsman, M. (1998) 'BBC in vanguard of pay-TV', The Guardian: Media, 7.

Hoskisson, R. E. & Hitt, M. A. (1994) Downscoping: How to Tame the Diversified Firm, New York: Oxford University Press.

ITC (1996) ITC Annual Report and Accounts 1995, London, ITC.

Jacobs, G. & Dransfield, H. (1998) 'Scenarios for Interactive TV-Europe's Uncertain Future, *Long Range Planning*, Vol. 31, June, 396-405.

Jarillo, J. C. (1988) 'On Strategic Networks', Strategic Management Journal, 9, 31-41.

Jick, T. D. (1979) 'Mixing Qualitative and Quantitative Methods: Triangulation in Action, *Administrative Science Quarterly*, Vol. 24, Dec, 602-611.

Kanter, R. M. (1994) 'Preface', in Graham, P. (ed.) (1994) Mary Parker Follett - Prophet of Management, A Celebration of Writings from the 1920s, Harvard Business School Press, Boston, xii-xviii.

Kanter, R. M. (1995) World Class: thriving Locally in the Global Economy, New York, Simon Schuster.

Kay, J. (1993) Foundations of Corporate Success, Oxford, Oxford University.

King, N. & Anderson, N. (1995) Innovation and change in organisations, London, Routledge.

Kluth, A. (1997) 'TV wars spark battle of the boxes', *Investor's Chronicle*, 15.8.97, 16-17.

Koestler, A. (1964) The Act of Creation, London, Hutchinson.

Kolb, D. (1984) Experiential Learning: Experience as the source of learning and development, Englewood Cliffs, New Jersey, Prentice Hall.

Krogh, G. V., Roos, J. & Slocum, K. (1994) 'An essay in Corporate Epistemology', Strategic Management Journal, 15, 53-71.

Lash, S. & Urry, J. (1987) The End of Organised Capitalism, Polity Press, Cambridge.

Lave, J. & Wenger, E. (1991) Situated Learning: Legitimate Peripheral Participation, Cambridge, Cambridge University Press.

Leibeskind, J. P., Oliver, A. L., Zucker, L. & Brewer, M. (1996) 'Social Networks, Learning, and Flexibility: Sourcing Scientific Knowledge in New Biotechnology Firms', *Organization Science*, Vol. 7, No. 4, 428-443.

Levinthal, D. A. & March, J. G. (1993) Exploration and Exploitation in Organizational Learning', *Strategic Management Journal*, 14 (Winter), 95-112.

Leonard, D. (1998) Wellsprings of Knowledge, Boston, Harvard Business Press.

Leonard-Barton, D. (1992) 'Core Capabilities and Core Rigidities: A paradox in managing new product development', *Strategic Management Journal*, 13, 111-125.

Lewis, J. D. (1990) Partnerships for Profit: Structuring and Managing Strategic Alliances, New York, The Free Press.

Lincoln, J. R., Ahmadjian, C. L., & Mason, E. (1998) 'Organization Learning and Purchase-Supply Relations in Japan: Hitachi, Matsushita & Toyota Compared', *California Management Journal*, Vol. 40, No. 3, 241-264.

Lorenz, C. (1995) 'A remedy for corporate anorexia', Financial Times, 27.10.95,16.

MacDonald, B. (1994) Broadcasting in the United Kingdom: A guide to information sources, (second edition), London, Mansell.

MacIntyre, S. (1979) 'Some issues in the Study of Pregnancy Careers', *Sociological Review*, Vol. 27, No. 4., 755-771

Marshall, C. & Rossman, G. B. (1995) Designing Qualitative Research, (Second Edition), London, Sage.

Mason, J. (1994) 'Linking qualitative and quantitative data analysis', in Bryman, A. & Burgess, R.G.(ed.) *Analysing Qualitative Data*, London, Routledge, p89-110.

Miles, G., Miles R. E., Perrone, V., & Edvinsson, L. (1998) 'Some Conceptual and Research Barriers to the Utilisation of Knowledge', *California Management Review*, Vol. 40, No. 3, 281-288.

Miles, M. B. & Huberman, A. M. (1984) Qualitative Data Analysis: A sourcebook of new methods, Beverley Hills, Sage.

Miles, M. B. & Huberman, A. M. (1994) Qualitative Data Analysis, 2nd Edition, Beverley Hills, Sage.

Miles, R. E. & Snow, C. C. (1986) 'Organisations: new concepts for new forms', *California Management Review*, XXXVIII, 62-73.

Millenium Group (1998) 'Anticipating the Organisational Impact of technological change', Exploiting New Opportunities to Create Value, Feb, 18-41.

Millerson, G. (1994) Effective TV Production, London, Focal Press.

Miner, A. S. & Mezias, S. (1996) 'Ugly Duckling No More: Pasts and Futures of Organisational Learning Research', *Organization Science*, 7 (1), 88-99.

Mintzberg, H. (1973) The nature of managerial work, New York, Harper Row.

Mintzberg, H. (1979) 'An Emerging Strategy of "Direct" Research', *Administrative Science Quarterly*, 24, 582-588.

Mintzberg, H. (1994) 'Commentary to Chapter Seven' in Graham, P. (ed.) (1994) Mary Parker Follett - Prophet of Management, A Celebration of Writings from the 1920s, Harvard Business School Press, Boston.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998) Strategy Safari, Hempstead, Prentice-Hall.

Mockler, R. J. (1995) Strategic Management: The Beginning of a New Era', in Hussey, D. (ed.) *International Review of Strategic Management*, New York, John Wiley & Son, 1-43.

Murray, E. A. & Mahon, J. F. (1993) 'Strategic Alliances: Gateway to the New Europe?', Long Range Planning, 26, 4, 102-111.

Nadler, D. A. (1992) 'Organisational Architecture a Metaphor for Change', in Nadler, D. A., Gerstein, M. S. & Shaw, R. B. (ed.), Organizational Architecture: Designs for changing organisations, San Francisco, Jossey-Bass.

Nadler, D. A. & Tushman, M. L. (1992) 'Designing Organisations that have good fit: A framework for understanding new architectures' in Nadler, D. A., Gerstein, M. S. & Shaw, R. B. (ed.), Organizational Architecture: Designs for changing organisations, San Francisco, Jossey-Bass.

Nanda, A. (1996) 'Resources, Capabilities, and Competencies', in Moingeon, B. & Edmondson, A. (ed.) *Organizational Learning and Competitive Advantage*, London, Sage.

Nahapiet, J. & Ghoshal, S. (1998) 'Social Capital, Intellectual Capital, and the Organisational Advantage', *Academy of Management Review*, Vol. 23, No. 2, 242-266.

Nelson, R. R. & Winter, S. G. (1982) An Evolutionary Theory of Economic Change, Cambridge, MA: Harvard University Press.

Nolan, P. & Saundry, R. (1997) 'The limits and contradictions of Employment Restructuring in British Television', unpublished paper, *BUIRA Conference*, Bath, 4-6 July.

Nonaka, I. (1991) 'The Knowledge-Creating Company', *Harvard Business Review*, November- December, 96-104.

Nonaka, I. & Konno, N. (1998) 'The concept of "Ba": Building a foundation for knowledge creation', *California Management Review*, Vol. 40, No. 3, Spring, 40-54.

Nonaka, I. & Takeuchi, H. (1995) *The Knowledge Creating Company*, Oxford, Oxford University Press.

O'Dell, C. & Grayson, C. J. (1998) 'If Only We Knew What We Know: Identification and Transfer of Internal Best Practices', *California Management Review*, Vol. 40, No. 3, 154-174.

Office of Science and Technology (1995) Technology Foresight: Progress Through Partnership, No. 14, 'Leisure and Learning', London, HMSO.

Ohmae, K. (1989) 'The Global Logic of Strategic Alliances', *Harvard Business Review*, March-April, 143-154.

Orr, J. E. (1990) 'Sharing Knowledge, Celebrating Identity: War Stories and Community Memory Among Service Technicians', in D. S. Middleton and D. Edwards (eds.) Collective Remembering: Memory in Society, London, Sage, 140-169.

PACT (1996) The PACT Directory of Independent Producers, London, PACT.

Pascale, R. (1990) Managing on the Edge, London, Penguin.

Paulu, B. (1956) British Broadcasting; Radio and Television in the United Kingdom, Minneapolis, University of Minnesota Press.

Peacock Committee, (1986) Report on the Financing of the BBC, Cmnd 9824, London, HMSO.

Pedler, M., Burgoyne, J. & Boydall, T. (1991) The Learning Company: A Strategy for Sustainable Development, Maidenhead: McGraw-Hill.

Penrose, E. (1959) The Theory of the Growth of the Firm, New York, John Wiley and Sons.

Peters, T. & Waterman, R (1984) In Search of Excellence, London, Harper & Row.

Pettigrew, A. M. (1992) 'The Character and Significance of Strategy Process Research, *Strategic Management Journal*, Vol 13, 5-16.

Pilkington Committee, (1962a) Report of the Committee on Broadcasting 1960, Cmnd 1753, London HMSO.

Pilkington Committee, (1962b) Report of the Committee on Broadcasting, Vol1, Appendix e, Cmnd 1819, London, HMSO.

Piore, M. J. & Sabel, C. F. (1984) The Second Industrial Divide, New York, Basic.

Polanyi, M. (1962) Personal Knowledge: Towards a Post-Critical Philosophy, Chicago, University of Chicago Press.

Porter, M. (1980) Competitive Strategy, New York, Free Press.

Porter, M. (1985) Competitive Advantage, New York, Free Press.

Porter, M. E. (ed.), (1986) Competition in Global Industries, Boston, Harvard Business School Press.

Porter, M. E. (1990) The Competitive Advantage of Nations, London, Macmillan Press.

Powell, W. W. (1990) 'Neither market nor hierarchy: Network Forms of Organisation', Research in Organizational Behavior, 12, 295-336.

Powell, W. W. (1991) 'Neither market nor hierarchy: Network forms of organisation' in Thompson, G., Frances, J., Levacic, R. & Mitchell, J. (ed.), *Markets, Hierarchies & Networks: the Coordination of social life*, London, Sage.

Powell, W. W. (1998) 'Learning From Collaboration: Knowledge and Networks in the Biotechnology and Pharmaceuticals Industries', *California Management Review*, Vol. 40., No. 3, Spring, 228-240.

Prahalad, C. K. & Hamel, G. (1990) The core competence of the corporation, *Harvard Business Review*, May-June, 79-91.

Prahalad, C. K. & Hamel, G. (1994) 'Strategy as a field of study: Why search for a new paradigm?', Strategic Management Journal, 15, 5-16.

Price, C. (1997) 'United News agreed bid vales HTV at £371m', Financial Times, Weekend 28/29.6.97: 20.

Price Waterhouse/PACT (1995) Production 95: The results of the 1995 Price Waterhouse/PACT survey of UK Independent Production Companies, London, PACT.

Prokesch, S. E. (1997) Unleashing the power of learning, *Harvard Business Review*, September, 146-168.

Quinn, J. B. (1980) Strategies for Change: Logical Incrementalism, Homewood, IL: Irwin.

Quinn, J. B. (1992) Intelligent Enterprise, New York, The Free Press.

Quinn, J. B., Anderson, P. & Finklestein, S. (1996) 'Managing Professional Intellect', *Harvard Business Review*, March-April, 71-80.

Reich, R. B. (1991) The Work of Nations: Preparing Ourselves for 21st Century Capitalism, New York, Alfred A. Knopf.

Reed, R. & DeFillippi, R. J. (1990) 'Causal Ambiguity, barriers to imitation and sustainable competitive advantage, *Academy of Management Review*, 15 (1), 88-102.

Richards, L. & Richards, T. (1994) 'From Filing cabinet to computer', in Bryman, A. & Burgess, R. G. (ed.) *Analysing Qualitative Data*, London, Routledge, 146-172.

Richter, I. (1998) 'Individual and Organizational Learning at the Executive Level: Towards a Research Agenda', *Management Learning*, Vol. 29, No. 3, September, 299-316.

Ring, P. S. & Van de Ven, A. H. (1994) 'Developmental Processes of Cooperative Interorganisational Relationships, *Academy of Management Review*, 19, 1, 90-118.

Roos, J. & Von Krogh, G. (1996) 'The Epistemological Challenge: Managing Knowledge and Intellectual Capital, *European Management Journal*, Vol. 14, No. 4, 333-337.

Ruggles, R. (1998) 'The State of the Notion: Knowledge Management in Practice', California Management Review, Vol. 40, No. 3. Spring, 80-89.

Rumelt, R. P (1974) Strategy, Structure and Economic Performance, Cambridge, MA, Harvard Graduate School of Business.

Schendel, D. (1996) 'Knowledge and the Firm', Strategic Management Journal, Winter Special Issue on Knowledge and the Firm, Vol. 17, 1-4.

Schumpeter, J. A. (1950) Capitalism, socialism and democracy (3rd ed.), New York, Harper & Row.

Selznick, P. (1957) Leadership in Administration: A sociological interpretation, Harper & Row, New York.

Senge, P. M. (1990) The Fifth Discipline: The Art & Practice of The Learning Organisation, New York, Doubleday.

Silverman, D. (1994) Interpretating Qualitative Data: Methods for Analysing Talk, Text & Interaction, London, Sage.

Simon, H. A. (1947) Administrative Behaviour, New York, Macmillan.

Skillset (1994) Employment Patterns and Training Needs 1993/4, London, Employment Department.

Skillset (1996) Briefing for RTS/Skillset Conference-July 1996, 'NVQs'.

Skillset (1996b) Briefing for RTS/Skillset Conference-July 1996, 'Investment in Training'.

Skillset (1996c) Briefing for RTS/Skillset Conference-July 1996, 'Labour Force Surveys - key findings and comments'.

Snell, R. & Chak, A. M-K. (1998) 'The Learning Organization: Learning and Empowerment for Whom?', *Management Learning*, 29 (3), 337-364.

Snow, N. (1991) "Wanted: More Channels", Spectrum, No. 2, 14-15, ITC.

Spender, J. C. & Grant, R. M. (1996) 'Knowledge and the Firm: Overview', *Strategic Management Journal*, Vol. 17, (Winter special Issue), 5-9.

Spender, J. C. (1996) 'Making Knowledge the Basis of a Dynamic Theory of the Firm', Strategic Management Journal, Vol. 17 (Winter Special Issue), 45-62.

Starbuck, W. H. (1992) 'Learning by knowledge intensive firms', *Journal of Management Studies*, 29, 713-714.

Starkey, K. (ed.), (1996) *How Organizations Learn*, London, International Thomson Business Press.

Starks, M. (1993) 'Producer Choice in the BBC', in Harrison, A. (ed.) From Hierarchy to Contract, Oxford, Transaction Books, 167-176.

Stewart, T. A. (1994) 'Your Company's Most Valuable Asset: Intellectual Capital', Fortune, 3.10.94. 28-33.

Stewart, T. A. (1997) *Intellectual Capital: The new wealth of organizations*, London, Nicholas Brearley Publishing.

Summer, C. E., Bettis, R. A., Duhaine, I. H., Grant, J.H., Hambrick, D. C., Snow, C. C., & Zeithaml, C. P. (1990) 'Doctoral education in the Field of Business Policy and Strategy', *Journal of Management*, 16 (2), 361-398.

Sveiby, K. E. (1996) 'Transfer of Knowledge and the Information Processing Professions', European Journal of Management, Vol. 14, No. 4, 379-388.

Sveiby, K. E. (1997) The New Organizational Wealth, Measuring and Managing Knowledge Based Assets, San Francisco, Berrett Koehler.

Sydow, J. & Windeler, A. (1998) 'Organizing and Evaluating Interfirm Networks: A Structurationist Perspective on Network Processes and Effectiveness', *Organization Science*, Vol. 9, No. 3, May-June, 265-284.

Sykes Committee (1923) Broadcasting Committee Report, Cd.1951, London HMSO.

Szulanski, G. (1996) 'Exploiting Internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm', *Strategic Management Journal*, Vol. 17, Special Issue on Knowledge and the Firm, Winter, 27-44.

Teece, D. J. (1998) 'Capturing Value from Knowledge Assets: The New Economy, Markets for Know-how, and intangible Assets', *California Management Review*, Vol. 40., No. 3, 55-79.

Teece, D. J., Pisano, G. & Schuen, A. (1991) 'Dynamic Capabilities and Strategic Management', *Working Paper Centre for Research in Management*, University of California, Berkeley.

Tempest, S., Starkey, K., & Barnatt, C. (1997) 'Flexible specialisation in the UK Television Industry', *The German Journal of Industrial Relations*, 4, 1, 38-57.

Thorelli, H. B. (1986) 'Networks: Between Markets and Hierarchies,' Strategic Management Journal, 7, 37-51.

Tunstall, M. (1993) Television Producers, London, Routledge.

Tushman, M. & Nadler, D. (1986) 'Organising for Innovation', *California Management Review*, Vol. 28, No. 3. 74-92.

Van de Ven, A. H. (1992) 'Suggestions for studying strategy process: A research note, Strategic Management Journal, Vol. 13, 169-188.

Van Maanen, J. (1979) 'Reclaiming Qualitative Methods for Organisational Research', *Administrative Science Quarterly*, Vol. 24, Dec, 519-683.

von Krogh, G. (1998) 'Care in Knowledge Creation', California Management Review, Vol. 40., No. 3, 133-153.

von Krogh, G. & Roos, J. (1996) 'Five claims on knowing', European Management Journal, Vol. 14, No. 4, 423-425.

von Krogh, G., Roos, J. & Slocum, K. (1994) 'An Essay on Corporate Epistemology', Strategic Management Journal, Vol. 15, 53-71.

Walker, G. (1988) 'Network Analysis for cooperative Inter-firm Relationships', in Contractor, F.J. & Lorange, P. (ed.), (1988) Cooperative Strategies in International Business, Lexington, MA, Lexington,

Weick, K. E. (1983) 'Organizational Communication: Toward a Research Agenda', in L. L. Putnam and M. E. Pacanowsky (eds.) *Communication and Organisations: An Interpretive Approach*, London, Sage, 7-12.

Weick, K. E. (1989) 'Theory Construction as Disciplined Imagination', Academy of Management Review, 14 (4), 516-531.

Weiss, R. S. (1994) Learning from Strangers: The art and method of qualitative interview studies, New York, The Free Press.

Wernerfelt, B. (1984) 'A Resource-Based View of the Firm,' Strategic Management Journal, 5, 2, 171-180.

Wickstrom, S. & Normann, R. (1994) Knowledge & Value: A new perspective on corporate transformation, London, Routledge.

Williamson, O. E. (1975) Markets and hierarchies: Analysis and antitrust implications, New York, Free Press.

Williamson, O.E. (1985) The Economic Institutions of Capitalism, New York, Free Press.

Wolcott, H. F. (1990) Writing up Qualitative Research, London, Sage.

Yin, R. K. (1989) Case Study Research, (Revised Edition), London, Sage.

Zuboff, S. (1988) In the Age of the Smart Machine: The Future of Work and Power, Oxford, Heinemann.

