CRANFIELD UNIVERSITY

Morgan Chambers

Factors and Mechanisms that influence INTRAORGANISATIONAL COLLABORATION AND COMPETITION

SCHOOL OF MANAGEMENT MRes

MRes Academic Year: 2010 - 2011

Supervisor: Dr. Colin Pilbeam August 2011

CRANFIELD UNIVERSITY

School of Management

MRes

Academic Year 2010 - 2011

Morgan Chambers

Factors and Mechanisms that influence Intraorganisational Collaboration and Competition

Supervisor: Dr. Colin Pilbeam

August 2011

This thesis is submitted in partial fulfilment of the requirements for the degree of MRes

© Cranfield University 2011. All rights reserved. No part of this publication may be reproduced without the written permission of the copyright owner.

ABSTRACT

Background and Purpose:

Recently, some authors point to value creation from the structure and behaviours associated with competition and collaboration *inside* the organisation (Helfat and Eisenhardt, 2004; Birkinshaw and Lingblad, 2005). While both competition and collaboration have been studied extensively between organisations, less attention has been focused on them and their interaction between units inside the organisation, particularly within complex and heterogeneous multinational corporations.

The question is how to achieve the coordination and collaboration that is necessary for a multinational organisation to reap the benefits that international expansion has to offer and yet balance the propensity for competition that exists as business units struggle for scarce resources or new opportunities. In order to answer this question, the aim of this review is to first of all know what the factors and mechanisms are that influence competition and collaboration between organisational units within multinational organisations.

Methodology: This study has been conducted using a systematic review methodology with the aim of producing a search of extant literature which can be trusted by others as being thorough, transparent, replicable and clear. Both quantitative and qualitative techniques have been used to achieve this.

Findings: This review finds that the there is minimal extant literature that addresses competition and collaboration between business units within the multinational corporation and that it also fails to provide a comprehensive understanding of the factors and mechanisms that influence the co-existence of intraorganisational competition and collaboration. They are typically viewed as mutually exclusive or at opposite ends of a continuum. While there has been some recent research attention given to intraorganisational collaboration and competition, each in their own right, there has not been an extensive review of the factors and mechanisms when looking at their coexistence within the multinational corporate environment. By bringing the two literatures into view and investigating the paradoxical nature of the influences on and

the interactions between competition and collaboration, insights into an optimal mix based on the corporations strategy and value creation logic can be gained for both academics and business unit leaders.

Keywords: Multinational, inter-unit, collaboration, competition, intra-organisation

TABLE OF CONTENTS

A	BSTRACT	i
L	IST OF FIGURES	v
L	IST OF TABLES	V
1	INTRODUCTION	1
	1.1 Aim of the Systematic Review	3
	1.2 Structure of the paper	
2	POSITIONING THE FIELD OF INQUIRY	
	2.1 Organisational Strategy and Structure	
	2.2 Competition and Collaboration	7
	2.3 Collaboration	
	2.3.1 Intraorganisational collaboration	. 10
	2.4 Competition	. 11
	2.4.1 Intra-organisational competition	. 13
	2.5 Competition and collaboration	
	2.6 Conclusion and research question	
3	METHODOLOGY	. 17
	3.1 The Systematic Review Process	. 17
	3.2 Review Panel	. 18
	3.3 Step 4: Conducting a systematic search	. 19
	3.3.1 Databases	. 20
	3.3.2 Keywords	
	3.3.3 Initial search Strings	. 22
	3.3.4 Initial Search Results	. 23
	3.3.5 Revised Search Strings	
	3.3.6 Revised Search String Results	
	3.3.7 Other Sources	
	3.4 Step 5: Evaluating studies	
	3.4.1 For all Titles and Abstracts	
	3.4.2 For full text papers, recommended articles and books	
	3.4.3 Quality Appraisal	
	3.4.4 Final Selection	
	3.5 Step 6: Extracting and analysing data	
	3.6 Step 7: Data synthesis	
4	DESCRIPTIVE FINDINGS	
	4.1 Publication Features	
	Summary notes	
5	CONCEPTUAL FINDINGS	
	5.1 Context	
	5.1.1 The theoretical perspectives	
	5.1.2 Research and Theoretical Papers	
	5.1.3 Research method used in this review	
	5.2 Collaboration	
	5.2.1 Definitions of intraorganisational collaboration	
	5.2.2 Factors that influence collaboration	
	5.2.3 Factors and mechanisms	. 55

5.2.3.1 Socialisation	57
5.2.3.2 Formalisation	59
5.2.3.3 Autonomy	60
5.2.3.4 Communication	61
5.2.4 Collaborative capability	
5.2.5 Leadership and Leaders Signals	63
5.2.6 External Environment	
5.2.7 Barriers to collaboration	63
5.2.8 Mechanisms	64
5.2.8.1 Mechanisms	64
5.3 Competition	65
5.3.1 Definitions of intraorganisational competition	66
5.3.2 Factors that influence competition	
5.3.3 Factors and mechanisms	68
5.3.3.1 Socialisation	
5.3.3.2 Formalisation	
5.3.3.3 Autonomy	
5.3.3.4 Communication	
5.3.4 Competitive Capability	
5.3.5 Environmental Factors	
5.3.5.1 Internal market system	
5.3.5.2 Charter change (internal)	
5.3.5.3 Multimarket situation	
5.3.6 Mechanisms	
5.4 Coexistence of competition and collaboration	
5.5 Overall summary	
6 DISCUSSION	
6.1 Does the extant literature answer the research questions?	
6.1.1 Similarities of the factors and mechanisms	
6.1.2 Differences between the factors and mechanisms found	
6.1.3 Factors and mechanisms in comparison	
6.2 Duality – a nuanced view	
6.3 Further research	
6.4 Limitations	
6.5 Personal Learning	
7 CONCLUSION	
REFERENCES	
APPENDICES	
Appendix A Core Papers Detail	
Appendix B Quality Appraisal	
Appendix C Data Extraction Table	117

LIST OF FIGURES

Figure 1 The systematic review process	18
Figure 2 Process flow decisions of systematic literature review	20
Figure 3 Core literature sources	41
Figure 4 Sources by publication year	42
Figure 5 Location of university of first author	43
Figure 6 Sources by journal ranking	
Figure 7 Sources by type of knowledge	
Figure 8 Types of research papers	
Figure 9 Sources by number of authors	
Figure 10 Interunit collaboration	
LIST OF TABLES	
Table 1 Review panel	
Table 2 Databases selected	
Table 3 Keywords	
Table 4 Initial search strings	
Table 5 Initial search string results	
Table 6 Revised search strings	
Table 7 Revised search string results	
Table 8 Other information sources	
Table 9 Selection criteria for titles and abstracts	
Table 10 Exclusion criteria for title and abstract	
Table 11 Quality appraisal criteria	
Table 12 Final list of core sources used	
Table 13 Data Extraction Form	38
Table 14 Journals used	44
Table 15 Categorisation of literature	48
Table 16 Summary of main theories (collaboration)	51
Table 17 Summary of main theories (competition)	52
Table 18 Research methodologies used in this review	
Table 19 Factors and conditions that influence collaboration	
Table 20 Factors that influence intra-organisational competition	67

1 INTRODUCTION

Recently, some authors point to value creation from the structure and behaviours associated with competition and collaboration *inside* the organisation (Helfat and Eisenhardt, 2004; Birkinshaw and Lingblad, 2005). While both competition and collaboration have been studied extensively between organisations, less attention has been focused on them and their interaction between units inside the organisation, particularly within complex and heterogeneous multinational corporation (MNC)¹.

The multinational firm has continued to evolve as an organisational configuration and the concept of the multinational firm as an organisation has "undergone a series of transformations over the last several decades" (Tallman and Koza, 2010, p. 434). Originally seen as a bureaucracy with a strong central command and control authority managing a geographically dispersed but organisationally unified structure, the multinational has been consistently democratised ² (Tallman and Loza, 2010, p. 434).

Ghoshal and Bartlett (1990) suggest that a multinational corporation has become a differentiated yet coordinated network of units. More recently, several studies (e.g. Nohria and Ghoshal, 1997; Tsai, 2001, 2002; Tsai and Ghoshal, 1998) suggest that "strategic links, i.e. flows of production inputs and value creation activities between parent and subunits and between peer subunits" (Luo, Y, 2005, p. 71). These inter-unit links consist of both collaborative and competitive ties that function simultaneously.

A new transnational mindset, which is instead about integration, flexibility, learning and interdependence, then combines both global integration and national responsiveness. By combining these two needs, the organisation is in a better position to maximize the consolidated economic returns contributed by globally scattered subunits (Bartlett and Ghoshal, 1989; Doz and Prahald, 1984). The geographically dispersed yet internally differentiated subunits of multinationals (Bartlett and Ghoshal, 1993; Birkinshaw, Hood and Jonsson, 1998; Govindarajan and Gupta, 2001; Kostova and Roth, 2003) have

¹ MNC will be used for all typologies of multinational corporations, enterprises and organisations.

² Democratized - the authors way of saying that subsidiary units and parent company are more like strategic partners than hierarchy

become critical to the multinationals global operations and strategic activities for global expansions (Luo, 2005).

However, Hansen and Nohria (2004) suggest that "for multinationals, it is increasingly difficult to maintain a competitive advantage on the basis of traditional economies of scale and scope" (p. 22). They propose that "the new economies of scope are instead based on the ability of business units, subsidiaries and functional departments within the company to collaborate successfully by sharing knowledge, rather than physical assets, and jointly developing new products and services" (p. 22). Bowman and Helfat (2001), cited in Eisenhardt and Martin (2010, p. 265), note in their review of the 'corporate effects' research, that 'cross-business unit collaboration can be a source of economic value for business units and their parent corporations'.

Though it is claimed that future advantage will go to those multinational companies that can stimulate and support inter-unit collaboration to take advantage of their geographically scattered resources, other authors however emphasise that the competitive links are an opportunity to create value for the organisation in the areas of innovation and new product development. While Birkinshaw and Lingblad (2005, p. 674) claim that the "academic literature only offers limited insight into the phenomenon of intra-firm competition", Kalnins (2004) supports the case for internal competition such that "the firm as a whole benefits from more, rather than less, competition among its divisions" (p. 117) and Birkinshaw and Lingblad (2005) agree that there are positive benefits that occur. In Ferrari's (2010) recent interview in the McKinsey Quarterly with Mike Little, GE's Head of Global Research Group, Little said "the idea of rivalry is an important and often-overlooked lever for catalyzing innovation." He noted also that it is infrequently discussed and often plays second fiddle to collaboration as a cultural norm" (Ferrari (2010, p. 105). Therefore, the co-existence of internal collaboration and competition between units in the MNC could be a future source of competitive (and collaborative) advantage for the firm.

In the multinational context, considerable research has been conducted on the nature and importance of interactions between headquarters and their subsidiaries (Goold and Campbell (2003) but less so between the subsidiaries and their internal peers. Luo's study in 2005 highlights this and goes on to say that "the literature has not clearly

unveiled a list of areas in which foreign subunits cooperate and compete between themselves or provided a list of the factors that determine collaboration or competition" (p. 72).

To complement Luo's 2005 study and to add to the understanding of competition and *collaboration* between business units within multinational organisations, this review seeks to systematically uncover, through the review methodology, instances of, and influences on, competition and collaboration between organisational units (i.e. subsidiary, business unit or divisions). By focusing on one or two levels below the corporate centre, my intention is not to cover competition or collaboration between multinationals (inter-organisational) nor between individuals or within teams.

1.1 Aim of the Systematic Review

The aim of this review is to systematically search the extant literature to uncover the factors, conditions and mechanisms that have been theoretically proposed or empirically found to influence intraorganisational competition and collaboration. *Intra*-organisational form, as opposed to inter-organisation, restricts the consideration of collaboration and competition to within an organisational boundary (Kasper-Fuehrer and Ashkanasy, 2003), which in this instance will be the multinational and multi-business organisations.

If competition and collaboration are to contribute to value creation it will be important to understand what determines or influences these processes or states such that strategies can be created and structures integrated into the organisation to foster and encourage either competition and/or collaboration.

As a result of investigating this topic, this review may offer:

- A list of factors, conditions and mechanisms that influence *intra*-organisational competition and collaboration between organisational units in MNCs.
- a framework that would facilitate the understanding of the influences on competition and collaboration
- an understanding of further research opportunities in the field and some possible openings for my own research

This review is systematic and evidence-based in nature and aims to be more than a descriptive account of the contributions in the field. My intention has been to conduct a search of the extant literature which is thorough, transparent, clear and replicable as far as possible. The methodology used is described in detail in chapter 3.

1.2 Structure of the paper

In chapter 2, I begin by positioning the field of inquiry in the relevant literature. The constructs of collaboration and competition are briefly described and summarised. The context of the multinational is briefly introduced.

In chapter 3 the systematic review process is detailed. This includes methods of searching for data, inclusion and exclusion criteria applied to the sources and the results of this process.

Chapter 4 details and examines a full catalogue of source data in order to highlight any key trends or biases. The conceptual findings are laid out in chapter 5.

Chapter 6 then synthesizes and organizes the findings from the literature review, responds to the research questions, details the limitations of the review and provides suggestions for further empirical research. My personal learnings are also recorded here.

In the final chapter, chapter 7, the conclusions of the review are presented .References and appendices (which include the detailed data extraction tables used in the process of the systematic review) are found at the end of this document.

2 POSITIONING THE FIELD OF INQUIRY

In this section of the paper, I will briefly position the field of inquiry of intraorganisational competition and collaboration by addressing three areas:

- Organisational strategy and structure
- Intraorganisational collaboration and
- Intraorganisational competition

2.1 Organisational Strategy and Structure

A challenging debate for organisational scholars is whether they view organisations (at the micro level) from a system-structural or a strategic choice view as summarised by the seminal work of Astley and Van de Ven (1983). The system – structural view "is seen to be shaped by a series of impersonal mechanisms that act as external constraints on actors" (p. 247) while the strategic choice view "draws attention to individuals, their interactions, social constructions, autonomy, and choices, as opposed to the constraints of their role incumbency and functional interrelationships in the system" (Astley and Van de Ven, 1983, p. 249). They present four views in total which are based on two analytical dimensions: 1) the level of organisational analysis - micro or macro, and 2) the relative emphasis placed on deterministic versus voluntaristic assumptions about human nature. To this end, understanding the qualitatively different views on organization structure, behaviour, change and managerial roles that these dimensions represent, captures the multiple perspectives on these issues when exploring the dynamics of competition and collaboration in a multinational organisation. Though Astley and Van de Ven(1983) acknowledge that there is a vast array of opinions among these schools, they have identified a commonality existing within the four perspectives. The system-structural view advocates that organisational behaviour is seen to be shaped by a series of impersonal mechanisms that act as external constraints on actors. The strategic-choice view advocates that there is choice in the design of organisational structure.

"The central purpose of structure is to coordinate the work divided in a variety of ways; how that coordination is achieved, by whom and with what, dictates what the organisation will look like" (Mintzberg, 1981, p. 104). Organisational design needs to be suited to the task (and value creation logic (Bowman and Ambrosini, 2003) of the organisation. Mintzberg distinguishes five natural structures or configurations. Each configuration contains elements of structure (e.g. specialisation of tasks, formalisation of procedures, grouping of units, liaison devices such as task forces, integrating managers and forms that emphasise vertical/horizontal links or centralisation or decentralisation of authority) and situation (e.g. age and size, conditions of the industry in which it operates and its production technology). There is a need to pay attention to the fit of the structure with the organisation's purpose: 'internal consistency and coherence are key to organisation design' (Mintzberg, 1981, p.103).

In response to the pressure of globalisation, the search for solutions turned into a quest for the right organisational structure Bartlett and Ghoshal, (1998). Influenced by the way in which the multidivisional structure had facilitated diversification, Bartlett and Ghoshal, (1998) write that a generation of managers grew up believing that there was a structural solution to every major strategic problem. Also the formal structure, as represented in one way by the organisation chart, was recognised as a powerful tool by which management could redefine responsibilities and relationships.

In order to participate in the continuing trend of globalisation in the 21st century, complex configurations such as international, global (matrix), multinational and transnational organisations, have been adopted by organisations operating in two or more countries. Each organisational form requires different structures and strategic capabilities and has a different relationship with their parent company or corporate centre as well as their peer subunits.

As organisations become more differentiated, with multiple products, divisions, units and positions scattered across numerous countries, the organisation faces an enormous integration challenge. Integration refers to the quality of collaboration across organisational units (Daft, 2010, p. 197). The question is how to achieve the coordination and collaboration that is necessary for a multinational organisation to reap the benefits that international expansion has to offer and yet balance the propensity for

competition that exists as business units struggle for scarce resources or new opportunities.

2.2 Competition and Collaboration

Competition and collaboration are inherent in all organisations (Arad and Caravelle, 1994; Cartwright and Zander, 1968; Parks, Henger and Scamahorn, 1996). Morgan (1997) notes that the Scottish sociologist Tom Burns has pointed out that most organisations are designed as systems of simultaneous competition and collaboration. These often conflicting dimensions of organisations are most clearly symbolized in the hierarchical organisation chart, which is both a system of cooperation (in the breakdown of who does what) and competition (where the goals may be experienced as competitive or contradictory even though from an organisational systems perspective they are not) Landsberger, 1961; Lawrence and Lorsch, 1967; Walton and Dutton, 1969).

Competition and collaboration are traditionally viewed as antithetical and often at opposite ends of a continuum. A competitive focus typically may have treated collaboration as interference or a collaborative focus might emphasise a win-win structure, even though the potential for competition is evident due to the different interests of the units involved. In this view, the competitive part is implicitly a negative thing that needs to be reduced or balanced to make the positive outcomes of collaboration possible. But by intentionally recognising the existence of both competition and collaboration within the same organisation, a different investigation of the phenomena might be possible.

In addition to understanding the nature of competition and collaboration independently of each other, there is value in exploring the simultaneous co-existence of competition and collaboration that exists between business units. The viewing of competition and collaboration inside a differentiated network like the multinational may be helped by using such a duality framework. I borrow from Oliver's (2004) meaning of duality to explain that a duality is the "quality or state of being dual or having a dual nature" (p. 151). The constructs of competition and collaboration have typically been reviewed and researched independently as a dualism i.e. the division of an object of study into two paired elements (Jackson, 1999). A dualism offers the simplest form of

categorisation and is an easy way to draw the contrast between the separate and perhaps opposed aspects of a single topic. But, it may seem oversimplified and too restrictive to encompass the complexity and diversity of modern multinationals.

2.3 Collaboration

Researchers have long argued that collaboration is a key to organisational success (Kanter, 1983; Porter, 1985; Martin and Eisenhardt, 2010). Hansen and Nohria (2004, p. 23) suggest five places where value might be created from internal collaboration: "cost savings through the transfer of best practices; better decision making as a result of advice obtained from colleagues in other subsidiaries; increased revenue through the sharing of expertise and products among subsidiaries; innovation through the combination and cross pollination of ideas and enhanced capacity for collective action that involves dispersed units."

The new opportunities to create competitive advantage are based on the ability of business units, subsidiaries and functional departments within the company to collaborate successfully by sharing knowledge and jointly developing new products and services (Hansen and Nohria, 2004). It is widely accepted in the managerial literature that knowledge, a rather tacit intangible resource, has outperformed physical assets and become the main source of a firm's competitive advantage (Youndt, Subramaninan, & Snell, 2004). Future advantage will go to those companies that can stimulate and support inter-unit collaboration to leverage their dispersed resources.

Though collaboration is imbued with mostly a positive connotation (Mintzberg, 1996; Hansen, 2009; Tjosvold, Johnson, Johnson and Sun, 2003), there is mixed anecdotal and empirical evidence that people within organizations are seizing the opportunity to readily collaborate. Significant developments in organization design, technology platforms and social networking have seen a plethora of tools emerge to facilitate collaborative practices. However, the promoted use of such collaborative structures does not alter reluctant behaviour and appears to be insufficient to drive collaboration (Zander and Kogut, 1995). Indeed, Sanders (2007) finds that collaboration is not synonymous with e-business technology use. This is noted as occasionally companies

presume that having information technology in place automatically assumes that collaboration exists.

Organisations are seeing the need for their autonomous business units to integrate and collaborate more and, in addition to technology, are putting in place formal mechanisms to create collaborative behaviour, collaborative capability and collaborations (Vangen and Huxham, 2003). Formal mechanisms such as performance management processes can facilitate clarity about what is expected. But while this can enable collaboration because of the explicit articulation of roles and expectations, the processes cannot force business units or those individual leaders of the units to collaborate (Mintzberg, 1996). Collaboration is fundamentally a process of communication (Kanter, 1994); not something that can be made compulsory (Mintzberg, 1996).

Hence, even with formal mechanisms, "in most hierarchical organisations, the existing structures and systems do not encourage cooperation and collaboration between separate organisational units. In most cases, inter-unit sharing will not be initiated by individual units because their primary focus is on the performance of their own operations" (Ensign, 2004, p. 133).

Collaboration has also become more important as the internal and external boundaries of organisations have become increasingly permeable (Cross, R., Borgatti, S.P., and Parker, A., 2002) and newer organisational forms emerge to provide resources at a global level. Considerable coordination, through cooperation and collaboration, is required to make the organisation designs work. It is essential that units 'work together' and collaborate, particularly at the divisional level in order to coordinate actions that facilitate the desired processes.

Decentralised organisational structures and geographical dispersion make it hard for people to work across units (Hansen and Birkinshaw (2007, p. 123). Intra-unit collaboration within complex multinational companies is not only difficult to achieve but also poorly understood (Hansen and Nohria, 2004, p. 22). And precisely because collaboration does not come automatically, collaboration could become the future source of MNC's competitive advantage.

2.3.1 Intraorganisational collaboration

Because words such as collaboration are in common usage in our everyday language as well as within organisations, the concepts contained within the definition are often implied in statements. Wood and Gray (1991) examined elements of definitions of collaboration and concluded that much was left implicit by researchers. It is as if the author takes for granted that the reader understands what the intended meaning is (Suddaby, 2010).

With many definitions of collaboration in use, Wood and Gray (1991) proposed a process definition of collaboration; it "occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms and structures, to act or decide on issues related to that domain" (p. 146). The challenge with Wood and Gray's definition is that it was initially focused on interorganisational collaboration where the notion of autonomous stakeholders is relatively clear. In the modern multinational, the subsidiary units are questionably autonomous and independent. However if we consider the multinational as a differentiated network with significant interdependencies, this definition is challenging to apply by their own criteria although it does answer their call for a definition that answered: "who is doing what, with what means, toward which ends" (Wood and Gray, 1991, p. 146)

A more simplified definition is provided by Hansen (2009); "working together on a common task". But, Miles, Miles and Snow (2006) definition provides a view of collaboration that is defined as "a process whereby two or more parties work closely with each other to achieve mutually beneficial outcomes" (p.1). They, as do Zineldin (2004), Himmelman (2001) and Jassawalla and Sashittal (1998), articulate that collaboration is "a much more complex and demanding process than cooperation, where desired outcomes are relatively clear, and the distribution of future returns can be negotiated" (Miles, et al., 2006, p.1).

Most of the studies on collaboration are essentially focused on collaboration between organisations i.e. inter organisational, not intraorganisational. A majority of the literature dealing with multi-organisation structures treats each organisation as a single entity with a single, though complex set of goals (Huxham, 1993). Any barriers or

factors contributing to successful collaboration are studied in the context of interorganisational relationships. Hansen's (2009) contribution is all the more important for its singular focus on collaboration inside the organisation as most models of collaboration do not account for the internal structures and processes of the organisations involved.

2.4 Competition

"Intrafirm competition is an issue of growing importance in multinational companies" (Becker-Ritterspach and Dorrenbacher, 2009, p. 201). Though there has been lots of research between the corporate centre and the business units, Lou (2005) claims that the cooperative link is established, but "it is the linkage between business units that has not been adequately addressed in terms of competition (p.71).

In general, it is agreed that inter-firm competition as a phenomenon, is accepted and well-researched (e.g. Baum & Korn, 1996; Echols and Tsai, 2005). Here, competition is classically viewed as the way firms interact within the same industry (Porter, 1980). Valuable insights regarding inter-firm competition have been provided by neo-classical economic theory. Cheng and Ng (1999) suggest that this focus on the firm as the decision making entity has neglected the internal structure of the firm, and as such "has assumed away possible effects of competition within a firm (*intra*-firm competition)" (p. 238).

Becker-Ritterspach and Dorrenbacher (2009) note that, despite the growing importance of intra-firm competition due to mergers and acquisitions, there is a dearth of research in the field so far. They also claim that "with a few exceptions (e.g. Burgelman, 1983; Hill et al, 1992) most contributions have been published fairly recently." (p. 201).

According to Birkinshaw and Lingblad (2001) research into intraorganisational competition faces two major obstacles. Firstly, as noted above, the concept itself is relatively new, if intraorganisational competition is defined as the "duplication or overlap of activities within the boundaries of the firm" (Birkinshaw and Lingblad, 2001, p. 1).

Cerrato (2006) builds on the work of Birkinshaw (2000) which identified the multinational corporation (MNC) as an entity that operates as an internal market system. In this situation, intrafirm competition between subsidiaries occurs regularly (Gammelgaard, 2009, p.214). The concept of an internal market (March and Simon, 1958; Williamson, 1975) as a mechanism for allocating resources within the boundaries of the organisation recognises the notion that organisational units (and individuals) compete for resources (Birkinshaw and Lingblad, 2001, p. 1). These resources could be human e.g. management attention or the skills of people within the firm (Burgelman, 1983, financial or physical resources, and to the extent that they are in scarce supply, they must therefore be allocated to the most worthwhile opportunities. Taylor (2010) cites March (1991 p. 81) who says "internal competitive processes pit individuals in the organisation against each other in competition for scarce organisational resources and opportunities".

Secondly, the empirical phenomenon of intra-organisational competition is not well recognised, even by those companies that engage in it. Compounding this problem, intra-organisational competition is typically viewed very negatively by practising managers. While scarcity is a core concept in internal and external competition, the 'need' for internal competition of any kind is challenged (Rosen, 2009; Kohn, 1986) and the word itself is often labelled as 'bad'. Subsidiary executives and managers see it as a waste of resources and generating unnecessary internal conflict. Internal competition evokes mixed feelings among most senior executives (Khoja, 2008, p. 11). When asked whether it is 'allowed' within their firm, the gut reaction is usually negative. It conjures up images of turf war among departments. Furthermore, "it is often thought to result in massive duplication of effort and an insipid financial performance" (Birkinshaw, 2001, p. 21).

However, some recognise that internal competition has a contribution to make. The benefits include increasing the speed to market for new products, enhancing strategic options, and broadening the firm's coverage of the segments in the market (Kalnins, 2004; Sorenson, 2000).

Michael Schrage in CIO Magazine (2007) states that "most CIOs focus far less on the productive role of competition versus collaboration than on the design and deployment

of productive processes". Though Schrage ³ has written books on collaboration, in his article he goes on to say that "while competition shouldn't be the dominant driver of your internal [IT] culture, it needs to be more than a spice; it has to be an essential ingredient" (p. 34). When considering competition and collaboration, a leadership dilemma can occur in the form of, "which is the better investment internally: do I encourage rivalry or foster cooperation; competition or collaboration?"(Schrage,2007). Taylor (2010) also supports this point of view. His findings suggest that internal competition may play a larger role than the current literature intimates in that the internal competition over internally available knowledge is critical in the adoption of new technologies (p. 38).

2.4.1 Intra-organisational competition

Competition is, by definition, the act of striving for better performance against rivalry (Cheng and Ng, 1999, p. 238). Most recently, Osarenkhoe (2010) broadly defined competition as "a dynamic situation that occurs when several actors in a specific area(market) struggle for scarce resources, and/or produce and market very similar products or services that satisfies the same customer need" (p. 203).

Luo's (2005) view of intrafirm competition is essentially about the competition of subsidiaries for headquarters resources, systems positions and mandates (different categorisations are provided by Birkinshaw (2000) and Cerrato (2006). The first aspect refers to the competition for headquarters resources (capital, technology, equipment, specialised human resources, training knowledge, information, etc). Since most of these resources are scarce, competition to access them occurs among subsidiaries.

The second aspect refers to the competition among subsidiaries to improve or defend their system position. Following Nohria and Ghoshal (1997), the modern MNC needs to be viewed as a differentiated network in which the role and power position of subsidiaries varies to large degrees with different emphases: on tasks that are performed

_

³ Michael Schrage, (2007), <u>www.cio.com</u>. March 17. Author of *Shared Minds: The New Technologies of Collaboration*(1990) http://www.cio.com/article/107053/The Race to Innovation

(White and Poynter, 1984) or different levels of strategic autonomy subsidiaries might possess (Birkinshaw and Morrison, 1995).

A third view on intrafirm competition touches upon the concept of subsidiary mandates or charters. By intraorganisational competition, (Birkinshaw and Lingblad, 2005, p. 674) not only mean the phenomenon of firms' competition for scarce resources, but include the existence of overlapping activities within the boundaries of the multibusiness firm.

Earlier research focused on competition among individuals and small teams and was based in organisational behaviour theory (Khoja, 2008). More recent research was noted by Birkinshaw and Lingblad (2005) in a variety of settings; from the automotive industry (Peters and Waterman, 1982) to information technology (Galunic and Eisenhardt, 1996).

2.5 Competition and collaboration

By investigating the different ways that competition and collaboration manifest themselves through structures and processes in organisations, we may gain some insight into how business units interact and the potential effect of the interaction.

Little conceptual and even less empirical research into the nature of the co-existence of competition and collaboration has been conducted at the intra-organisational level within the MNC with the exception of Luo(2005), whose conceptual paper identified some of the factors of coopetition i.e. 'the coexistence of cooperation and competition' (Brandeburger and Nalebuff, 1996; Bengtsson and Kock, 2010. But even this study is investigating the similar, but different, construct of cooperation in conjunction with competition.

2.6 Conclusion and research question

I have briefly introduced the relevant literature of strategy and structure to position the investigation of competition and collaboration within the multinational corporation. It

has been explained that previously business units operated autonomously in the multinational configuration and competition existed for scarce resources from the corporate centre. However, globalisation requires greater integration among the business units in order to share knowledge. This requires a more collaborative approach. Strategy and structure considerations are important to organisational design.

My interest in indentifying the factors and mechanisms that influence the internal competition and collaboration of business units in a multinational organisation suggests that there are underlying mechanisms in operation but they cannot be observed. Firstly, by understanding what the factors and mechanisms are, this will enable me to pursue more explanatory question of 'how' they influence competition and collaboration.

The question that I will be considering in this systematic review is:

What are the factors and mechanisms that influence competition and collaboration between organisational units within multinational organisations?

3 METHODOLOGY

3.1 The Systematic Review Process

The literature review process is an essential part of the total research process. Hart (1998, p. 13) has described it as:

"the selection of available documents(both published and unpublished) on the topic, which contain information, ideas, data and evidence written from a particular standpoint to fulfil certain aims or express certain views on the nature of the topic and how it is to be investigated, and the effective evaluation of theses document in relation to the research being proposed."

The systematic literature review was first developed in the medical science research arena to eliminate bias and synthesise research in a systematic, transparent and reproducible manner (Tranfield, 2003, p. 209). It has been proposed for use in the management field to respond to the criticisms of management reviews "for being singular descriptive accounts of the contributions made by writers in the field ... [and therefore] condemned for lacking critical assessment" (Tranfield, et al., 2003, p. 208).

The specific steps in conducting a systematic review are shown within this document are as shown in Figure 1.

With regards to Stage 1, the review panel is detailed below, mapping the field has already been explained in chapter 2 and a review protocol has been submitted. This document therefore now proceeds to specify stages 2 to 4 in detail and stage 5, the implications for research and practice, are discussed within chapter 6

	Stage 1: Planning the Review	
See section 3.2	Step 1 - Forming a review panel	
See Chapter 2	Step 2 – Mapping your field of study	
Systematic Review Protocol	Step 3 – Producing a review protocol	
	Stage 2: Planning the Review	
See section 3.3	Step 4 – Conducting a systematic search	
See section 3.4	Step 5 – Evaluating studies	
	Stage 3: Planning the Review	
See section 3.5	Step 6 – Conducting data extraction	
See section 3.6	Step 7 – Conducting data synthesis	
	Stage 4: Planning the Review	
See Chapters 4 and 5	Step 8 – Reporting the findings	
	Stage 5: Planning the Review	
See Chapter 6	Step 9 – Informing research	
See Chapter 6	Step 10 – Informing practice	

Figure 1 The systematic review process

3.2 Review Panel

The members that comprise my review panel are detailed below in Table 1 . The panel purposely includes both academics and practitioners, who are both experts in my field of research as well as people who are skilled in the systematic research process. The purpose of forming a review panel is to ensure that support and guidance are provided throughout the process for example in such areas as initial database searches and latterly in the quality appraisal process.

Table 1 Review panel

Person	Organisation	Involvement
Dr. Colin Pilbeam	Cranfield School of Management	Supervisor: coaching, reviewing writing and moral support
Cliff Bowman	Cranfield School of Management	Academic: advising me on the strategic management domain
David Denyer	Cranfield School of Management	Systematic review specialist: advising me on the systematic literature review process
John Stopford	London Business School	Strategy Management expert: advising me on multinational corporation's literature. Sadly, John passed away on Aug 13, 2011.
Julian Birkinshaw	London Business School	Competition: advising me on relevant literature
Morten Hansen	INSEAD / University of Berkeley	Collaboration: advising me on relevant literature
Tammy Eriksson	nGenera Corporation	Practitioner and Writer: communicating on the field of collaboration
Heather Woodfield	Cranfield University Library	Information Specialist: advising me on literature searches and database management

3.3 Step 4: Conducting a systematic search

The systematic search strategy identified the documents which were then analysed in terms of their relevance to the research question. In this section, the process of the database search is explained followed by referencing the important role that other relevant data sources played in searching for data which include direct contact with academics in this field.

Though the decision process used throughout the review is shown here as linear and smooth flowing, there were many decisions reviewed and revisited at each stage, as more clarity emerged about the topic of interest. The experience was more messy and iterative than linear.

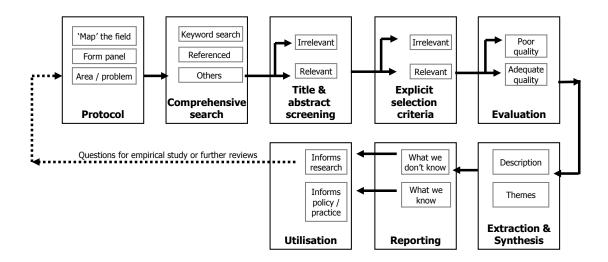


Figure 2 Process flow decisions of systematic literature review.

Source: Cranfield MRes Programme

3.3.1 Databases

Table 2 details the databases referred to during the review. EBSCO and ABI/Proquest were the primary databases used to search through a wide number of journals in the business management fields to explore in significant detail the research focus on competition and collaboration in multinational corporations.

PsychInfo was initially explored for its relevance. However, as the focus was on organisational units and not at the interpersonal, intra-group or team level, PsychInfo was not pursued after an initial exploratory search with key words of "competition AND collaboration AND intra-organisation AND multinational" which generated 345 hits and 4 relevant duplicates of existing articles. On the completion of the academic database searches, Google Scholar was used as a cross check.

Table 2 Databases selected

Database	Description and Explanation
ABI/INFORM(Proquest) and EBSCO	ABI and EBSCO are the most comprehensive business databases which cover a wide time period. The databases were appropriate in that my research covers the literature of organisation theory, organisational behaviour and strategic management.
Google Scholar	This was searched as another avenue to access selected academic publishers and unpublished documents not available from other databases.

3.3.2 Keywords

Table 3 details the keywords used to form the search strings applied to the databases above. These keywords were developed during the scoping study and as a result of further reading.

A two stage process eventuated as refinements were required as a result of the initial search. The initial search results are presented and the subsequent search strings and results.

Table 3 Keywords

Topic	Keywords	Explanation
Competition	compete, competing, competition	Covers terms related to competition but excludes words (if truncated to compete*) such as competence.
Collaboration	collaborat*, work* together, network*, interdependence, synergy, teamwork, cooperation	Covers terms related to collaboration in OB and Strategic Management literature. I included 'cooperation' initially as some studies revealed during the preliminary scoping study that 'cooperation' was occasionally used interchangeably and synonymously with collaboration
Multinationals	multinational*, multi- business, matrix, transnational*, international*	Related to specific context of multinationals but included other organisational designs where organisational units such as divisions and functions would be captured

3.3.3 Initial search Strings

Table 4 details the initial search strings, developed from the key words above that were used to examine the databases.

Table 4 Initial search strings

Торіс	Search String
Multinationals	Matrix organi?ation* OR multinational OR multi-national organi?ation OR transnational organization* OR global matrix
/Multibusiness	OR internation* OR multi business* OR multi-business* OR multi unit OR multiunit
Intraorganisation	Intra-organi?ation OR intraorgani?ation
Collaboration	Collaborat* OR work* together OR interdependence OR synergy* OR teamwork
Cooperation	Cooperat* OR co-operat*
Competition	Compete OR competing OR competition OR competitive

3.3.4 Initial Search Results

The results of these searches are shown below in Table 5.

Restrictions were applied for ABI: Citation and Abstract / Scholarly Journal / Sorted by Relevance and for EBSCO: Abstract/Scholarly Journal (Peer Reviewed) / Sorted by Relevance.

Table 5 Initial search string results

Topic	AND	Search String	EBSCO # hits	Proquest # hits
Collaboration		collaborat* OR work* together OR interdependence OR synergy* OR teamwork	25705	27112
	Competition	AND compete OR competition OR competitive	1976	2842
	Competition AND Cooperation	AND compete OR competing OR competition OR competitive AND cooperat* OR co-operat*	296	498
Competition		compete OR competing OR competition OR competitive	95608	88875
Multinational and Multi-businesses		multi-national* OR multinational* OR global matrix OR transnation* OR internation* OR multibusiness* OR multi-business* OR multiunit OR multi unit	12248	318
	Collaboration	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork	289	502
	Competition	AND compete OR competing OR competition OR competitive	1295	2256

Topic	AND	Search String	EBSCO # hits	Proquest # hits
	Collaboration AND Competition	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork AND compete OR competing OR competition OR competitive	43	87
Intra-organisation		intra-organi?ation* OR intraorgani?ation*		
	Collaboration	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork	46	71
	Competition	AND compete OR competing OR competition OR competitive	51	66
	Collaboration AND Competition	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork AND compete OR competing OR competition OR competitive	7	12

The initial search shows a very high number of hits. Initial abstracts were reviewed to identify opportunities for refinement and subsequent strings were devised in an attempt to exclude irrelevant content.

On reviewing the first one hundred abstracts generated by the search strings, it became apparent that specific words were surfacing unintended and irrelevant articles. For example, 'transnation*' and 'internation*' introduced a significant number of articles on nation states and countries. Because transnational and international organisations were typically mentioned in conjunction with multinational corporations (MNCs), the two words were excluded from subsequent search strings.

Additionally, as I am particularly focused on the dynamics of collaboration and competition, the separate inclusion of 'cooperation' did not appear to surface any distinctly different articles when combined with competition and collaboration if cooperation was used interchangeably with collaboration. Therefore, I did not choose to continue unique searches using 'cooperation' but did so in combination with competition and collaboration.

The search word 'intra (-) organisation' was used to identify specific situations of competition and collaboration inside the organisation. However, the word did not select out abstracts relating to inter-organisation. Therefore, on further advice, I expanded the search words to include specific organisational unite used in the literature to convey *inside* the organisation. Furthermore, I was advised that even after expanding the search string to include other synonyms, I may also need to carry out a manual review at the title and abstract selection stage due to the lack of sensitivity of the database search tools.

3.3.5 Revised Search Strings

As a result of the initial search string selections, I made the following modifications:

 expanded 'intra-organisation' to include other synonyms such as internal and intra-firm, and organisational units expanded to include business units, divisions, and interunits. Cross functional units were also included as they are a well known mechanism to facilitate collaboration at the divisional level.

Table 6 Revised search strings

Topic	Search String
Multinational	Multi-national organi?ation* OR multinational organi?ation* OR
(include multi-	matrix organi?ation* OR multi business * OR multi-business*
business)	
Collaboration	Collaborat* OR work* together OR interdependence OR synergy*
	OR teamwork
Competition	Compete OR competing OR competition OR competitive
Cooperation	Cooperat* OR co-operat*
Intra-organisation	Intra-organi?ation* OR intraorgani?ation* OR internal OR inter-
(expanded to	unit OR cross function* OR intergroup OR inter-function* OR
include specific	intra-firm OR intrafirm
organisational	
units)	

3.3.6 Revised Search String Results

The same restrictions were exercised on the revised search for ABI (citation and abstract / scholarly journal / sorted by relevance) and EBSCO (abstract/scholarly journal, peer reviewed/ sorted by relevance). The revised search strings are presented in Table 7

Table 7 Revised search string results

Topic	AND	Search String	EBSCO # hits	Proquest # hits
Collaboration		collaborat* OR work* together OR interdependence OR synergy* OR teamwork		
	Competition	AND compete OR competition OR competitive	1976	2842
	Competition AND Cooperation	AND compete OR competing OR competition OR competitive AND cooperat*	296	498
Multi - nationals		multi-national* OR multinational* OR multibusiness* OR multi-business*		
	Collaboration	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork	289	502
	Competition	AND compete OR competing OR competition OR competitive	1295	2256
	Collaboration AND Competition	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork AND compete OR competing OR competition OR competitive	43	875
Expanded Intra- Organisation to include specific organisational units		intra-organi?ation* OR intraorgani?ation* OR cross-function* OR cross function OR inter-unit* OR intrafirm* OR intra-firm*		
	Collaboration	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork	284	480

Topic	AND	Search String	EBSCO # hits	Proquest # hits
	Competition	AND compete OR competing OR competition OR competitive	590	731
	Collaboration AND Competition	AND collaborat* OR work* together OR interdependence OR synergy* OR teamwork AND compete OR competing OR competition OR competitive	37	75
		•	4810	8259
		Total	13069	

A total of 13,069 hits were reviewed based on the articles' abstract and title.

A search string was input into Google scholar as a final check and generated 237 hits http://scholar.google.co.uk/scholar?hl=en&q=intraorganizational+or+interunit+co mpetition+and+intraorganizational+or+interunit+collaboration+within+multinati onal+corporations&btnG=Search&as_sdt=0%2C5&as_ylo=&as_vis=0

13, 306 titles and abstracts were then taken forward for review.

3.3.7 Other Sources

Other sources were identified as a result of cross checking the references of the articles identified in the search and in discussion with others who directed me to further sources to consider. These are summarised in Table 8 below.

Table 8 Other information sources

Others Sources by Type	Details
Journals not found in the	This included articles found in the references of
databases searches	other articles. Because some were not available on
	line, they were sourced through the interlibrary loan
	system from the British Library.
Conference Papers, PhD Theses,	As above, or sourced on the internet.
relevant Masters Dissertations	
Books	Key authors have written in more depth in the areas
	of collaboration and competition which have
	provided important background to my research area
	e.g. Hansen(2009) on intraorganisational
	collaboration
Working papers or unpublished	Unpublished papers that have been made available
papers	by academics on request or generously offered by
	internal advisors e.g. Duality, value creation.
Personal requests to	Direct contact with knowledgeable researchers
knowledgeable researchers	and/or practitioners may be a source of related
and/or practitioners	papers

3.4 Step 5: Evaluating studies

The next stage of the process, having searched the databases and identified the number of hits, was to evaluate the articles and decide which ones would be included in my review.

Inclusion and exclusion criteria were determined and are shown below, represented as a 2-stage process: criteria applied to the titles and abstracts and then, on the remaining successful papers, additional criteria applied to the full text articles.

3.4.1 For all Titles and Abstracts

Abstracts and titles were reviewed. However, at this stage I chose not to check for any duplicates, which, on reflection, would have been more efficient and less confusing. For the 13,306 (13,069 articles + 237 Google articles) I undertook an evaluation as detailed in Table 9: Selection criteria for titles and abstracts.

Table 9 Selection criteria for titles and abstracts

Element	Criteria	Rationale for Inclusion
Topic	Competition and collaboration <i>inside</i> the organisation	Main focus of study
Unit of Analysis	Organisational unit - subsidiary, business unit, division or function	By focusing on this unit of analysis (one or two levels below the corporate centre or headquarters) I do not intend to cover between firms (i.e. <i>inter</i> -organisation) nor between individuals or within teams.
Context	Multinational Corporations (MNC)	Context for selection is in multinational, global or multi-business organisations to explore understanding of dynamics in a complex and heterogeneous environment
Journals	Scholarly journals	Scholarly peer reviewed papers will ensure some degree of academic rigour.
Nature of Research	Theoretical or empirical	I am interested in both the conceptualization and operationalisation of the core concepts.
Method	Qualitative and quantitative	I do not have a preferred method and will explore both
Location	All	A specific geographic location is not important
Industry	Private and Public Sector	Primary focus is on the private sector. However intra-organisation collaboration or competition may be theoretically relevant in global professional services firms (PSF).
Language	English	My language proficiency is English. Therefore only articles that are, or have been translated into, English will be included.

Table 10 lists the exclusion criteria adopted at the title and abstract stage.

Table 10 Exclusion criteria for title and abstract

Exclusion	Decision	Rationale
Criteria		
Sector	systems / collaboration technology	Focus is process or behaviour of collaboration, not the technology
	<i>57</i>	platform within which this can occur
	supply chain, network	Focus is within organisation
Unit of analysis	individuals/ within teams/	Exclude internal small group
		dynamics/ teamwork
	inter-organisation	Also exclude inter-organisation
Other research	• Conflict	Conflict management is an outcome
	management	of competition and a specific area of
	• Communities of	literature that I am not pursuing.
	practice (COP)	COP are more information sharing
	 Coopetition 	than outcome oriented.
		Studies on coopetition are typically
		focused at the 'between firm' level so
		exclude inter-firm coopetition .

As a result of the evaluation process, 315 of the 13,069 articles (which still include duplicates) were selected for full text review; 152 articles were from the ABI database, 158 from the EBSCO database, and one article and three theses from Google Scholar, . Duplicates were reviewed at this stage (and where a duplicate was found (\approx 33% of articles), EBSCO was recorded as the data source because of my preference for its search format. 207 articles were forwarded for full text review. Many of the articles eliminated at the title and abstract stage were due to:

- competition or collaboration occurring *among* organisations, networks, alliances not *within*
- organisational units of teams and within groups

- generic 'competition' or 'competitive' advantage
- supply-chain/buyer-seller collaboration
- collaboration occurring in public services e.g. health and education
- not within the multinational or multi-business environment
- where multinationals was the context but not relevant to intra-organisational competition and collaboration
- collaboration and competition as antecedents to other factors e.g. performance and value creation

3.4.2 For full text papers, recommended articles and books

The remaining 207 articles which were retained through the title and abstract selection process above were then examined fully alongside 49 articles which had been cited as key references in relevant articles or brought to my attention by other colleagues or from previous searches during the scoping study. One book was included. At this stage, I applied tighter selection criteria on subject matter and context which included: identified factors, conditions and mechanisms as antecedents or determinants of intraorganisational competition and collaboration; horizontal inter-unit interaction (whether business unit, subsidiary or cross functional unit) and not headquarters and business unit).

Through this process I kept 37 articles, 1 book, 1 PhD thesis and 2 Masters

Dissertations but chose to exclude the 4 email communications with key authors as their contributions were primarily advice.

3.4.3 Quality Appraisal

The final criteria were applied to appraise the quality of all sources used in this review: articles, book and theses and were described in Table 11.

The quality appraisal process was more suited to empirical papers than conceptual and practitioner papers. However, my own capability of adequately critiquing these papers

would recommend itself to further expert guidance. While the conceptual papers did not pursue a specific methodology and the practitioner papers typically had neither theoretical nor methodological robustness, they nevertheless offered a perspective that was helpful to the review. These more subjective decisions are best illustrated with a couple of examples. If there was still any doubt expressed, the journal ranking was taken into consideration.

Two examples are:

1. Hansen and Nohria (2004) article alluded to their empirical study but only the discussion results were provided. In this instance, I rated the paper accordingly for its contribution to practice and overall contribution:

(Theory) NA; (Methodology) 1; (Overall contribution) 3; Total Score: 4

Decision: Include, in light of overall contribution in terms of usefulness to the practitioner at the maximum.

2. Ferrari (2010) article is an interview of a global Research & Development leader who practices competition and collaboration within GE.

(Theory) 1; (Methodology – perhaps ethnography but not portrayed as such) 1; (Overall contribution – real world example of competition and collaboration) 3; Total Score: 4

Decision: Include, in light of overall contribution to practice at 3

Any articles that scored at least a '2' on all categories were included with the exception of the types of examples above. At this stage, most of the articles were retained. The exceptions were three book reviews or introductory papers to Special Editions.

Table 11 Quality appraisal criteria

Criteria	Low = 1	Medium = 2	High = 3	N/A
1. Theoretical foundation	Inexistent or little information about the literature used. Superficial understanding of main theories in the field.	Reasonable awareness of the key contributions in the field and demonstrated ability to use them in building the argument.	Complete review of the relevant literature. Makes clear use of existing theoretical arguments, compares and contrasts them in a critical way.	Not applicable (e.g. practitioner paper)
2.Methodological rigour	Inexistent or inadequate explanations of research design chosen. Insufficient description of the sample.	The link between the theoretical argumentation and the choice of the design is clear. Acceptable data analysis and interpretation.	Clear rationale for sample and design choice. Adequate sample and sound data analysis. Very accurate interpretation.	Not applicable (e.g. practitioner or conceptual paper)
3. Contribution to the field	Little or no theoretical and methodological contribution to the field. Unsupported generalisations. Uses only existing ideas and methods or oversimplification of other ideas/theories.	Contribution only on specific aspects – theoretical or methodological. Incorporates core concepts of the theory presented, Builds on existing knowledge.	Clear contribution to existing knowledge (practice, research or theory) by rigour or originality. OR Excellent quality and contribution at several levels. The conclusions are supported by thorough analysis and relevant examples	

3.4.4 Final Selection

The above processes resulted in 48 articles, 1 book and 1 doctoral thesis and 2 master's dissertations.

This brings the final list of core reading to 51. Table 12 details the final core list that was used in compiling this review. More detailed information on these can be found in the appendix. The references at the end of this document list these in addition to other sources which are related to multinational organisations and systematic review method, specific theoretical perspectives and regarded as peripheral reading for background.

Table 12 Final list of core sources used

Source	Source Details	Number
Articles	Search Strings	34
	Recommendations or citations	13
Books	Found through citations	0
Book Chapters	Found through citations	0
	Recommendations by panel or authors	1
PhD /Masters Theses	Sourced on line (via Google Scholar)	3
Websites		0
Total Sources		51

3.5 Step 6: Extracting and analysing data

The data extraction table shown below was used to record key facts from each source and to aid analysis and synthesis.

For the sources used in this review, additional detailed data was extracted to facilitate descriptive and conceptual analysis. This is illustrated in the table listing core sources in the appendix.

Table 13 Data Extraction Form

Data Extraction Form	
Details of publication	
Author	
Title	
Source (e.g. Database)	
Year/Volume/Pages/Country of Origin	
Research question	
Focus of research (competition, collaboration) or	
'coopetition' (if intra-organisational perspective)	
Type of Knowledge	
If empirical:	
Method	
Operationalisation of variables, if applicable	
Findings/Conclusions	
Specific research context (e.g., multinational corporation/multi-	
business)	
Unit of analysis (e.g. subsidiary, business unit, cross-functional	
team)	
Literature and theoretical base drawn from	
Influences on competition and collaboration	
Factors, mechanisms, identified enablers and barriers	
Relevant frameworks and models	
Theoretical contribution	
Future research identified	
Reviewers Decision - on initial pass	
Relevant to the research question? (Yes/No)	
If yes, how?	
Is it to be included? (Yes/No)	
If excluded, why?	
Reviewers Assessment of Quality- on second review	
Meet quality criteria? (Yes/No)	

3.6 Step 7: Data synthesis

The final step in the systematic review process is data synthesis. Having selected the sources and taken them through the relevant inclusion criteria, I separated the sources into 3 categories: competition, collaboration or competition and collaboration (or

intraorganisational 'coopetition') in order to consolidate my separate understanding of each construct before comparing and contrasting the various factors, mechanisms or conditions. I then reread all sources and made specific notes for each article and then identified key categories of relevance.

In parallel, through reflection, and in discussion with my panel advisors and other students researching in the area of cooperation and competition (coopetition), I was able to build up a picture of the various influences on competition and collaboration between organisational units, predominantly in multinational companies. The findings are set out in chapters 4 and 5.

4 DESCRIPTIVE FINDINGS

This chapter examines the 51 sources that have contributed to this review. The aim is to detect any underlying biases or trends in the data sourced which may limit or explain some of the conceptual findings in the following chapter.

Detailed information on these sources is listed in the appendix. Other peripheral literature on multinational companies, books and articles on the broader topics of competition and collaboration, understanding of dualism and duality in addition to further publications for explanations of specific methodologies and constructs is included in the reference list.

4.1 Publication Features

The source location of the core literature used in this review is summarised in Figure 3. The review was heavily influenced by journal articles.

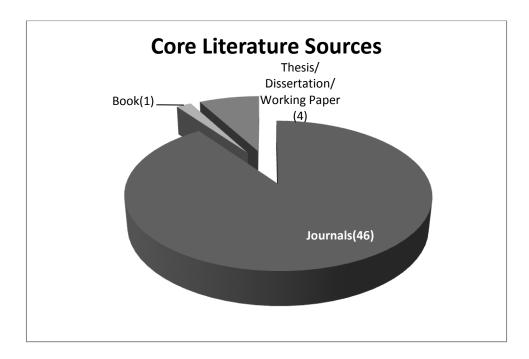


Figure 3 Core literature sources

Figure 4 shows the sources by publication year which shows that most of the literature has emerged in the last decade.

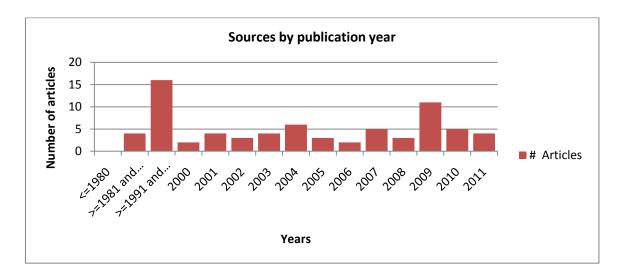


Figure 4 Sources by publication year

Source by location of first author

Figure 5 highlights the location of the universities of the first authors cited in the journals. Overwhelming, the literature is USA initiated with the next substantial number from the UK. Both of these are western oriented cultures. Tjosvold (1988, 1989, 1990, and 2008) has initiated a number of cross-cultural studies as China emerges as a global power. However this may remain to be an area for further research.

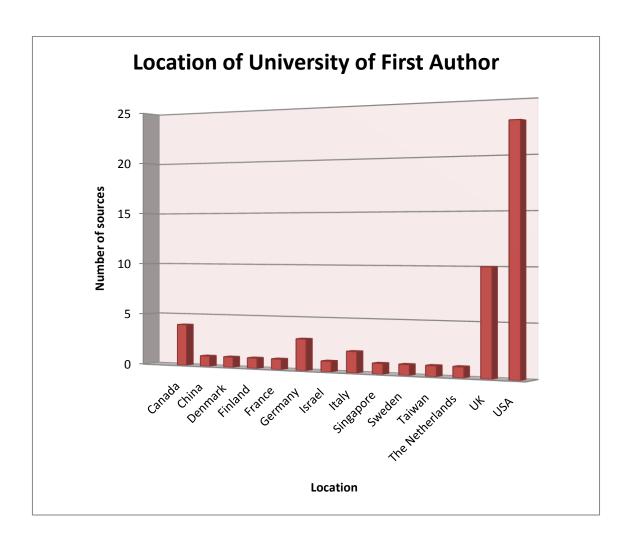


Figure 5 Location of university of first author

Journals used in the review

The 46 articles used in this review are drawn from the publications listed in Table 14.

Table 14 Journals used

	T	T . 1
		1
3		
1	Journal of International Management	1
1	Journal of Marketing (2)	2
	Journal of Operations Management	1
1	Journal of Organizational Behavior	1
1	Journal of Productive Innovation	1
	Management	
2	Journal of Personal Selling and Sales	1
1	Management	
1	Journal of World Business	1
1	Long Range Planning	1
2	Management and Organisation	1
1	Review	
1	Management Decision Economics	1
1	McKinsey Quarterly	1
	Organization Science (3)	3
1	Organizational Dynamics	1
1	Scandinavian Journal of	1
1	Management	
1	Sloan Management Review (2)	2
1	Thesis/Dissertations	3
1		
1		
	1 1 1 2 1 1 1 1 1 1 1 1 1	Management Research Journal of International Management Journal of Marketing (2) Journal of Operations Management Journal of Organizational Behavior Journal of Productive Innovation Management Journal of Personal Selling and Sales Management Journal of World Business Long Range Planning Management and Organisation Review Management Decision Economics McKinsey Quarterly Organization Science (3) Organizational Dynamics Scandinavian Journal of Management Sloan Management Review (2) Thesis/Dissertations

Journal Ranking

As Figure 6 shows most of the journals are ranked the top three or four stars by either Anne Will-Harzig journal quality list or ABS (the Association of Business Schools rankings). The 'not rated' reference includes one journal that was not rated, Business Research, one conference paper, one book, one thesis and two master's dissertations.

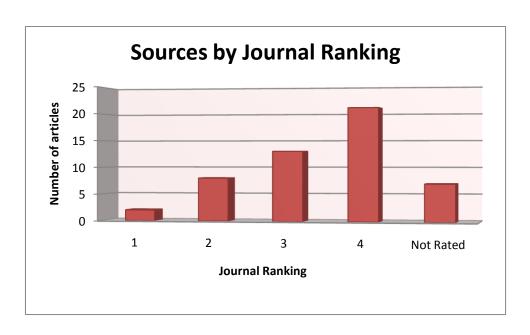


Figure 6 Sources by journal ranking

Source by kind of knowledge

Figure 7 shows the type of knowledge pertained in the literature as per the classification of Wallace and Wray (2006). Theoretical knowledge is "developed through systematic reflection on the social world", research knowledge "through systematic investigation of the social world", and practice knowledge "through taking action in the social world" (2006, pp. 76). Both research and theoretical knowledge strongly influence this review.

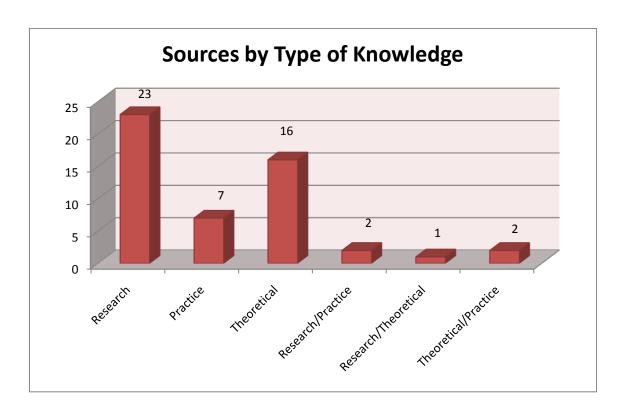


Figure 7 Sources by type of knowledge

Breakdown of the research papers

The research knowledge articles were further broken down into the separate constructs by whether qualitative, quantitative or mixed/multiple methods were used in the study. See Figure 8

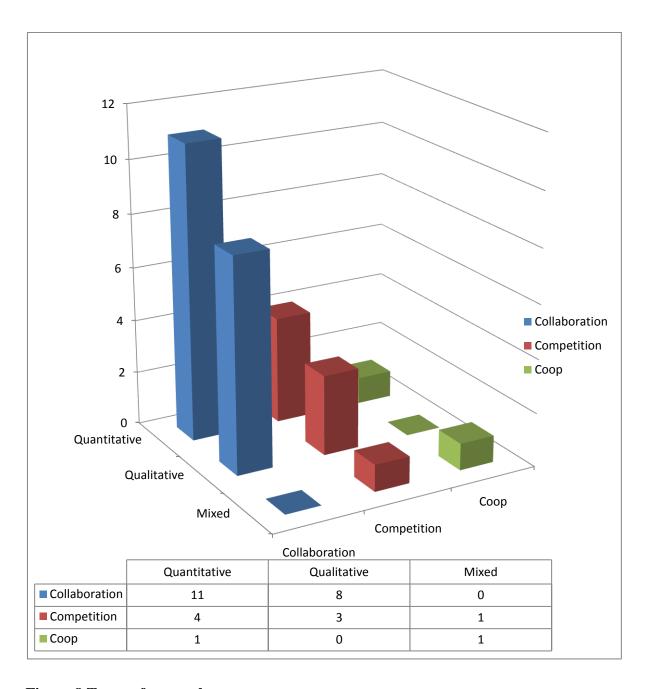


Figure 8 Types of research papers

Categorisation of literature

Further categorisation of the constructs is provided by author by construct and unit of analysis. The strong functional influence reflected in the collaboration papers is a result of my search process, as cross functional teams are a mechanism to facilitate collaboration. Consequently, the literature is focused predominately on inter-unit

collaboration. Inter-functional competition does not receive the same attention in this review. A further research area would be to investigate intra-organisational competition at the functional level and compare with it competition between subsidiary and business units.

Table 15 Categorisation of literature

	Intra-organisational			
Organisational Units	Competition	Competition and Collaboration "Coopetition"	Collaboration	
Subsidiary/ Business Unit/ Division	Becker-Ritterspach and Dorrenbacher (2009) Birkinshaw and Lingblad (2001) Birkinshaw and Lingblad (2005) Birkinshaw (2001) Cerrato (2006) Fong, Ho, Weng and Yang (2005) Gammelgaard (2009) Houston, Walker, Hutt and Reingen (2001) Kalnins (2004) Khoja (2008) Phelps and Fuller (2000) Zarzecka and Zhou (2002)	Competition and Collaboration Eisenhardt and Galunic (2000) Coopetition Tsai (2002) Luo, Y (2005)	Barner-Rasmussen and Bjorkman (2007) Martin and Eisenhardt (2010) Gnyawali, Singal and Mu (2009) Golden and Ma (2003) Hansen and Nohria (2004) Hansen and Birkinshaw (2007) Hill, Hitt and Hoskisson (1992) Liedtka (1996) Persaud (2005) Singh (2005) Tjosvold and Tsao (1989) Rauser, O (2002)	
Function/ Department		Luo, Slotegraaf and Pan (2006)	Chen and Tjosvold (2008) DeLuca and Atuahene- Gima (2007) Ellinger, Keller and Hansen (2006) Jassawalla and Sashittal (1999) Koulikoff-Souviron and Harrison (2010) Le Meunier-FitzHugh (2008/2009) Tjosvold (1988) Mena, Humphries and Wilding (2009) Mintzberg, Jorgenson, Dougherty and Westley (1996) Qureshi, Briggs and Hlupic (2006)	

Co-authors

In a field of collaboration and competition I was interested to see if there was collaboration in co-authorship. More multiple authorship than single authorship is evident in this review.

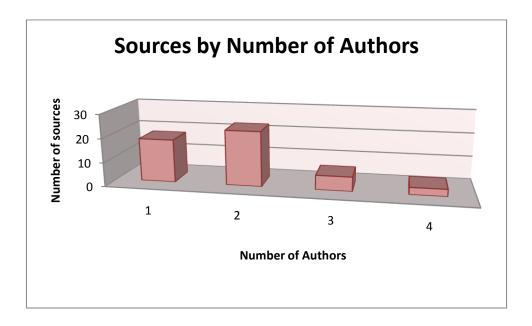


Figure 9 Sources by number of authors

Summary notes

The descriptive findings suggest that this review will be influenced by the following factors:

- The US perspective in a multinational environment and therefore implied cultural bias.
- The topic is of current importance as indicated by the number of publications in major journals in the past decade.
- The collaboration literature is represented at the cross-functional and subsidiary level

5 CONCEPTUAL FINDINGS

The discussion of the findings of this review will be presented in five parts.

The first section will present the theoretical perspectives adopted in this review.

The second section will focus on the findings of intraorganisational collaboration between organisational units (i.e. subsidiaries, business units, divisions) by presenting the:

- the meaning of collaboration
- factors that influence collaboration
- the barriers to collaboration
- mechanisms used to facilitate the successful occurrence of collaboration
- a summary of the influences on collaboration

The third section will investigate the findings from of intraorganisational competition using a similar outline as that described above.

The fourth section will present any findings of intraorganisational competition and collaboration that coexists at the subsidiary or business unit level in multinational corporations.

The final section will summarise the findings of the review of the collaboration and competition literature.

5.1 Context

5.1.1 The theoretical perspectives

As competition and collaboration are noted for their different ontological perspectives, the main theories utilised in this review reflect that bias.

Tables 16 and 17 summarise the main theories used for collaboration and competition respectively.

Table 16 Summary of main theories (collaboration)

Theory	In this study	Authors
Resource based view	Availability of	Allred et al (2011); Hansen (2009);
	resources	Mena et al (2009); Rauser (2002);
		De Luca and Atuahene-Gima (2007);
		Liedtka (1996)
Knowledge-based &	Availability of	Quereshi et al (2006); Rauser (2002);
organisational learning	resources	Gynawali (2009)
theory		
Social capital	Resource exchange	Barner-Rasmussen and Bjorkman
	aspects	(2007);
Network theory	Resource exchange	Martin & Eisenhardt(2010); Rank and
	aspects	Tuschke (2010);
Agency theory	Governance modes and	Rauser (2002)
	mechanisms	
Social exchange theory	Governance modes and	Rauser (2009); Gynawali (2007)
	mechanisms	
Evolution theory		Boussebaa(2009); Eisenhardt &
		Galunic(2000);
Collaboration		Ellinger et al (2006); Wood and Gray
perspective		(1991);

Table 17 Summary of main theories (competition)

Theory	In this study	Authors
Resource based view	Scarcity of resources	Tsai(2002); Cerrato (2006); Fong et al (2007);
Knowledge-based & organisational learning theory	Scarcity of resources	Gammelgaard (2009); Cerrato (2006)
Network theory	Resource exchange aspects	Gammelgaard(2009) ; Tsai (2002) Hill et al (1992)
Evolution theory		Birkinshaw and Lingblad(2001); Loch et al (2006);
Organisational Politics	Charter change	Becker-Ritterspach and Dorrenbacher (2009); Gammelgaard(2009); Luo(2005)

5.1.2 Research and Theoretical Papers

The papers are categorised by their types of knowledge. See Appendix A which lists the type of knowledge under the same column heading in the core paper details.

5.1.3 Research method used in this review

Qualitative, quantitative and mixed methods were used in the research papers. The breakdown by methods are summarised in Table 18.

Table 18 Research methodologies used in this review

	Qualitative	Quantitative	Mixed or Multiple
Collaboration	Semi structured interview (1) Critical incident Method (1) Literature review (2) Case study (4)	Survey questionnaire (6) Structured Equation Modelling (5)	
Competition	Case study (3)	Survey questionnaire (3)	Questionnaire + Survey
Collaboration & Competition /Cooperation		Survey (1) Socio-metric analysis (1)	

5.2 Collaboration

5.2.1 Definitions of intraorganisational collaboration

In the articles in this review, at least eight definitions of collaboration appear. The definitions are categorised by the main organisational units that the definition covers:

Functional/Departmental Units:

- Liedtka (1996, p. 21) uses Gray's (1991, p. 227) definition of collaboration as "a
 process of decision making among interdependent parties; it involves joint
 ownership of decisions and collective responsibility for outcomes".
- Jassawalla and Sashittal (1999, p. 51) apply the term to teams and departments
 from conflict literature (Thomas, 1992) as "a method by which competing
 interests reach win-win outcomes". They go on to say that in the new product
 development literature, the term is often used interchangeably with cooperation
 among functional groups.
- Ellinger et al (2006, p. 25) offer a more comprehensive version based on Schrage's (1990) definition of cross-functional collaboration being an "informal integrative work management approach that involve departments working together, having a mutual understanding, sharing a common vision, sharing

resources and achieving goals collectively" and add, based on Mintzberg's (1997) contribution that "inter-functional collaboration is an unstructured, informal communicative process that is dependent on people's ability to trust each other, build meaningful relationships, and appreciate one another's expertise".

- Sanders (2007) builds on Schrage's and Stank's definitions and contributes to the meaning of intraorganisational collaboration as a construct defined as "an affective, mutual shared process where two or more departments work together, have mutual understanding, have a common vision, share resources, and achieve collective goals" (Schrage, 1990; Stank et al, 2001).
- DeLuca et al (2007) describe cross functional collaboration as the degree of cooperation and the extent of representation by marketing, research and development (R&D) and other functional units in the product innovation process (p. 99).
- Mena et al (2009, p. 764)) adopted Humphries and Wilding 's (2004) definition from within the supply chain literature which states that collaboration means "working jointly to bring resources into a required relationships to achieve effective operation in harmony with the strategies and objectives of the parties involved, thus resulting in mutual benefit".

Multibusiness units:

- Martin and Eisenhardt (2010, p. 265) construct a definition of collaboration within a multi-business firm as the "collective activity by two or more business units within a multi-business organisation to create economic value" (p. 265).
- For their purposes, Liedtka (1996, p. 21) choose to deploy Gray's (1991) definition of collaboration "as a process of decision making among interdependent parties; it involves joint ownership of decisions and collective responsibility for outcomes".

In other instances, collaboration is used as an adjective to describe various relationships, processes, approaches, behaviours, cultures and capabilities, and almost tautologically, for example, collaborative HR configurations; described as ones "that

encourage and reward cooperation, collaboration and information sharing" (Koulikoff-Souviron and Harrison, 2010, p. 931).

What is immediately noticeable is the paucity of inter-subsidiary definitions of collaboration from the literature reviewed. Definitions at the functional level are prevalent in this study because cross-functional mechanisms are used to foster collaboration within the divisions of a multinational corporation.

5.2.2 Factors that influence collaboration

This following section will address two of the critical issues of collaboration deemed by Wood and Gray (1991) as important to building collaboration theory: 1) the factors that make collaboration possible and motivate units to participate and 2) the process or mechanisms through which collaboration occurs.

Collaboration is claimed to be a voluntary activity and one that cannot be mandated, programmed or formalised (Mintzberg, 1996). Why would peer organisational units collaborate with each other? What factors would encourage collaboration to happen and under what conditions?

I have broken these factors into two components. First we look at the 'willingness and motivation of units to collaborate using four well established structural constructs of autonomy, formalisation, socialisation and communication.

5.2.3 Factors and mechanisms

Persaud (2005) investigated the nature of collaborative relationships among globally dispersed R & D units in a multinational. His aim was to explore the extent to which coordination structures foster closer collaborative relationships among the R & D units. He applied four well established structural constructs of autonomy, formalisation, socialisation and communication (Persaud, 2005) "which have been shown in the organisational design, international business strategy and international R & D literature,

to evaluate the effectiveness of cross-border coordination" (p. 412). The four constructs have also formed part of the new way of thinking about the multinational corporation as a "transnational" corporation (Ghoshal and Bartlett, 1990) and "differentiated network" (Nohria and Ghoshal, 1997).

Though some factors identified in the study may be represented in more than one structure, I have used these as a way to present the findings of collaborative relationships in this review, individually and collectively.

Table 19 summarises the findings of the factors and mechanisms that positively or negatively influence collaboration between business units. The summary will be followed by further elaboration on each factor identified.

Table 19 Factors and conditions that influence collaboration

Collaboration	Structure	Factor	Influence on collaboration	
			increase	decrease
Relationships	Socialisation	Trust	1	
		Shared Vision - when top down strategy	↑	
		Bargaining Power - personal relationships	↑	
		Social Identity	\uparrow	
		Culture - cooperative - competitive	个	V
	Formalisation	Rules	1	
		Rewards - lack of transnational rewards		\
		Individual performance	↑	
		Aligned goals	1	
		Overarching big goals	\uparrow	
		Competitive goals	\uparrow	
	Autonomy	Autonomy - decentralisation of NPD units	↑	
		Unrelated firms	1	
		BU led initiatives		\downarrow
		Centralisation	↑	
	Communication		1	
Collaborative Capability	Skills	Synergistic innovation Knowledge networking	<u></u>	
- apacant)		Dynamic collaboration	↑ ↑ ↑	
Environment	External	Innovative capability Strategic vulnerability	<u>Υ</u>	

5.2.3.1 Socialisation

"Socialisation refers to the process by which units learn and embrace the values, norms and required behaviours of the corporation" (Persaud, 2005, p. 416)

Friendship, trust and close relationships

Trust is a key factor in collaborative relationships. Tsai's (2000) results confirmed that related BU's with high mutual trust are more likely to form collaborations. Persaud found that "the more [R&D] personnel and managers trust each other, the more likely they are to establish close social networks and to collaborate with their colleagues in dispersed locations around the world" (p. 416). Martin and Eisenhardt (2010) produce a more recent view from social network theory emphasizing that social relationships among business unit (BU) executives may also facilitate creation of high performing cross-BU collaborations by improving familiarity and trust (Hansen, 1999; Tsai and Ghoshal, 1998). Thus, rich social networks (e.g. more formal and informal relationships) increase the formation and performance of cross-BU collaborations (p. 267).

In the Ellinger et al (2006) study "managers' levels of collaborative behaviour may be influenced by manager's attitudes towards the other function" (p. 5). At the top management level, Rank and Tuschke (2010, p. 155) found that little academic attention had been given to the nature of collaborative relationships among top management

Rank and Tuschke (2010) investigated the feeling of friendship among the top executives in which research is rather sparse.

High levels of trust were found to be a strong cohesive force which also created a climate of inclusion and led to higher levels of collaboration (Jassawalla and Sashittal, 1998).

Shared vision / values / culture

"Values are a central part of an organisation's culture and emphasise the aspirations of the organisation" (Chen and Tjosvold, 2008, p.94). However, even when values encouraging inter-site collaboration are in existence, the expected collaboration does not always occur (Koulikoff-Souviron and Harrison, 2010). The collaborations are in need of ongoing reinforcement from senior management. The cultural interpretation of particular values of people and respect were tested in the collective cultures of the Chinese environment by Chen and Tjosvold (2008) and found to be as applicable as in

Western cultures. Another aspect of culture considered by Barner-Rasmussen and Bjorkman (2007) in this review is the impact of language and accent influence which act as important drivers of inter-unit trust and shared vision. Multinationals are by their very nature multilingual organisations, even when the preferred language of business interactions is English. When it is difficult to communicate with other units because of the lack of a common language, coordination is not only restricted but mistrust can occur through interpretation and translation (Barner-Rasmussen and Bjorkman (2007, p. 122).

Socialisation mechanisms such as inter unit transfers, corporate meetings, international conferences and socialising have been assumed to be important ways for corporate units to embed shared visions, goals, values and beliefs (Nohria and Ghoshal, 1994). However, Barner-Rasmussen and Bjorkman's empirical testing of this assumption found differing results from that of Tsai and Ghoshal (1998). Tsai and Ghoshal found a strong positive relationship between socialisation mechanisms and trust/trustworthiness, but not shared vision. Also Barner-Rasmussen and Bjorkman's study provides support for the importance of language fluency which is not considered in Tsai and Ghoshal's (1998) study.

Gynawali (2009) propose that the greater the subsidiary units proximity in terms of culture, beliefs, and access to information to each other (i.e. they are culturally and technologically similar) the greater the likelihood that the focal subsidiary will collaborate (as referenced but forming a knowledge tie) with the subsidiary.

5.2.3.2 Formalisation

"Formalization refers to the decision making based on formal systems, established, rules, and prescribed procedures (Mintzberg, 1979)", Persaud (2005, p. 416).

Formalisation can be used as a control mechanism when there is greater interdependence among the business units and as a way to ensure that goals are aligned with the corporate strategy. It can be perceived as a rule based way of fostering cooperation and collaboration. Collaboration has been traditionally viewed as a voluntary phenomenon, at least in the interorganisational setting. However the subtle

enforcement of collaboration may be prevalent through the use of corporate values and performance management processes.

Goals /rewards/incentives

When goals are perceived as cooperative (i.e. when goal interdependence is high), collaborative effectiveness (as measured by effectiveness of relationships among departments was enhanced), (Chen and Tjosvold, 2008). At the functional level, Ellinger et al (2006) found that conflicting goals was an inhibitor of collaboration.

Rewards and incentives at the business unit level usually have some element of individual and firm-wide financial incentives. Firm-level cross sectional studies indicate that centralised decision making and firm-wide incentives for BU executives in related diversified firms are correlated with higher levels of cross-BU collaboration, which are, in turn, related to higher performance (Martin and Eisenhardt, 2010, p. 266). They found that irrespective of the general managers having firm wide incentives, the motivation to collaborate (or not) was based on their own self interest; "it helps my business" (Martin and Eisenhardt, p. 287). The rewards for focusing on their own businesses were simple, not confusing nor demotivating for the general managers.

Boussebaa (2009) likens the multinational professional services firm (PSF) as in internal market system (Birkinshaw, 2000). The transnational reward and recognition systems create significant conflicts of interest between subunits and militate against cross—national collaboration and knowledge sharing.

5.2.3.3 Autonomy

Persaud (2005, p. 415) describes "autonomy, as the obverse of centralisation, is the degree to which a particular unit is able to make or influence strategic and operational decisions affecting it in various value adding activities (Mintzberg, 1979)".

Headquarters grant more autonomy to business units in an attempt to have them collaborate more. But that doesn't mean that they will necessarily take up the

opportunity (Taggart, 1997). More autonomy could in fact 'allow' them to do their own thing for their own interest.

Martin and Eisenhardt (2010) found, surprisingly, that given the opportunity to initiate and select the units own collaborations, BU self-interest promotes, not impedes, cross-BU collaboration. They chose collaborations that were beneficial to themselves first, and then to other units. BU initiated collaborations were found to be more successful than corporate-centric initiated ones because the BU could see the value that they could gain by the collaboration. There is also greater incentive to collaborate when they have complementary skills so that any risks or costs can be shared between the two units (Persaud, 2005).

Pressures exist today for simultaneous centralisation and decentralisation which can drive the need for enhanced collaboration. It's often a difficult balance when economies of scale and standardisation are sought by the organisation through centralisation but the requirement to be more responsive to local demands is achieved through decentralisation of decision making (Liedtka, 1996).

5.2.3.4 Communication

As discussed above, interunit communication is an important factor that influences the willingness to collaborate. In Barner-Rasmussen and Bjorkman's (2007) study of interunit relationships in MNC, they empirically demonstrated the crucial importance of fluency in a common language for the development of close inter-unit relationships which foster collaboration (p. 215).

5.2.4 Collaborative capability

In the previous section we looked at some the factors that increase the willingness of business units to collaborate with other units within the same organisation. In the literature it became evident that collaboration was not a naturally occurring behaviour in most organisations. Liedtka (1996) goes as far to say that "collaboration for most was

an unnatural act" (p. 29). In this section, some specific capabilities (such as knowledge networking (Gynawali et al, 2009) and synergistic innovation (Persaud, 2005) are identified as enhancing collaboration from the review.

"Successful collaboration requires the development of new skills, mindsets and corporate architectures", (Liedtka, 1996, p. 23). The quality at many attempts at collaboration today is discouraging. The risks and effort involved seem to outweigh the benefits in organisation where turf protection has been the norm and where competition for corporate funding has been the only reminder of interdependence. Collaboration calls upon skills that have been rarely rewarded in most organisations (p.23)

It is assumed that units and individuals alike can naturally work together. However, learning how to and when to collaborate is not so easy to achieve (Hansen, 2009). With this awareness, "several theories implicitly or explicitly inform the importance, development and impact of collaboration as a dynamic capability" (Allred, Fawcett, Wallin and Magnan, 2011, p.130). By definition, a capability is "the firm's ability to integrate build and reconfigure internal and external competencies (Teece, et al, 1997, p. 517).

Deliberate learning activities focusing on how to collaborate prior to collaboration decisions were the success factor in all high performing collaborations that were BU initiated (Martin and Eisenhardt, 2010, p. 279). Those collaborations initiated by the corporate centre were all low performing due to the learning session happening after the choice to proceed with the collaboration was made.

Other capabilities identified in empirical studies that influence the ability to collaborate are knowledge networking capability: "the ability to form, manage and leverage a network for gaining and sharing knowledge" (Gnyawali et al, 2009, p. 387) and synergistic innovation: "a higher-order ability to accumulate and deploy new knowledge or to recombine existing knowledge to create new innovations more effectively and efficiently due to collaboration among globally dispersed R&D units"

(Persaud, 2005). However it seems that "collaborative behaviours are difficult to learn" Jassawalla and Sashittal, 1999, p. 50).

5.2.5 Leadership and Leaders Signals

The importance of the leadership and the signals the leaders or headquarters provide to the organisation were seen to be influential in the fostering of peer to peer collaboration. Ellinger et al (2006) suggest that "the relative scarcity of collaborative behaviour may be partly attributable to senior management's lack of involvement" (p. 1). Koulikoff-Souviron and Harrison (2010) claimed it was important that leadership at each site played a key role in articulating and communicating "ways of working" within the relationship (p. 927). Gynawali et al (2009) propose that the greater the support in terms of 1) instituting mechanisms for effective communication and exchange, 2) providing greater autonomy, and 3) allocating necessary resources will foster a culture that encourages collaboration.

5.2.6 External Environment

It is worth highlighting that there are external influences that have an influence on the willingness or skill to collaborate in multinationals. Gynawali et al (2009) propose that external environmental scenarios can motivate subsidiaries to collaborate to address the challenges of strategic vulnerability for example, new companies entering the market or new laws in the host country.

5.2.7 Barriers to collaboration

Hansen and Nohria (2004) have identified several barriers that impede collaboration within complex multiunit organisations and these are summarised in the framework below. While it is a useful framework which incorporates the findings at the intraorganisational level within an MNC, once again it is conducted within the business unit and not necessarily across business units. The management levers identified fall

into three broad categories of leadership behaviours, shared values and goals, human resources procedures and lateral cross unit mechanisms. These complement the findings already discussed.

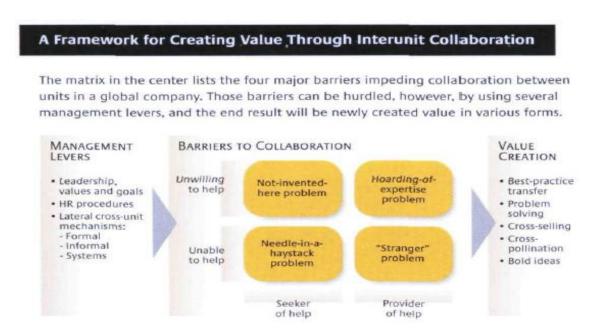


Figure 10 Interunit collaboration

Source: Hansen and Nohria (2004) Sloan Management Review, p. 25

Ellinger, et al (2006) also found similar categories of inhibitors of collaborative behaviour at the inter-functional level: "lack of communication, poor working relationships; conflicting goals and lack of direction from senior management" (p.12).

5.2.8 Mechanisms

While some of the mechanisms have already been referred to in the section above, other mechanisms which have the potential to foster collaborative relationships are mentioned for elaboration on in the discussion chapter following.

5.2.8.1 Mechanisms

Mechanisms for fostering socialisation include:

 constant travel, language training, exchange visits, corporate sponsored programs and the and have increased (Persaud, 2007:

- joint planning international teams (Persuad, 2007), task forces, cross functional teams (Chen and Tjosvold, 2008; Barner-Rasmussen and Bjorkman (2005);
- use of expatriate managers to lead overseas units (Persaud, 2007), rotation of managers (expatriates), interunit transfers to create stronger personal relationships to increase collaboration (Hansen and Nohria, 2004: Barner-Rasmussen (2005, p. 106)
- formation of task forces, cross functional new product and other teams can help overcome barriers to inter-unit collaboration Chen and Tjosvold (2008).
- short term visits, participation in joint training programmes and meeting and membership in cross functional teams, etc significantly contribute to the normative integration of employees with the whole organisation (Barner-Rasmussen and Bjorkman, 2005)
- collaboration is directly enabled by IT use (Stank, 2001) and firm use of e-business technologies has a direct and positive effect on intra-organisational collaboration (Sanders, 2010, p. 1333). Sanders (2010) also identified that e-business was not the same as collaboration: "ccollaboration is a human interaction that can only be supported by IT" (p. 1343) but not replaced by.

5.3 Competition

Not much has been written about intraorganisational competition and as such little is known specifically about the extent of intra-multinational corporation (MNC) competition, though the existence of geographically dispersed multi-business units and competition for scarce resources suggests that it is well known. The challenge to overcome in terms of confirming its existence and investigating it empirically within a multinational is that it is not only difficult to operationalise (Birkinshaw, July 8, 2011) but it is often perceived of as 'bad' within the organisation. External competition is expected but internal competition is wasteful and inefficient. Taylor (2010) cited March (1991, p. 81) in his discussion of the innovation process: "internal competitive processes put individuals in the organisation against each other in competition for scarce organisational resources and opportunities". However, several authors more

recently point to the positive impact of internal competition on new product development and innovation (Birkinshaw and Lingblad, 2005; Martin and Eisenhardt, 2010).

5.3.1 Definitions of intraorganisational competition

Further to the definitions articulated in the positioning of this paper, others in this review have defined intraorganisational competition but appear to be variations of those previously expressed. For completeness I am including the initial definitions provided in chapter 2.

- Becker- Ritterspach and Dorrenbacher(2009, p. 201) point to the definitions expressed by Luo (2005)
- Birkinshaw(2001, p. 22; 2005, p. 674) describes internal competition as "parallel or overlapping activities inside the boundaries of the (multi-business) firm"
 They view competition in this sense as not just for financial or scarce resources but also for rights to a particular technology or product charter
- Khoja (2005, p. 12) borrows Chandy and Tellis's (1998) definition of inter-unit competition as "rivalry among business units or divisions for current and potential product markets and technologies, and for organisational resources"
- Zarzecka and Zhou (2010) choose to refer to point to an earlier definition used by Birkinshaw (2001) as hostile activities among peer units which might appear in horizontal or vertical relationships (Bengtsson and Koch, 2000). They also provide a most recent definition from Osarenkhoe(2010) for intra-firm competition as "a dynamic situation that occurs when several actors in a specific area (market) struggle for scarce resources, and /or produce and market very similar products or services that satisfies the same customer need
- Tsai (2002, p. 184) internal resource competition refers to the extent to which
 two units obtain resources from the same source and external market
 competition refers to the extent to which two units offer similar products or
 services in the marketplace.

5.3.2 Factors that influence competition

To capture and structure the findings from the competition literature in this review, I will apply the same framework as used in the previous section to present the factors of intraorganisational collaboration

Table 20 Factors that influence intra-organisational competition

Factors	Structure	Factor	Influence on competition	
			Increase	Decrease
Relationships	Socialisation	Shared Vision - when top down strategy	1	
		Bargaining Power - personal relationships	↑	
		- self interests	↑	
		Social Identity - (non members)	1	
		Internal culture – competitive	↑	
		Strong normative integration		\leftarrow
	Formalisation	Rules - Transfer pricing		V
		Rewards - Unit designed incentive system - Firm wide incentives - Individual performance	↑	\
		Goals - competitive goals	↑	
	Autonomy	Choose product markets	↑	
		Choose new technologies	1	
		BU led initiatives	1	↓
		Power	1	
		Decentralisation	↑	
	Communication		↑	
Capability	Skills	Issue selling Fungible capabilities	↑ ↑	

Environment	External	National politics/regional development	↑	
		Uncertainty of evolving market	↑	
		Competitive intensity	↑	
		Losing competitive advantage	\uparrow	
	Internal	Organisational slack	\uparrow	
		HQ Initiatives ("top down")	\uparrow	
		Collaborative environment		\
		Merge two business units		\
		Careers of key executives	↑	

5.3.3 Factors and mechanisms

5.3.3.1 Socialisation

Personal relationships also play a role in competitive situations as they do in collaboration. Gammelgaard (2009, p. 217) cites the example provided by Birkinshaw and Ridderstrale (1999) of where a Canadian subsidiary met resistance when advocating for an extended production mandate. However, Birkinshaw and Ridderstrale (1999, p. 168) wrote; "it was the personal relationship between the Canadian president and the US manufacturing director that provided the necessary breakthrough." This example reinforces the positive benefits of established friendly personal relationships in either competitive or collaborative situations.

Houston et al (2001) identified power as one of the factors that influence intraorganisational competition. Becker- Ritterspach and Dorrenbacher (2009) claim that neither the literature on intrafirm competition nor subsidiary mandate changes look at the political aspect of intrafirm competition. They also acknowledge that "the existing literature on the interests and strategies of subsidiaries in intrafirm competition is even scarcer than that on headquarters" (p. 203). As a result of their literature review they conclude that interest based strategies and political manoeuvres play a role in intrafirm

competition. They shift the attention from the firm level to the individual key actors to look at what constitutes the key actors' *interests and rationales* and identify what *games* are played by the actors.

Kalnins (2004) proposes that "a firm wishing its divisions to compete should be particularly concerned with discouraging multimarket contact among its divisions in markets where the units of the firm's own divisions dominate" as you want to ensure competition not collusion.

5.3.3.2 Formalisation

Kalnins (2004, p. 127) found that firms with incentives to induce competition among divisions will attempt to *avoid* intraorganisational and cross-organisational divisional multimarket contact, whether it exists at a low or high level.

Luo, Y (2005, p. 87) proposes that an incentive system is particularly imperative to promoting and fostering internal competition among foreign subunits. It is the primary mechanism that drives up county managers' motivation for continued rivalry for corporate resources and market expansion. A well designed incentive system allows corporate headquarters to level or manipulate which direction or which aspects of internal competition should be boosted. He postulates that HQ may encourage competition for market expansion than for corporate support and this can be done through the MNC's performance management process. However, Eisenhardt and Galunic (2000) would agree and suggest that let competition flourish and reward self interest through unit performance (p. 101). Hill et al (1992) suggest that gearing bonus pay for divisional returns, and allocating capital between divisions on the basis of relative yields, reinforces the incentive to maximise divisional performance – in this scenario "the internal ethos of such organisations is explicitly *competitive* rather than *cooperative*" (p. 506).

5.3.3.3 Autonomy

As noted in the previous section, autonomy is the obverse of centrality therefore as it pertains to competition I will refer to both aspects under this heading.

The notion of centrality here is that a subsidiary that is close to the parent company is more powerful than subsidiaries that take a more peripheral position (Phelps and Fuller, 2000). Also the more a network depends on a subsidiary the more the subsidiary is independent of the network. This position in the network implies that it has more influence within the network which can create tension and competition for access to their resources. Fong et al (2007) go on to say that it is more likely that "some tacit intangible resources, such as knowledge, can even outperform physical assets to become the main source of a firm's competitive advantage". Hence they hypothesise that this will increase competition as other subsidiaries, its competitors, will have difficulty acquiring such resources.

Competition between subunits also increases when they need to use available operational resources from subunits as well as headquarters support "to improve its local adaptation in constrained circumstances "(Luo, Y., 2005, p. 79).

Different organisational configurations with regard to centralisation and integration, as well as control practices and incentive schemes, are evident in more competitive organisations and these differ from more cooperative organisations Hill et al (1992, p. 507). They raise a key challenge which is how do organisations foster collaboration and encourage competition which is effectively supported in a hybrid organisation which has both competitive and collaborative structures.

5.3.3.4 Communication

Intrafirm competition is also influenced by whether there is a frequent and open communication between a subsidiary and its parent company (Cerrato, 2006; Gammelgaard, 2009) although in both cases how or why are not stated.

Internally focused competition among affiliates takes place through formal lines of communication and authority (Phelps and Fuller, 2000, p. 227)

5.3.4 Competitive Capability

Issue selling capability

Gammelgaard (2009) discusses that issue-selling strategies of subsidiaries, which aim to capture the attention of headquarters bargaining power is influential in situations of intraorganisational competition. His research framework implies a directional, if not causal, relationship of subsidiary bargaining power influencing intrafirm competition. However, his point is that when internal competition exists, bargaining skills are helpful to get noticed by headquarters and receive the necessary attention or resources required for the subsidiary. "Intrafirm competition puts pressure on subsidiary managers to develop bargaining power" (Gammelgaard, 2009, p. 217)

Issue selling strategies of subsidiaries involve various activities aiming at a) making the parent company understand an issue, b) attracting parent company attention to an issue and c) lobbying for an issue at the parent company. Gammelgaard (2009) shows that "parent company nationals (PCN) have more bargaining power than subsidiaries managed by host country nationals (HCN) for reasons of being that better able to translate specific information held within that culture. Second, he goes on to say that they are better at "packaging the issue" in the format required by headquarters and lastly, better at aligning their presentation of the issue to the goals and objectives of the parent company.

Capability gap

The notion of a capability gap (Rugman and Verbeke, 2001) was explored by Fong et al (2007). Their concern was about insufficient consideration being given to the issue of individual subsidiary survival arising from inter-subsidiary competition. For example, the growth of mainland Chinese subsidiaries has reduced "the capability gap' that existed between China and Taiwan. The decrease in the gap means that there is less reliance on Taiwan and this has elevated the level of competition between the subsidiaries for resources from the centre. The more strategically important subsidiary will be the one that will be allocated the limited funding or resources, hence generating competition among the other subsidiaries (Fong, 2007, 45).

5.3.5 Environmental Factors

5.3.5.1 Internal market system

The multinational corporation (MNC) has been identified as an entity that operates as an internal market system and not a hierarchy where intrafirm competition between subsidiaries occurs regularly (Birkinshaw and Lingblad, 2005; Cerrato, 2006; Gammelgaard, 2009, p. 214)

5.3.5.2 Charter change (internal)

In the situation of charter change, the business units that constitute an organisation compete within an "economy of charters" for the opportunity to lead the firm's strategy in a choice market domain (Galunic and Eisenhardt, 1996). Charter change involves the assignment of responsibility for a particular product-market domain to an existing business unit, or the transfer of responsibility for a product market from one business unit to another. Central to the strategic dialogue is which business unit is best equipped to deliver superior customer value and compete in this newly defined market domain. Because the development of new charters constitutes an attractive opportunity, rival business units actively lobby top management for initial charter assignment. Rather than compete only for financial resources within the organisational hierarchy, business units also actively compete for the information, power, support and legitimacy that a new or expanded charter provides (Houston et al, 2001, p. 21)

5.3.5.3 Multimarket situation

Organisations have at least three incentives to induce intra-divisional competition in instances of multimarket contact (Kalnins, 2004). Multiple market contact happens when a firm's divisions meet and often compete in multiple geographical and product market s (Kalnins, 2004, p. 117) The reasons include a drive for efficiency between the divisions, a preference for competition rather than collaboration as competition among the divisions of one firm in a market limited the entry of rival firms and to discourage coalitions forming and decrease the cooperation among divisions that would facilitate unwanted coalition formation (Kalnins, 2004, p. 119)

The parent company can achieve efficiency through such competition (Hill, Hickett and Hoskisson, 1993) and make optimal allocation of resources and competencies (Bartlett and Ghoshal, 1989) which subsidiaries compete for in addition to system position and market expansion (Luo, 2005).

5.3.6 Mechanisms

Fewer mechanisms were noted in the literature to facilitate competition. One example given in practice was noted by Ferrari (2010) who recounted a specific mechanism to guard against the perception of incompetent judges when reviewing new products for development. By getting people who are acknowledged experts in on the judgement, reduces the concern of unfairness in such a competition.

5.4 Coexistence of competition and collaboration

During the literature two articles were found that specifically addressed the managed coexistence of competition and collaboration between business units in a multinational corporation. One was the practitioner article mentioned above by Ferrari (2010) in the McKinsey Quarterly. Ferrari interviewed J. Little, the global head of research and development from GE. Little comments that "the norm of the organisation is collaborative, but competition also is generated by the organisation in the new product development arena". The other one was the article of "co-evolving" by Eisenhardt and Galunic, 2000) which was primarily focused on collaboration but acknowledged the complexity of the coexistence of competition.

However, investigating intraorganisational competition leads you into a tangential and emerging field of "coopetition" which looks at the coexistence of internal competition and *cooperation* (Brandenburger and Nalebuff (1996). Three papers were reviewed in this regard, primarily because they address intra-organisational competition as an element of coopetition. Two of the papers (Tsai, 2002; Luo et al, 2006) were perhaps less focused on identifying the influences on intraorganisational competition but more

about how coopetition was a strategy to enhance knowledge transfer or knowledge sharing. The paper by Luo (2005) looked at coopetition from an intraorganisational perspective but again addressed cooperation and not collaboration. Although he proposes several organisational infrastructures (intranet, reward, and knowledge encapsulation and coordination system) that would support such a coopetitive strategy, it is not empirically supported and does not address Hill et al's (1992) concern that both structures can effectively operate in the same unit.

5.5 Overall summary

The conceptual findings of the factors and mechanisms that influence intraorganisational competition and intraorganisational collaboration were presented as an outcome of the literature review. Those papers that addressed 'coopetition' from an intraorganisational perspective were also summarised in terms of any factors and mechanisms that influenced internal competition.

However related studies on inter-subsidiary competition are limited and so concepts expressed in theoretical papers are in need of empirical evidence to support them. Fong et al (2007, p. 46) claim that this is an opportunity for further research.

6 DISCUSSION

This chapter discusses the conceptual findings resulting from the systematic review process and their implications for theory and practice. Specifically, I will cover the following points:

In **section 6.1**, does the extant literature answer the research question, namely: what are the factors and mechanisms that influence competition and collaboration between organisational units within multinational and multi-business organisations? In order to do this the following areas are discussed:

- What did the studies mean by intraorganisational competition and collaboration
- What are the factors that have a similar influence on competition and collaboration
- What factors have a different influence on competition and collaboration
- What is different between these two scenarios

In **section 6.2** suggests a nuanced view of intraorganisational competition and collaboration

In **section 6.3** I suggest further research that this review might encourage. **Section 6.4** details the limitations of the review and finally I highlight my personal learning in **section 6.5**

6.1 Does the extant literature answer the research questions?

An examination of the literature identified a number of factors and mechanisms that influence the relationships and processes of collaboration and competition independently. These can be classified in terms of their structural components of socialisation, formalisation, autonomy and communication. In addition individual and organisational capabilities and environmental circumstances (both internal and external) were identified as having an independent influence on the occurrence of completion and collaboration.

However, in the search for relevant literature for this review, a substantial amount was focused on the interorganisational phenomena i.e. between organisations. This comment is based on the number of exclusions from the papers generated by the search strings that were focused on the phenomena from an interorganisational perspective and also comments made by the authors researching in the field (Hansen, 2009; Birkinshaw and Lingblad, 2005; Luo, 2005). At the *inter*-organisational level, both constructs have been widely researched and analyzed by academics. At the intraorganisational perspective, which was the focus of this review, substantially less literature exists which considers the factors or mechanisms that influence competition or collaboration between business units or subsidiaries of multinational organisations (Hansen, 2009; Birkinshaw and Lingblad, 2005; Luo, 2005)

The academic literature has only recently engaged with the phenomenon of intrafirm competition between business units (Birkinshaw and Lingblad, 2005). A substantial amount of literature exists on intraorganisational cooperation. Collaboration research has developed since 1996 under the influences of Kanter (1994) and Brandenburger and Nalebuff (1996) but has focused primarily of interorganisational interactions, i.e. between firms, supply chains, joint ventures and alliances as the boundaries of organisations expanded to do what one organisation alone could not do (Brandeburger and Nalebuff, 1996). This is with the exception of the contribution by Hansen (2009) which is focused on the specific phenomenon of collaboration within organisations. The growth of research on both internal competition and collaboration between business units is clearly evident but there is still a dearth of literature that investigates the

dynamics of simultaneous competition and collaboration between business units or subsidiaries in a multinational context.

It is worth repeating here that the focus of this review is competition and *collaboration*. The choice to investigate collaboration and not cooperation which is a similar but distinct construct as previously noted, has been influenced by the relatively recent inclusion of the word into the internal organisational lexicon and encouraged through values statements and performance management processes. I am perhaps then over sensitive to the particular use of the words which are often used interchangeably within the reviewed literature. As a result of this, it is difficult on occasions to appreciate what phenomenon is actually being presented for investigation in the academic literature. Offering definitions of key terms is a bare minimal standard of clarity so that the constructs used are not confusing.

Those definitions of collaboration provided in the review emphasise a process orientation whereby two or more parties work closely with each other to achieve mutually beneficial outcomes (Miles et al, 2006). In the process of collaborating, a number of authors refer to there being a specific type of relationship between the parties where there is 'skin in the game', and joint accountability for the complicated coordinations between business units and joint solutions that can create value within a multinational corporation.

Himmelman's (2001) positioning of collaboration as being a higher order and more complex interaction than cooperation and would suggest that cooperation would be an antecedent to collaboration, a factor that would imply a willingness to collaborate. It is difficult to envisage collaboration without cooperation being an initial stage of that process. However, this positioning of cooperation as an influencing factor of collaboration was not evident.

Definitions of competition have evolved from the classic view of vying for scarce resources with other subunits and features significantly in the literature relating to the resource based view of the firm (Barney, 1991). Gammelgaard (2009) refers not only to information as a scarce resource but also includes product markets and new technologies. These definitions also emphasise a process orientation. However the

definition of competition that Birkinshaw (2005) provides defines competition as a state, and not a process. What he is measuring is a manifestation of internal competition i.e. the overlap of charters and mandates. This latter view seems to have dominated the studies of intraorganisational competition more recently. However, it fails to address competition as a process. Several case studies have investigated the influences on internal competition such as Gammelgaard in his investigation of issue selling but this too looks at specifically what influences competition and does not investigate the process of internal competition.

The challenge presented with investigating the two key constructs of competition and collaboration is that there is some element of incommensurability as they have traditionally been approached from two different ontological and epistemological positions. Bengtsson, Eriksson and Wincent (2010) highlight that intra-firm competition has mostly been studied with an ontology and epistemology of objectivist and positivist, while research exploring intra-organisational collaboration has used more interpretative approaches. However, Yin (2003) proposes that "case studies are the preferred method when (a) 'how' or 'why' questions are being posed, (b) the investigator has little control over events, and (c) the focus is on a contemporary phenomenon within a real-life context" (p. 9). I would therefore assess the case study methodology to be an appropriate methodology to use to explore intraorganisational collaboration and competition between business units based on the paucity of empirical research for either construct. As a research design, not a method (Buchanan, 2011), case studies are often multi-methods designs as is evidenced in this review, combining both quantitative and qualitative data. Indeed, the flexibility and strength of the case study is its ability to incorporate a wide range of evidence: documents, interviews, and observations about the phenomenon.

6.1.1 Similarities of the factors and mechanisms

The study identified a number of similar factors as summarised in chapter 5 that influence the independent occurrence of collaboration or competition, either empirically or conceptually.

Similar structural factors were evident but the outcomes generated were different based on the circumstances. An assumption adopted throughout the papers appears to be one of strategic choice (Astley and Van de Ven, 1983) in that the factors are intentionally initiated and implemented by the organisation and led by the corporate centre to generate the desired behaviour or support the process of either competition or collaboration. Specific external and internal environmental factors influence business unit initiated competition and collaboration and these will be discussed in the section of the different influential factors.

Reward mechanisms and goals were used extensively to either increase the amount of collaboration or encourage an appropriate level of competition between business units in the multinational. When desiring more collaboration, the goals and incentives typically involved a "bigger goal" of the corporation to achieve the overall strategy of the business. The business unit goals were tied to incentives that reflected the joint contribution to the overall value creation of the company.

Competition however was influenced by these very same factors (i.e. goals and rewards) to generate competition between the business units. The nature of the goals however influences the perception of whether they suggestion collaboration or competition. Interdependent goals have a more positive influence on collaboration whereas independent goals have a more positive influence on competition. (Tjosvold, 1988). If the business unit goals were independent of the other business units and hence did not suggest or potentially require any need to interact with the other units, competition would increase. This happens if the situation is looked at independently of collaboration. However, whether competition is headquarters initiated or business unit initiated, it may provide the impetus to collaborate with other business units to access specific information or resources in order to compete. This is one of the paradoxes that requires further investigation when looking at the interaction of competition and collaboration within the multinational corporation, across autonomous, independently goaled business units.

It is unclear in this example whether the top down strategy of competition had more influence on fostering competition or unintentionally encouraging collaboration. How does this structure fit with the corporate strategy?

Capabilities and skill development were also highlighted in the literature has a positive influencing factor on both competition and collaboration. To facilitate the success of collaborations, deliberate learned experiences were beneficial prior to the decision to collaborate (Martin and Eisenhardt, 2010) in addition to synergistic networking skills (Gynawali et al, 2009). To facilitate successful internal competition for the business unit, bargaining and issue selling skills were seen to be important (Gammelgaard, 2009) although Gammelgaard himself questions whether an issue selling in intrafirm competition is really beneficial for MNCs (p. 227)

Hill et al (1992) points out that different internal structural configurations such as centralisation, integration, control practices and incentive schemes as discussed above. Hill et al (1992, p. 507) classically describes a major dilemma of organisations: "the internal management philosophies of cooperative and competitive organisations are incompatible. In cooperative [and I suggest, collaborative] organisations, cooperation is fostered and encouraged. In competitive organisations, competition between divisions [and business units] is fostered and encouraged". His summation is that "it is exceedingly difficult to simultaneously encourage competition and cooperation between divisions" (Hill et al, 1992, p. 507) This dilemma is also played out between business units in the MNC and confused as the desire for competition is exemplified in the configuration of autonomous business units that operate within an MNC as a differentiated network.

6.1.2 Differences between the factors and mechanisms found.

In the previous section several similar factors were highlighted and although they influenced different outcomes they generated a similar effect: increased collaboration or increased competition. In this section I will highlight those factors that influence in a different direction i.e. if the factor increases competition, it decreases collaboration.

One notable factor where this occurs is the use of corporate socialisation mechanisms and the notion of social identity. Van Maanen and Schien's (1979) concept of corporate socialisation mechanisms is used by Barner-Rasmussen and Bjorkman (2007, p. 110), "to refer to those organisational mechanisms that facilitate the development of interpersonal relationships and elicit identification with the organisation". Social

mechanisms can be thought of as recurring processes that will cause a specific outcome (Mayntz, 2003).

Establishing a group identity through the use of norms, values and a shared vision at the business unit level creates such an identity over time that eventually those who are 'non members' are perceived as competitors. The mechanisms mentioned above, in addition to team meetings and informal social gatherings, are deployed to promote collaboration within the organisation and in advertently can also encourage competition between the business units because an "us and them " scenario has been created (Houston, et al, 2001). However the irony or paradox that exists is that the collective grouping is important to have collaborations succeed across the organisation and yet the very mechanism that encourages collaboration, fosters competition.

Many more mechanisms were cited in the literature review to facilitate relationships and building of trust to positively influence the willingness to collaborate. Fewer mechanisms were identified to facilitate intraorganisational competition. One mechanism mentioned was an example provided by Ferrari (2010) at GE. The provision of competent judges was ensured to adjudicate the outcome of internal product competitions so as be perceived as fair and hence encourage more competition.

A structural factor worthy of mention is autonomy or the manifestation of that as a centralised or decentralised organisational configuration. In cases where the business units have autonomy, they are more independent and less likely to pursue collaborations as discussed above. However, autonomous business units may choose to collaborate with other units when it satisfies their own interests, for example in terms of access to resources or the spreading of the cost and risk of new product development.

An element of difference between the two literatures was the use of the structured equation modelling statistical technique to investigate the factors of influence on collaboration. One of the strengths of SEM is the ability to construct latent variables which are not measured directly. This has led to collaboration being measured as knowledge sharing(Tsai, 2002), knowledge interaction mechanisms (KIM), or as integration (Sanders, 2007; Jassawalla and Sashittal, 1999). These latent variables become confused with the construct itself and the distinctions between collaboration

and integration, KIM and knowledge sharing have recently received academic attention (ibid.). The operationalisation of both collaboration and competition constructs is challenging for empirical research (email communication with J Birkinshaw, August 7, 2011).

6.1.3 Factors and mechanisms in comparison

What we immediately see is a confusing picture for any manager to know which factors and mechanisms will generate the required behaviours and processes to achieve both competitive and collaborative strategies. It depends. But how does that help the subsidiary leader to determine what factors will generate the right mix of collaboration and competition in the organisation? A fundamental assumption is that specific situations can be managed through structure and mechanisms. However the fact that both competition and collaboration are influenced by similar factors might suggest that there are other factors than those discussed here. Becker-Ritterspach and Dorrenbacher (2009) challenge the contingency theory dominated approach to competition for example and propose a conceptual analysis based on organisational power. This provides a different perspective as to why structural elements alone will not foster competition nor collaboration. This argument lends itself to further investigation by exploring the construct of power at multiple levels of intraorganisational competition and collaboration, not just the organisational level. The individual level would then be incorporated as this has not been the focus of this review.

The individual level of analysis is important as the influence of the leader in fostering (or hindering) intraorganisational competition or collaboration was noted many times in the review. Of interest also is the relationships the leaders have with their fellow heads of MNC subsidiaries. If indeed internal competition and collaboration can be managed, clarity on how this can be achieved for the business leader is less evident (Birkinshaw, 20005). Hansen (2009) offers some management guidance and suggests several levers (see Figure 10 Interunit collaboration) to facilitate collaboration and Birkinshaw (2001, p. 27-30) suggests four strategies under the headings of: "catch it early, bring the competing units together, accept co-existence as an outcome and manage the loser". The

motivations and emotions of the leaders are critical to the climate and influence on competition and collaboration.

6.2 Duality – a nuanced view

Several paradoxes emerge from the literature that are best described as a duality: we see a centralised organisational configuration to facilitate collaboration while a decentralised structure supports efficiency through competition; the influence of the top leader is needed to foster collaboration while the personal motivations of a subsidiary unit may well be competitive; a group identity that fosters collaboration over time encourages competition; close geographic proximity in which case the business units are more likely to contact each other (Tsai, 2002) and yet in multimarket situations the organisation encourages separateness and to be kept apart (Kalnins, 2004).

In Luo's (2005) conceptual paper he advances the notion of internal competition and cooperation as a duality and that it "has become a major challenge for MNEs that seek to manage their intraorganisational knowledge flows, internalise globally coordinated operations, and differentiate various subunits" (p. 72). Subunits themselves are either enforced or enticed to simultaneously compete and cooperate, and in the more specific cases of this review, collaborate with one another.

The duality lens has been applied in Oliver's (1995) conceptual paper which explores the duality of competition and collaboration from an interorganisational perspective, in the network-based knowledge relations within the biotechnology industry. Oliver (2004) goes on to suggest that the "collaborative and competitive duality can be expected to appear in areas where "learning races" are dominant, where knowledge is distributed among many actors, where knowledge can be appropriated, captured and 'privatised' in patents or products" (p. 168). This would suggest that business units within a multinational corporation when viewed as a differentiated network with an internal market operating would be an opportunity for empirical research of this concept.

6.3 Further research

Several empirical and conceptual research opportunities exist when considering the findings of this review.

Empirically, what impact or influence does organisational design (i.e. coordination of tasks) have on intraorganisational competition and collaboration (Tsai, 2002)? What are additional predictor variables to be considered e.g. organisation culture that acts on competition and collaboration? (Khoja, 2008)

Second, how do firms move from one strategy –structure position to another? (Hill et al, 1992) How do alternative structural configurations inhibit or support the creation of new charters and the transfer of knowledge across business units (Houston et al, 2001).

Third, how does the role of the leader influence inter-unit collaboration and competition (Luo, 2005)? A fruitful exploration would be to identify the different types of HQ executive and their basic orientation toward and interest in intrafirm competition (Becker-Ritterspach and Dorrenbacher (2009). In addition, explore what their interests and strategies of subsidiaries are as this literature is even scarcer than that on headquarters. Additionally in this domain, conduct a multilevel analysis of intraorganisational competition between organizational units.

Fourth, Cerrato, (2006) suggests that an increasingly relevant issue worthy of more exploration is to analyse the coordination mechanisms within the MNE network which is made up of a number of dispersed and interdependent subsidiaries is.

Fifth, explore the dynamics of the coexistence of intraorganisational competition and collaboration between subsidiaries in the multinational organisation

Sixth, investigate the phenomenon of inter and intra collaboration or inter and intra competition, specifically to explore the differences between the external market and its manifestation and causes in the "internal market" (Birkinshaw and Lingblad, 2005; Cerrato, 2006).

6.4 Limitations

The limitations of this review can be categorised as those relating to the scope of the question; researcher bias; the comprehensiveness of the review and the recently acquired skills of the beginner researcher.

The scope of the question was a specific and purposeful choice to review collaboration, and not cooperation, in interaction with competition. Though there is an emerging literature on 'coopetition' i.e. the co-existence of cooperation and competition (Brandenberger and Nalebuff, 1996) at the intraorganisational level, the cooperation discussion was not included. The inclusion of the interaction would have informed this review in a different way.

It would be misleading to suggest that, having followed the systematic review process, this review is free of researcher bias. Bias is still evident in the search strings chosen, the selection of papers, the inclusion and exclusion criteria chosen, and even previous experiences of operating in the multinational environment would have led to different analysis and conclusions.

The aim of this review was to identify the factors and mechanisms that influenced intraorganisational competition and collaboration in an MNC. I do not claim this to be a definitive search but based on the papers identified by the specific search strings used. I also do not claim to have identified nor provided an exhaustive list of the factors and mechanisms influencing either independently or simultaneously competition and collaboration due to the literature selected.

Furthermore, the researchers own skills in the assessment and critique of empirical papers are a limitation of this study as well as the fluency of concepts in the competition literature as competition and collaboration are from two different ontological and epistemological traditions.

6.5 Personal Learning

"If I only knew then what I know now......"

Looking back with a desire for perfection, the systematic review process could have been more streamlined rather than extremely iterative. The discipline and organisation skills required are challenging but bring clarity. However, it is important not to lose sight of the ultimate goal at the end of the day and ask why I am going through this process. The finding of the papers became the all consuming goal. The story waiting to be told as a result of reading the papers faded into the background as more databases were searched for the 'perfect list of relevant papers'. The Holy Grail was not found on the first, second or even third review of the databases. At this point I cannot say with any certainty that I have a definitive list of references. However the importance of remaining clear about, and focused on, has been established, if not yet successfully achieved.

I am more knowledgeable and appreciative of the skill set required to be a researcher. My efficiency was severely curtailed due to my inefficient use of Refworks and lack of familiarity with the more advanced features of Word or Excel. This has become an urgent development area.

The challenge of synthesising a large amount of data I think will remain a challenge and continually test my organisational skills, memory retention, sheer perseverance and stress management. However, once I do have all the pieces of the puzzle in front of me, I can sense the excitement and anticipation about what new knowledge may be there as a picture begins to emerge. But, that needs time to mature and cannot be rushed.

In addition to learning about how to more effectively use relevant software tools, I learnt a significant amount about my topic of interest and am encouraged about the various avenues for future research that have opened up as a result of this review.

7 CONCLUSION

This review presents factors and mechanisms that influence collaboration and competition between business units in a multinational corporation. It is accepted that business units simultaneously compete and collaborate with their peers in multinational corporations as they attempt to operate in complex and diverse environments. It is hoped that the factors and mechanisms identified and summarised in chapter 5 of this review add to the awareness of the structures available within the organisation to support collaboration and competition.

However the extant literature has not given due attention to the structures required to support or manage the coexistence of competition and collaboration at the intraorganisational level between subsidiaries or business units. Research has begun to investigate "coopetition" at the intraorganisational level. However, the phenomenon of interest for this review was collaboration and competition. Collaboration is viewed as a higher level of interaction and acknowledged in this review as difficult to achieve and in need of an array of structures and mechanisms to facilitate the process.

This review confirms the challenges faced by management in understanding how to apply the various factors which suggest both facilitate competition and collaboration, depending upon the internal and external environmental situations. The achievement of an optimal balance is an obvious but allusive choice. Enough collaboration is sought to forge the integration necessary for e.g. the development of innovative products and yet sufficient competition provokes the exploitation of those ideas in order to create further value for the organisation.

Organisational design issues continually rise to the top of the agenda when organisations try to align strategies, activities and distinctive capabilities resulting from shifting market trends. While structure may be part of the solution, it is not all.

REFERENCES

- Note: references marked with an * represent the core literature for this review
- *Allred, C., Fawcett, S., Wallin, C. and Magnan, G. (2011), "A Dynamic Collaboration Capability as a Source of Competitive Advantage", *Decision Sciences*, vol. 42, no. 1, pp. 129-161.
- Astley, W. G. and Van, d. V. (1983), "Central Perspectives and Debates in Organization Theory", *Administrative Science Quarterly*, vol. 28, no. 2, pp. 245-273.
- Axelrod, R. (1984), The Evolution of Cooperation, Basic Books: New York
- *Barner-Rasmussen, W. and Björkman, I. (2007), "Language Fluency, Socialization and Inter-Unit Relationships in Chinese and Finnish Subsidiaries", *Management & Organization Review*, vol. 3, no. 1, pp. 105-128.
- Barner-Rasmussen, W. and Bjorkman, I. (2005), "Surmounting Interunit Barriers: Factors Associated with Interunit Communication Intensity in the Multinational Corporation", *International Studies of Management & Organization*, vol. 35, no. 1, pp. 105-128.
- *Bartlett, C. A. and Ghoshal, S. (1987), "Managing across Borders: New Organizational Responses", *Sloan Management Review (1986-1998)*, vol. 29, no. 1, pp. 43 -52.
- Bartlett, C. A. and Ghoshal, S. (1991), "The Transnational Solution" in Bartlett and Ghoshal, *Managing Across Borders: The Transnational Solution*, Harvard Business Press, M.A. pp. 197-212
- Baum, J., and Korn, H. (1996), Competitive Dynamics of Interfirm Rivalry", *Academy of Management Journal*, vol.39, no.2, pp. 255-292
- *Becker-Ritterspach, F. and Dorrenbacher, C. (2009), "Intrafirm Competition in Multinational Corporations: Towards a Political Framework", *Competition & Change*, vol. 13, no. 3, pp. 199-213.
- Bengtsson, M. and Kock, S. (1999), "Cooperation and competition in relationships between competitors in business networks", *Journal of Business & Industrial Marketing*, vol. 14, no. 3, pp. 178 194.
- Bengtsson, M., Wincent, J. and Eriksson, J. (2010), "Co-opetition dynamics--an outline for further inquiry", *Competitiveness Review*, [Online], vol. 20, no. 2, pp. 194 214.
- Birkinshaw, J. (2000), Entrepreneurship in the Global Firm, London: Sage

- Birkinshaw, J., Bresman, H. and Håkanson, L. (2000), "Managing the Post-Acquisition Integration Process: how the Human Integration and Task Integration Processes Interact to Foster Value Creation", *Journal of Management Studies*, vol. 37, no. 3, pp. 395-425.
- *Birkinshaw, J. and Lingblad, M. (2001), "An evolutionary theory of intraorganizational competition", London Business School working paper, pp. 1-23
- *Birkinshaw, J. and Lingblad, M. (2005), "Intrafirm competition and charter evolution in the multibusiness firm", *Organization Science*, vol. 16, no. 6, pp. 674 686.
- Birkinshaw, J. and Morrison, A.J. (1995), "Configurations of Strategy and Structure in Subsidiaries of Multinational Corporations", Journal of International Business Studies, vol.26, no.4, pp. 729-753
- *Boussebaa, M. (2009), "Struggling to organize across national borders: The case of global resource management in professional service firms", *Human Relations*, vol. 62, no. 6, pp. 829-850.
- Bowman, C., and Ambrosini, V. (2003), "How the resource-based and the dynamic capability views of the firm inform corporate-level strategy", *British Management Journal*, vol.14, pp. 289-303
- Bowman, E.H. and Helfat, C.E. (2001), "Does corporate strategy matter?", *Strategic Management Journal*, vol.22, pp. 1-23
- Buchanan, D. (2011), 'Case Studies in Organizational Research', in Syman, G. and Cassell, C. (Eds.), The *Practice of Qualitative Organisational Research: Core Methods and Current Challenges*, London: Sage
- Burgelman, R. A. (1983), "A Process Model of Internal Corporate Venturing in the Diversified Major Firm", *Administrative Science Quarterly*, vol. 28, no. 2, pp. 223-244.
- *Cerrato, D. (2006), "The multinational enterprise as an internal market system", *International Business Review*, vol. 15, no. 3, pp. 253-277.
- Chandler Jr., A. D. (1991), "The Functions of the HQ Unit in the Multibusiness Firm", *Strategic Management Journal*, vol. 12, pp. 31-50.
- Chen, G. and Tjosvold, D. (2008), "Organizational values and procedures as antecedents for goal interdependence and collaborative effectiveness", *Asia Pacific Journal of Management*, vol. 25, no. 1, pp. 93-112.
- Chen, Y. F. and Tjosvold, D. (2005), "Cross-cultural leadership: Goal interdependence and leader–member relations in foreign ventures in China", *Journal of International Management*, vol. 11, no. 3, pp. 417-439.

- Cheng, W. and Ng, Y. (1999), "Intra-firm Branch Competition for a Monopolist", *Australian Economic Papers*, vol. 38, no. 3, pp. 238 249.
- Cross, R., Ehrlich, K., Dawson, R. and Helferich, J. (2008), "Managing Collaboration: improving team effectiveness through a network perspective", *California Management Review*, vol. 50, no. 4, pp. 74-98.
- Cross, R. L., Martin, R. D. and Weiss, L. M. (2006), "Mapping the value of employee collaboration", *McKinsey Quarterly*, no. 3, pp. 28-41.
- Daft, R. and Anand, N. (2007), "What is the Right Organization Design?" *Organizational Dynamics*, vol. 36, no. 4, pp. 329-344.
- *De Luca, L. M. and Atuahene-Gima, K. (2007), "Market Knowledge Dimensions and Cross-Functional Collaboration: Examining the Different Routes to Product Innovation Performance", *Journal of Marketing*, vol. 71, no. 1, pp. 95-112.
- Doz, Y., and Prahalad, C.K. (1991) "Managing DMNCs: A search for a new paradigm", *Strategic Management Journal*, vol. 12, pp. 145-164
- Dutton, J.E. (1993), "The Making of Organizational Opportunities: an interpretive path way to organizational change," in Research in Organizational Behavior, vol.15, Staw, B.M. and Cummings, L.L., eds. Greenwich, CT: JAI Press, 195-226
- Easterby-Smith, M, Thorpe, R and Lowe, A. (2008), *Management Research*, 3rd Ed., London: Sage
- Echols, A. and Tsai, W. (2005), "Niche and Performance: the moderating role of network embeddedness", *Strategic Management Journal*, vol.26, no.3, pp. 219-239
- Eisenhardt, K. M. and Galunic, D. C. (2000), "Coevolving", *Harvard Business Review*, vol. 78, no. 1, pp. 91-101.
- Elfving, S. (2009), "Important factors for project performance in collaborative product development: a survey investigating contextual settings", *International Journal of Product Development*, vol. 8, no. 2, pp. 55
- *Ellinger, A. E., Keller, S. B. and Hansen, J. D. (2006), "Bridging the Divide between Logistics and Marketing: Facilitating Collaborative Behavior", *Journal of Business Logistics*, vol. 27, no. 2, pp. 1-27.
- *Ferrari, B. (2010), "Competition and collaboration in General Electric's Global Research Group", *The McKinsey Quarterly*, no. 3, pp. 105.
- *Fong, C., Ho, H., Weng, L. and Yang, K. (2007), "The Intersubsidiary Competition in an MNE: Evidence from the Greater China Region", *Canadian Journal of Administrative Sciences*, vol. 24, no. 1, pp. 45-57.

- Galunic, C.D. and Eisenhardt, K.M. (1994), "Renewing the strategy-structure-performance paradigm, "in *Research in Organisational Behavior*, vol. 16, Staw, B.M. and Cummings, eds., Greenwich, CT: JAI Press, pp. 215-255
- *Gammelgaard, J. (2009), "Issue Selling and Bargaining Power in Intrafirm Competition: The Differentiating Impact of the Subsidiary Management Composition", *Competition & Change*, vol. 13, no. 3, pp. 214-228.
- Gnyawali, D. R., Singal, M. and Mu, S. ". (2009), "Knowledge ties among subsidiaries in MNCs: A multi-level conceptual model", *Journal of International Management*, vol. 15, no. 4, pp. 387-400.
- *Golden, B. R. and Ma, H. (2003), "Mutual Forbearance: the Role of Intrafirm Integration and Rewards", *Academy of Management Review*, vol. 28, no. 3, pp. 479-493.
- *Goold, M. and Campbell, A. (2003), "Structured Networks: Towards the Well Designed Matrix", *Long range planning*, vol. 36, no. 5, pp. 427-438.
- Govindarajan, V. and Gupta, A. K. (2001), "Building an Effective Global Business Team. (Cover story)", *MIT Sloan Management Review*, vol. 42, no. 4, pp. 63-71.
- Gray, B. (1989), Collaborating: Finding common ground for multiparty problems. San Francisco, CA: Jossey-Bass.
- *Hansen, M. T. and Nohria, N. (2004), "How to Build Collaborative Advantage", *MIT Sloan Management Review*, vol. 46, no. 1, pp. 22 -30.
- *Hansen, Morten T. (2009), Collaboration: How Leaders Avoid the Traps, Create Unity and Reap Big Results, *Harvard Business Press*, M.A.
- Hart, C. (1998), Doing a Literature Review: Releasing the Social Science Research Imagination, Sage:
- Helfat, C.E., and Eisenhardt, K.M. (2004), "Inter-temporal economies of scope, organizational modularity, and the dynamics of diversification", *Strategic Management Review*, vol. 25, pp. 1217-1232
- *Hill, C. W. L., Hitt, M. A. and Hoskisson, R. E. (1992), "Cooperative Versus Competitive Structures in Related and Unrelated Diversified Firms", *Organization Science*, vol. 3, no. 4, pp. 501-521.
- Himmelman, A. T. (2001), "On Coalitions and the Transformation of Power Relations: Collaborative Betterment and Collaborative Empowerment", *American Journal of Community Psychology*, vol. 29, no. 2, pp. 277-284.

- *Houston, M. B., Walker, B. A., Hutt, M. D. and Reingen, P. H. (2001), "Cross-Unit Competition for a Market Charter: The Enduring Influence of Structure", *Journal of Marketing*, vol. 65, no. 2, pp. 19-34.
- Huxham, C. (1993), "Collaborative Capability: An Intraorganizational Perspective on Collaborative Advantage", *Public Money & Management*, vol. 13, no. 3, pp. 21-28.
- *Jassawalla, A. R. and Sashittal, H. C. (1998), "An examination of collaboration in high-technology new product development processes", *The Journal of Product Innovation Management*, vol. 15, no. 3, pp. 237 -254.
- Kalling, T. (2003), "Organization-internal transfer of knowledge and the role of motivation: a qualitative case study", *Knowledge and Process Management*, vol. 10, no. 2, pp. 115 .
- *Kalnins, A. (2004), "Divisional Multimarket Contact within and between Multiunit Organizations", *Academy of Management Journal*, vol. 47, no. 1, pp. 117-128.
- Kanter, R.M. (1983), The Change Masters, Simon & Schuster, New York
- Kanter, R. M. (1994), "Collaborative Advantage: The Art of Alliances", *Harvard business review*, vol. 72, no. 4, pp. 96-
- Kasper-Fuehrer, E.C. and Ashkanasy, N.M. (2003), |The interorganizational virtual organization defining a weberian ideal", *International Studies of Management Journal*, vol. 33, no. 4, pp. 34-64
- *Khoja, F. (2008), "Is sibling rivalry good or bad for high technology organizations?", Journal of High Technology Management Research, vol. 19, no. 1, pp. 11 -20.
- Kohn, A (1986), No Contest: The Case against Competition, Houghton Mifflin, Boston.
- *Koulikoff-Souviron, M. and Harrison, A. (2010), "Evolving HR practices in a strategic intra-firm supply chain", *Human resource management*, vol. 49, no. 5, pp. 913 938.
- Lado, A. A., Boyd, N. G. and Hanlon, S. C. (1997), 'Competition, Cooperation, and the Search for Economic Rents: a Syncretic Model', *Academy of Management Review*, vol. 22, no. 1, pp. 110-141
- Lawrence, P. R. and Lorsch, J. W. (1967), "Differentiation and Integration in Complex Organizations", *Administrative Science Quarterly*, vol. 12, no. 1, pp. 1-47.
- *Le Meunier-FitzHugh, K. and Piercy, N. F. (2007), "Does Collaboration between Sales and Marketing Affect Business Performance?", *Journal of Personal Selling & Sales Management*, vol. 27, no. 3, pp. 207-220.

- *Le Meunier-FitzHugh, K. and Piercy, N. F. (2008), "The importance of organisational structure for collaboration between sales and marketing", *Journal of General Management*, vol. 34, no. 1, pp. 19-35.
- *Liedtka, J. M. (1996), "Collaborating across lines of business for competitive advantage", *Academy of Management Executive*, vol. 10, no. 2, pp. 20-34.
- Lindskold, S., Betz, B. and Walters, P. S. (1986), "Transforming Competitive or Cooperative Climates", *Journal of Conflict Resolution*, vol. 30, no. 1, pp. 99-114.
- *Loch, C. H., Galunic, D. C. and Schneider, S. (2006), "Balancing cooperation and competition in human groups: the role of emotional algorithms and evolution", *Managerial and Decision Economics*, vol. 27, no. 2-3, pp. 217-233.
- *Luo, X., Slotegraaf, R. J. and Pan, X. (2006), "Cross-Functional "Coopetition": The Simultaneous Role of Cooperation and Competition within Firms", *Journal of Marketing*, vol. 70, no. 2, pp. 67-80.
- Luo, Y. (2005), "Toward coopetition within a multinational enterprise: a perspective from foreign subsidiaries", *Journal of World Business*, vol. 40, no. 1, pp. 71-90.
- March, J.G. (1991), "Exploration and Exploitation in Organizational Learning", *Organizational Science*, vol.2, pp. 71-87.
- March, J.and Simon, H. (1958), Organizations, John Wiley & Sons, New York
- *Martin, J. and Eisenhardt, K. (2010), "Rewiring: Cross-Business-Unit Collaborations in Multibusiness Organizations", *Academy of Management Journal*, vol. 53, no. 2, pp. 265 301.
- *Martin, J.A. and Eisenhardt, K.M., (2001), *Exploring Cross-Business Synergies*, Academy of Management.
- Mena, C., Humphries, A. and Wilding, R. (2009), "A comparison of inter- and intraorganizational relationships: Two case studies from UK food and drink industry", *International Journal of Physical Distribution & Logistics Management*, vol. 39, no. 9, pp. 762-784.
- Mintzberg, H. (1981), "Organization design: fashion or fit?", *Harvard business review*, vol. 59, no. 1, pp. 103.
- *Mintzberg, H., Jorgensen, J., Dougherty, D. and Westley, F. (1996), "Some Surprising Things about Collaboration-Knowing How People Connect Makes It Work Better", *Organizational Dynamics*, vol. 25, no. 1, pp. 60-71.
- Morgan, G. (1997), Images of Organization, Sage Publications, USA.

- Na Brandenburger, A. and Nalebuff, B. (1996), Co-opetition, ISL Forlag AB, Oskarshamm
- Nohria, N. and Ghoshal, S. (1997), *The Differentiated Network: Organizing Multinationals Corporations for Value Creation*, Jossey-Bass, San Francisco, CA.
- *Oliver, A. L. A. L. (2004), "On the duality of competition and collaboration: network-based knowledge relations in the biotechnology industry", *Scandinavian Journal of Management*, vol. 20, no. 1-2, pp. 151-171.
- Osarenkhoe, A. (2010), "A Study of Inter-firm Dynamics between Competition and Cooperation a coopetition strategy", Journal of Database Marketing & Customer Strategy Management, vol. 17, no. 3, pp. 201-221.
- *Persaud, A. (2005), "Enhancing Synergistic Innovative Capability in Multinational Corporations: an empirical investigation", *Journal of Product Innovation Management*, vol. 22, no. 5, pp. 412-429.
- Porter, M. (1980), Competitive Strategy, The Free Press: New York
- Porter, M. (1985), Competitive Advantage: creating and sustaining superior performance, The Free Press, New York
- *Qureshi, S., Briggs, R. O. and Hlupic, V. (2006), "Value Creation from Intellectual Capital: Convergence of Knowledge Management and Collaboration in the Intellectual Bandwidth Model", *Group Decision & Negotiation*, vol. 15, no. 3, pp. 197-220.
- *Rank, O. and Tuschke, A. (2010), "Perceived Influence and Friendship as Antecedents of Cooperation in Top Management Teams: A Network Approach", *Business Research*, vol. 3, no. 2, pp. 151-171.
- *Rauser, O. (2002), "Value added of Corporate Venture Capital: How do CVC units benefit their organizational core?" MSc dissertation, University of Bamburg, Germany http://www.opus-bayern.de/uni-bamberg/volltexte/2005/33/pdf/rausges.pdf (accessed June 10, 2011)
- Rolland, N. and Kaminska-Labbé, R. (2008), "Networking inside the organization: a case study on knowledge sharing", *The Journal of Business Strategy*, vol. 29, no. 5, pp. 4.
- Rosen, E. (2009), Bloomberg Business week, at <a href="http://www.businessweek.com/print/managning/content/nov2009/ca2009
- Roth, K. and Kostova, T. (2003), "The Use of the Multinational Corporation as a Research Context", *Journal of Management*, vol. 29, no. 6, pp. 883-902.

- Rugman, A. M. and Verbeke, A. (2001), "Subsidiary-specific advantages in multinational enterprises", *Strategic Management Journal*, vol. 22, no. 3, pp. 237-250.
- *Sanders, N. R. (2007), "An empirical study of the impact of e-business technologies on organizational collaboration and performance", *Journal of Operations Management*, vol. 25, no. 6, pp. 1332 1347.
- Schrage, M.(2007), "The Race to Innovation", CIO Insider http://www.cio.com/article/107053/The_Race_to_Innovation (accessed on November, 14, 2010)
- *Singh, B. (2005) Collaborative Advantage in Volatile Business Environments,
 Conceptual Paper, Case Western Reserve University, pp. 1-36.
 http://weatherhead.case.edu/degrees/doctor-management/research/files/concept/SINGH--1ST%20YRConceptual%20Paper%20Final%205-13-05.pdf (accessed March 14, 2011)
- Smith, K. G., Carroll, S. J. and Ashford, S. J. (1995), 'Intra- and Inter-organizational Cooperation: Toward a Research Agenda', Academy of Management Journal, vol. 38, no. 1, pp. 7-23.
- Srivastava, S. B. and Banaji, M. R. (2011), "Culture, Cognition, and Collaborative Networks in Organizations", *American Sociological Review*, vol. 76, no. 2, pp. 207-233.
- Stank, T. P., Daugherty, P. J. and Ellinger, A. E. (1999), "Marketing/Logistics Integration and Firm Performance", *International Journal of Logistics Management*, vol. 10, no. 1, pp. 11.
- Suddaby, R. (2010), "Editor's Comments: Construct Clarity in Theories of Management and Organization", in Academy of Management, ,pp. 346-357.
- Sy, T. and Cote, S. (2004), "Emotional intelligence: A key ability to succeed in the matrix organization", *The Journal of Management Development*, vol. 23, no. 5/6, pp. 437.
- Tallman, S. and Koza, M. (2010), "Keeping the Global in Mind: The Evolution of the Headquarters' Role in Global Multi-business Firms", *Management International Review*, vol. 50, no. 4, pp. 433.
- *Taylor, A. (2010), "The Next Generation: Technology Adoption and Integration Through Internal Competition in New Product Development", *Organization Science*, vol. 21, no. 1, pp. 23-41.

- Tjosvold, D. (1988), "Cooperative and Competitive Interdependence: collaboration between departments to serve customers", *Group & Organization Studies* (1986-1998), vol. 13, no. 3, pp. 274.
- Tjosvold, D. (1988), "Cooperative and Competitive Dynamics Within and Between Organizational Units", *Human Relations*, vol. 41, no. 6, pp. 425-436.
- Tjosvold, D. (1988), "Cooperative and Competitive Interdependence", *Group & Organization Studies*, vol. 13, no. 3, pp. 274-289.
- Tjosvold, D. (1990), "Making a Technological Innovation Work: Collaboration to Solve Problems", *Human Relations*, vol. 43, no. 11, pp. 1117.
- Tjosvold, D. (1999), "Bridging East and West to Develop New Products and Trust: Interdependence and Interaction Between a Hong Kong Parent and North American Subsidiary", *International Journal of Innovation Management*, vol. 3, no. 2, pp. 233.
- Tjosvold, D. and Tsao, Y. (1989), "Productive Organizational Collaboration: The Roles of Values and Cooperation", *Journal of Organizational Behavior*, vol. 10, no. 2, pp. 189.
- Tranfield, D., Denyer, D. and Smart, P. (2003), "Towards a methodology for developing evidence-informed management knowledge by means of systematic review", *British Journal of Management*, vol. 14, no. 3, pp. 207-222.
- *Tsai, W. (2002), "Social structure of "coopetition" within a multiunit organization: Coordination, competition, and intra-organizational knowledge sharing", *Organization Science*, vol. 13, no. 2, pp. 179 -190.
- Vangen, S. and Huxham, C. (1996), "Working together: key themes in the management of relationships between public and non-profit organizations", *International Journal of Public Sector Management*, vol. 9, no. 7, pp. 5-17.
- Vangen, S. and Huxham, C. (2003), "Nurturing collaborative relations: building trust in interorganisational collaboration", *Journal of Applied Behavioral Science*, vol.30, no.1, pp. 5-31.
- Wagner, S., Eggert, A. and Lindemann, E. (2010), "Creating and appropriating value in collaborative relationships", *Journal of Business Research*, vol.63, no. 8, pp. 840.
- White, R.E. and Poynter, T.A. (1984), Strategies for foreign-owned subsidiaries in Canada, Business Quarterly, vol.49, no.2, pp. 59-69
- Witt, U. (2011), "Emergence and functionality of organizational routines: an individualistic approach", *Journal of Institutional Economics*, vol. 7, no. 2, pp. 157.

- *Wood, D.J. and Gray, B. (1991), 'Toward a comprehensive theory of collaboration', Journal of Applied Behavioral Science, vol. 27, no. 2, pp. 139-162.
- Youndt, M.A., Subramaninan, M, and Snell, S.A. (2004)," Intellectual capital profiles: an examination of investments and returns", *Journal of Management Studies*, vol.41, no.2, pp. 335-361
- *Zarzecka, O and Zhou, Y, (2011), "Is Cooperation the only way to enhance knowledge transfer within Multinational Corporations?: a study of intrafirm competition from knowledge transfer perspective", MSc Paper. http://gupea.ub.gu.se/handle/2077/26239
- Zineldin, M. (2004), "Co-opetition: the organisation of the future", *Marketing Intelligence & Planning*, vol. 22, no. 6/7, pp. 780.
- *Ziss, S. (2007), "Hierarchies, intra-firm competition and mergers", *International Journal of Industrial Organization*, vol. 25, no. 2, pp. 237-260.

APPENDICES

Appendix A Core Papers Detail

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Allred, C., Fawcett, S., Wallin, C. and Magnan, G. (2011), "A Dynamic Collaboration Capability as a Source of Competitive Advantage", <i>Decision Sciences</i> , vol. 42, no. 1, pp. 129 - 161.	J	4	2011	D	Е	COLL	4	USA	R	Quant
Barner-Rasmussen, W. and Björkman, I. (2007), "Language Fluency, Socialization and Inter-Unit Relationships in Chinese and Finnish Subsidiaries", <i>Management & Organization Review</i> , vol. 3, no. 1, pp. 105-128.	J	3 - ABS	2007	D	Е	COLL	2	Finland	R	Quant
Bartlett, C. A. and Ghoshal, S. (1987), "Managing across Borders: New Organizational Responses", <i>Sloan Management Review</i> (1986-1998), vol. 29, no. 1, pp. 43-52.	1	4	1987	D	A	Other	2	USA	T	NA
Becker-Ritterspach, F. And Dorrenbacher, C. (2009), "Intrafirm competition: a political", <i>Competition & Change</i> , vol. 13, no. 3, pp. 119-213	J	2-ABS	2009	0	X-ref	COMP	2	The Nether- lands	Т	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Birkinshaw, J. and Lingblad, M. (2005), "Intrafirm Competition and Charter Evolution in the Multibusiness Firm", <i>Organization Science</i> , vol. 16, no. 6, pp. 674-686.	J	4	2005	D	A	COMP	2	UK	Т	NA
Birkinshaw, J. and Lingblad, M.(2001), "An evolutionary theory of intraorganizational competition", <i>London Business School working paper</i> , pp. 1-23	СР	NA	2001	0	X-ref	COMP	2	UK	Т	NA
Birkinshaw, J.(2001), Strategies for Managing Internal Competition, <i>California Management Review</i> , vol. 44, no.1, Fall, pp. 21-38	J	4	2001	0	X-ref	COMP	1	UK	P	NA
Boussebaa, M. (2009), "Struggling to organize across national borders: The case of global resource management in professional service firms", Human Relations, vol. 62, no. 6, pp. 829-850.	1	4	2009	D	A	COLL	1	UK	R	Qual
Cerrato, D.(2006), "The multinational enterprise as an internal market system", <i>International Business Review</i> , vol.15, pp. 253-277	J	3	2006	Other	X-ref	COMP	1	Italy	Т	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Chen, G. and Tjosvold, D. (2008), "Organizational values and procedures as antecedents for goal interdependence and collaborative effectiveness", <i>Asia Pacific Journal of Management</i> , vol. 25, no. 1, pp. 93 – 112	J	2-ABS	2008	D	A	COLL	2	China	R	Quant
De Luca, L. M. and Atuahene-Gima, K. (2007), "Market Knowledge Dimensions and Cross-Functional Collaboration: Examining the Different Routes to Product Innovation Performance", <i>Journal of Marketing</i> , vol. 71, no. 1, pp. 95-112.	J	4	2007	D	Е	COLL	2	Italy	R	Quant
Eisenhardt, K.M. and Galunic, D.C. (2000), "Coevolving: at last a way to make synergies work", <i>Harvard Business Review</i> , Jan-Feb, pp. 91-101,	J	4	2000	Other	Е	COLL	2	USA	P	NA
Ellinger, A. E., Keller, S. B. and Hansen, J. D. (2006), "Bridging the Divide between Logistics and Marketing: Facilitating Collaborative Behavior", <i>Journal of Business Logistics</i> , vol. 27, no. 2 pp. 1-27	J	3	2006	D	A	COLL	3	USA	R	Qual
Ferrari,B. (2010) "Competition and collaboration in General Electric's Global Research Group", <i>The McKinsey Quarterly</i> , issue 3, p. 105-	J	NR	2010	D	A	COMP-COLL	1	USA	P	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Fong, C., Ho, H., Weng, L. and Yang, K. (2007), "The Intersubsidiary Competition in an MNE: Evidence from the Greater China Region", <i>Canadian Journal of Administrative Sciences</i> , vol. 24, no. 1, pp. 45-57	J	2-ABS	2007	D	A	COMP	3	Taiwan	R	Quant
Gammelgaard, J. (2009), "Issue Selling and Bargaining Power in Intrafirm Competition: The Differentiating Impact of the Subsidiary Management Composition", <i>Competition & Change</i> , vol. 13, no. 3, pp. 214-228.	J	2-ABS	2009	D	E	COMP	1	Denmark	Т	Qual
Golden, B. and Ma, H.(2003), "Mutual Forbearance: The role of intrafirm integration and rewards", <i>Academy of Management Review</i> , vol. 28, no. 3 pp. 479-493	J	4	2003	D	Е	COMP	2	Canada	T	NA
Goold, M. and Campbell, A. (2003), "Structured networks: towards the well designed matrix", <i>Long Range Planning</i> , vol. 36, no. 5, pp. 427-439.	J	3	2003	D	A	Other	2	UK	Т	NA
Gynawali,D., Singal,M., and Mu,S.C., (2009), "Knowledge ties among subsidiaries in MNCs: A multi-level conceptual model", <i>Journal of International Management</i> , vol. 15, no. 4, December, 2009, pp. 387-400	J	2-ABS	2009	0	X-ref	COLL	3	USA	Т	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Hansen, M. T. and Nohria, N. (2004), "How to Build Collaborative Advantage", <i>MIT Sloan Management Review</i> , vol. 46, no. 1, pp. 22 - 30.	J	4	2004	D	A	COLL	2	USA	Р	NA
Hansen, M. (2009), Collaboration: How Leaders Avoid the Traps, Create Unity and Reap Big Results, Harvard Business Press, M.A	В	NA	2009	0	NA	COLL	1	USA	R/P	Mixed
Hill, C.W.L., Hitt, M.A. and Hoskisson, R.E. (1992), "Cooperative versus competitive structures in related and unrelated diversified firms", <i>Organization Science</i> , vol. 3, no. 4, November, pp. 501 - 521	1	4	1992	D	E	COMP-COLL	3	USA	R	Quant
Houston, M. B., Walker, B. A., Hutt, M. D. and Reingen, P. H. (2001), "Cross-Unit Competition for a Market Charter: The Enduring Influence of Structure", <i>Journal of Marketing</i> , vol. 65, no. 2, pp. 19-34.	J	4	2001	D	Е	COMP	4	USA	R	Qual
Jassawalla, A. R. and Sashittal, H. C. (1998), "An examination of collaboration in high-technology new product development processes", <i>The Journal of Product Innovation Management</i> , vol. 15, no. 3, pp. 237-54	J	4	1998	D	A	COLL	2	USA	R	Qual

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Jassawalla, A.R. and Sashittal ,H.C. (1999), "Building collaborative crossfunctional new product teams", <i>Academy of Management Executive</i> , vol. 13, no. 3, p. 50-63	J	3	1999	D	E	COLL	2	USA	P	NA
Kalnins, A (2004), "Divisional Multimarket Contact Within and Between Multiunit Organisations", <i>Academy of Management Journal</i> , vol. 47, no.1, pp. 117-128	J	4	2004	0	X-ref	COMP	1	USA	R	Quant
Khoja, F. (2008), "Is sibling rivalry good or bad for high technology organizations?", <i>Journal of High Technology Management Research</i> , vol. 19, no. 1, pp. 11.	1	4-Harzig	2008	D	A	COMP	1	USA	T /P	NA
Koulikoff-Souviron, M. and Harrison, A. (2010), "Evolving HR practices in a strategic intra-firm supply chain", <i>Human Resource Management</i> , vol. 49, no. 5, pp. 913 - 937.	1	4	2010	D	A	COLL	2	UK	R	Qual
Le Meunier-FitzHugh, K. and Piercy, N. F. (2008), "The importance of organisational structure for collaboration between sales and marketing", <i>Journal of General Management</i> , vol. 34, no. 1, pp. 19-35	J	1	2008	D	E	COLL	2	UK	R	Quant

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Le Meunier-FitzHugh and Nigel F. Piercy (2007), "Does Collaboration between Sales and Marketing Affect Business Performance?", <i>Journal of Personal Selling & Sales Management</i> , vol. 27, no. 3, pp. 207-220	J	2-ABS	2007	О	E	COLL	2	UK	R	Quant
Liedtka, J. M. (1996), "Collaborating across lines of business for competitive advantage", <i>Academy of Management Executive</i> , vol. 10, no. 2, pp. 20-34.	J	3	1996	D	Е	COLL	1	USA	Р	NA
Loch, C. H., Galunic, D.C., Schneider, S., (2006), "Balancing cooperation and competition in human groups: the role of emotional algorithms and evolution", <i>Management Decision Economics</i> , vol. 27, no. 2-3, pp. 217-233	J	2-ABS	2006	0	X-ref	COMP-COLL	3	France	Т	NA
Luo, X., Slotegraaf, R. J. and Pan, X. (2006), "Cross-Functional "Coopetition": The Simultaneous Role of Cooperation and Competition Within Firms", <i>Journal of Marketing</i> , vol. 70, no. 2, pp. 67-80.	J	4	2006	D	Е	COMP-COLL	3	USA	R	Quant
Luo, Y. (2005), "Toward coopetition within a multinational enterprise: a perspective from foreign subsidiaries", <i>Journal of World Business</i> , vol. 40, no. 1, pp. 71-90.	1	3	2005	D	A	COMP-COLL	1	USA	Т	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Martin, J. and Eisenhardt, K. (2010), "Rewiring: Cross-Business-Unit Collaborations in Multibusiness Organizations", <i>Academy of Management Journal</i> , vol. 53, no. 2, pp. 265-301.	J	4	2010	D	Е	COLL	2	USA	T/P	NA
Martin,Jeffrey A.; Eisenhardt,Kathleen M. (2001), Exploring Cross-Business Synergies, <i>Academy of Management Proceedings & Membership Directory</i> , pp. H1-H6, Academy of Management	1	3	2001	0	X-ref	COLL	2	USA	Т	NA
Mena, C., Humphries, A. and Wilding, R. (2009), "A comparison of inter- and intraorganizational relationships: Two case studies from UK food and drink industry", International Journal of Physical Distribution & Logistics Management, vol. 39, no. 9, pp. 762-784	J	3	2009	D	A	COLL	3	UK	R/P	Qual
Mintzberg, H., Jorgensen, J., Dougherty, D. and Westley, F. (1996), "Some Surprising Things About CollaborationKnowing How People Connect Makes It Work Better", <i>Organizational dynamics</i> , vol. 25, no. 1, pp. 60-71.	1	3	1996	D	E	COLL	4	Canada	Р	NA

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Oliver, A.L. (2004), "On the duality of competition and collaboration: network-based knowledge relations in the biotechnology industry", <i>Scandinavian Journal of Management</i> , vol. 20, pp. 51–171	J	1	2004	0	X-ref	COMP-COLL	1	Israel	Т	NA
Persaud, A. (2005), "Enhancing synergistic innovative capability in multinational corporations: An Empirical Investigation", <i>Journal of Product Innovation Management</i> , vol.22, pp. 412-429	J	4	2005	0	X-ref	COLL	1	Canada	R	Quant
Phelps, N.A. and Fuller, C (2000), "Multinationals, Intracorporate Competition, and Regional Development", Economic Geography, vol. 76, no.3, July, pp. 224-243	J	4-ABS	2000	0	X-ref	COMP	2	UK	R	Qual
Qureshi, S., Briggs, R. O. and Hlupic, V. (2006), "Value Creation from Intellectual Capital: Convergence of Knowledge Management and Collaboration in the Intellectual Bandwidth Model", <i>Group Decision & Negotiation</i> , vol. 15, no. 3, pp. 197-220.	1	3-ABS	2006	D	A	COLL	3	USA	R	Qual

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Rank, O. and Tuschke, A. (2010), "Perceived Influence and Friendship as Antecedents of Cooperation in Top Management Teams: A Network Approach", <i>Business Research</i> , vol. 3, no. 2, pp. 151.	1	NR	2010	D	E	COLL	2	Germany	R/T	Quant
Sanders, N. R. (2007), "An empirical study of the impact of e-business technologies on organizational collaboration and performance", <i>Journal of Operations Management</i> , vol. 25, no. 6, pp. 13321347	J	4	2007	D	Е	COLL	1	USA	R	Quant
Singh, B. (2005) Collaborative Advantage in Volatile Business Environments, Conceptual Paper, Case Western Reserve University, pp. 1-36.	Thesis	NA	2005	D	Google	COLL	1	USA	T	NA
Tjosvold, D. and Tsao, Y. (1989), "Productive Organizational Collaboration: The Roles of Values and Cooperation", Journal of Organizational Behavior, vol. 10, no. 2, pp. 189-195.	1	3	1989	D	Е	COLL	2	Singapore	R	Quant
Tsai, W., (2002), Social Structure of Coopetition within a multiunit organization: coordination, competition and intraorganisational knowledge sharing , <i>Organisation Science</i> , vol.13, no.2, pp. 179-190	J	4	2002	D	E	COMP-COLL	1	USA	R	Quant

Full Reference	Journal(J) Book(B) Book Chapter (BC) Conf Paper (CP) Thesis (T)	Journal Rating	Publ. Year	Database/ Other	D/base Retrieved ABI (A) EBSCO (E)	Competition (COMP) or Collaboration (COLL) or COMP-COLL or Other (email/MNC)	Number of Authors	Location of Uni of 1st author	Type of Knowledge Research (R) Practice (P) Theoretical (T)	If R Quant or Qual or Mixed
Rauser, O. (2002), "Value added of	T	NA	2002	О	X-Ref	COLL	1	Germany	R	Qual
Corporate Venture Capital: How do CVC units benefit their organizational core?" Uni-bamberg. http://www.opus-bayern.de/uni-bamberg/volltexte/2005/33/pdf/rausges.pdf										
Wood, D. and Gray, B (1991), 'Toward a Comprehensive Theory of Collaboration', Journal of Applied Behavioural Science, vol. 27, no. 2, June, pp. 139-162	В	2	1991	0	X-ref	COLL	2	USA	Т	NA
Zarzecka, O and Zhou, Y, (2011), "Is Cooperation the only way to enhance knowledge transfer within Multinational Corporations?: a study of intra-firm competition from knowledge transfer perspective", MSc Paper University of Gothenburg.	Т	NA	2011	D	Google	COMP	2	Germany	R	Qual
Ziss, S. (2007), "Hierarchies, intra-firm competition and mergers", International Journal of Industrial Organization, vol. 25, no. 2, pp. 237- 260	J	3	2007	0	X-ref	COMP	1	Canada	Т	NA

Appendix B Quality Appraisal

For further information regarding the cells that do not contain information please contact the author as the information is available in paper format.

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Allred, C., Fawcett, S., Wallin, C. and Magnan, G. (2011), "A Dynamic Collaboration Capability as a Source of Competitive Advantage", <i>Decision Sciences</i> , vol. 42, no. 1, pp. 129.	3	3	2	8	YES
Barner-Rasmussen, W. and Björkman, I. (2007), "Language Fluency, Socialization and Inter-Unit Relationships in Chinese and Finnish Subsidiaries", <i>Management & Organization Review</i> , vol. 3, no. 1, pp. 105-128.	3	3	3	9	YES
Bartlett, C. A. and Ghoshal, S. (1987), "Managing across Borders: New Organizational Responses", Sloan Management Review (1986-1998), vol. 29, no. 1, pp. 43-52.	3	3	3	9	YES
Becker-Ritterspach, F. And Dorrenbacher, C. (2009), "Intrafirm competition: a political", <i>Competition & Change</i> , vol. 13, no. 3, pp. 119-213	3	NA	3	6	YES
Birkinshaw, J. and Lingblad, M. (2005), "Intrafirm Competition and Charter Evolution in the Multibusiness Firm", <i>Organization Science</i> , vol. 16, no. 6, pp. 674-686.	3	NA	3	6	YES
Birkinshaw, J. (2001) "An evolutionary theory of intra-organizational competition" London Business School Working Paper pp. 1-23	3	3	3	9	YES
Birkinshaw, J.(2001), Strategies for Managing Internal Competition, California Management Review, vol. 44, no. 1, pp.21-38	3	NA	3	6	YES
Boussebaa, M. (2009), "Struggling to organize across national borders: The case of global resource management in professional service firms", <i>Human Relations</i> , vol. 62, no. 6, pp. 829-850.	2	2	2	6	YES

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Cerrato, D The multinational enterprise as an internal market system, International Business Review, vol.15, pp. 253-277	3	NA	3	6	YES
Chen, G. and Tjosvold, D. (2008), "Organizational values and procedures as antecedents for goal interdependence and collaborative effectiveness", <i>Asia Pacific Journal of Management</i> , vol. 25, no. 1, pp. 93.	3	2	3	8	YES
De Luca, L. M. and Atuahene-Gima, K. (2007), "Market Knowledge Dimensions and Cross-Functional Collaboration: Examining the Different Routes to Product Innovation Performance", <i>Journal of Marketing</i> , vol. 71, no. 1, pp. 95-112.	3	3	2	8	YES
Eisenhardt, K.M and Galunic, D.C. (2000) Coevolving, Harvard Business Review, vol. 78, issue. 1, pp. 91-101	NA	NA	3	5	YES
Ellinger, A. E., Keller, S. B. and Hansen, J. D. (2006), "Bridging the Divide between Logistics and Marketing: Facilitating Collaborative Behavior", <i>Journal of Business Logistics</i> , vol. 27, no. 2 pp. 1-27	2	3	2	7	YES
Ferrari, B. (2010) "Competition and collaboration in General Electric's Global Research Group", The McKinsey Quarterly, issue 3, p. 105	NA	1	3	4	YES
Fong, C., Ho, H., Weng, L. and Yang, K. (2007), "The Intersubsidiary Competition in an MNE: Evidence from the Greater China Region", <i>Canadian Journal of Administrative Sciences</i> , vol. 24, no. 1, pp. 45 -57.	2	2	3	7	YES
Gammelgaard, J. (2009), "Issue Selling and Bargaining Power in Intrafirm Competition: The Differentiating Impact of the Subsidiary Management Composition", <i>Competition & Change</i> , vol. 13, no. 3, pp. 214-228.	2	3	2	7	YES
Golden, B. and Ma, H.(2003), "Mutual Forbearance: The role of intrafirm integration and rewards", Academy of Management Review, vol. 28, no. 3 pp. 479-493	2	3	3	8	YES
Goold, M. and Campbell, A. (2003), "Structured networks: towards the well designed matrix", Long range planning, vol. 36, no. 5, pp. 427-439.	2	NA	3	5	YES

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Gynawali,D., Singal,M., and Mu,S.C.(2009), "Knowledge ties among subsidiaries in MNCs: A multi-level conceptual model", Journal of International Management, vol. 15, no. 4, December, 2009, pp. 387-400	3	NA	3	6	YES
Hansen, M. T. and Nohria, N. (2004), "How to Build Collaborative Advantage", <i>MIT Sloan Management Review</i> , vol. 46, no. 1, pp. 22 - 30.	NA	2	3	5	YES
Hansen, M. (2009), Collaboration: How Leaders Avoid the Traps, Create Unity and Reap Big Results, Harvard Business Press, M.A.	2	2	3	7	YES
Hill, C.W.L., Hitt, M.A. and Hoskisson, R.E. (1992), "Cooperative versus competitive structures in related and unrelated diversified firms", Organization Science, vol. 3, no. 4, November, pp. 501 - 521	3	3	3	9	YES
Houston, M. B., Walker, B. A., Hutt, M. D. and Reingen, P. H. (2001), "Cross-Unit Competition for a Market Charter: The Enduring Influence of Structure", <i>Journal of Marketing</i> , vol. 65, no. 2, pp. 19-34.	3	2	3	8	YES
Jassawalla, A. R. and Sashittal, H. C. (1998), "An examination of collaboration in high-technology new product development processes", The Journal of Product Innovation Management, vol. 15, no. 3, pp. 237-254.	3	2	3	8	YES
Jassawalla, A.R. and Sashittal ,H.C. (1999), "Building collaborative crossfunctional new product teams", Academy of Management Executive, vol. 13, no. 3, p. 50-63	1	2	2	5	YES
Kalnins, A (2004), "Divisional Multimarket Contact Within and Between Multiunit Organisations", Academy of Management Journal, Vol. 47, No. 1, pp. 117-128	3	2	3	8	YES
Khoja, F. (2008), "Is sibling rivalry good or bad for high technology organizations?", <i>Journal of High Technology Management Research</i> , vol. 19, no. 1, pp. 11 -20.	3	NA	2	5	YES
Koulikoff-Souviron, M. and Harrison, A. (2010), "Evolving HR practices in a strategic intra-firm supply chain", <i>Human resource management</i> , vol. 49, no. 5, pp. 913 -938.	2	3	2	7	YES

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Le Meunier-FitzHugh, K. and Piercy, N. F. (2008), "The importance of organisational structure for collaboration between sales and marketing", <i>Journal of General Management</i> , vol. 34, no. 1, pp. 19-35	2	1	2	5	YES
Le Meunier-FitzHugh and Nigel F. Piercy (2007), "Does Collaboration between Sales and Marketing Affect Business Performance? ", Journal of Personal Selling & Sales Management, vol. 27, no. 3, pp. 207-220	1	2	2	5	YES
Liedtka, J. M. (1996), "Collaborating across lines of business for competitive advantage", Academy of Management Executive, vol. 10, no. 2, pp. 20-34.	NA	1	3	4	YES
Loch, C. H., Galunic, D.C., and Schneider, S.(2006), "Balancing cooperation and competition in human groups: the role of emotional algorithms and evolution", Management Decision Economics, vol. 27, no. 2-3, pp. 217-233	2	NA	2	4	YES
Luo, X., Slotegraaf, R. J. and Pan, X. (2006), "Cross-Functional "Coopetition": The Simultaneous Role of Cooperation and Competition Within Firms", <i>Journal of Marketing</i> , vol. 70, no. 2, pp. 67-80	3	3	3	12	YES
Luo, Y. (2005), "Toward coopetition within a multinational enterprise: a perspective from foreign subsidiaries", <i>Journal of World Business</i> , vol. 40, no. 1, pp. 71 -90.	3	NA	3	6	YES
Martin, J. and Eisenhardt, K. (2010), "Rewiring: Cross-Business-Unit Collaborations in Multibusiness Organizations", <i>Academy of Management Journal</i> , vol. 53, no. 2, pp. 265-301.	3	NA	3	6	YES
Martin, J.A. and Eisenhardt, K. M. (2001), Exploring Cross-Business Synergies, Academy of Management Proceedings & Membership Directory, pp. H1-H6, Academy of Management	3	3 -	3	8	YES
Mena, C., Humphries, A. and Wilding, R. (2009), "A comparison of inter- and intraorganizational relationships: Two case studies from UK food and drink industry", <i>International Journal of Physical Distribution & Logistics Management</i> , vol. 39, no. 9, pp. 762-784	3	3	3	9	YES

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Mintzberg, H., Jorgensen, J., Dougherty, D. and Westley, F. (1996), "Some Surprising Things About Collaboration-Knowing How People Connect Makes It Work Better", <i>Organizational dynamics</i> , vol. 25, no. 1, pp. 60-71.	2	NA	3	5	YES
Oliver, A.L. (2004), "On the duality of competition and collaboration: network-based knowledge relations in the biotechnology industry", Scandinavian Journal of Management, vol. 20, pp. 51–71	3	NA	3	6	YES
Persaud, A. (2005), "Enhancing synergistic innovative capability in multinational corporations: An Empirical Investigation", Journal of Product Innovation Management, vol.22, pp. 412-429	3	3	3	9	YES
Phelps, N.A. and Fuller, C (2000), "Multinationals, Intracorporate Competition, and Regional Development", Economic Geography, vol. 76, no.3, July, pp. 224-243	2	3	3	8	YES
Qureshi, S., Briggs, R. O. and Hlupic, V. (2006), "Value Creation from Intellectual Capital: Convergence of Knowledge Management and Collaboration in the Intellectual Bandwidth Model", <i>Group Decision & Negotiation</i> , vol. 15, no. 3, pp. 197-220.	3	3	3	9	YES
Rank, O. and Tuschke, A. (2010), "Perceived Influence and Friendship as Antecedents of Cooperation in Top Management Teams: A Network Approach", <i>Business Research</i> , vol. 3, no. 2, pp. 151-171.	2	3	3	8	YES
Rauser, O. (2002), "Value added of Corporate Venture Capital: How do CVC units benefit their organizational core?" Uni-bamberg.MSc Thesis http://www.opus-bayern.de/uni-bamberg/volltexte/2005/33/pdf/rausges.pdf (accessed June 10, 2011)	2	NA	3	5	YES
Sanders, N. R. (2007), "An empirical study of the impact of e-business technologies on organizational collaboration and performance", <i>Journal of Operations Management</i> , vol. 25, no. 6, pp. 1332 - 1347.	2	3	3	7	YES

Full References	Quality 1 - Theory	Quality 2 - Method	Quality 3 - Overall Contribution	Quality Score	DECISION
Singh, B. (2005) Collaborative Advantage in Volatile Business Environments, Conceptual Paper, Case Western Reserve University, pp. 1-36.	2	NA	3	5	YES
Tjosvold, D. and Tsao, Y. (1989), "Productive Organizational Collaboration: The Roles of Values and Cooperation", Journal of Organizational Behavior, vol. 10, no. 2, pp. 189 -195.	2	2	2	6	YES
Tsai, W., (2002), "Social Structure of Coopetition within a multiunit organization: coordination, competition and intraorganisational knowledge sharing", Organization Science, vol.13, no. 2, March-April, pp. 179-190	3	3	3	9	YES
Wood, D. and Gray, B (1991), 'Toward a Comprehensive Theory of Collaboration', Journal of Applied Behavioural Science, vol. 27, no. 2, June, pp. 139-162	3	NA	3	6	YES
Zarzecka, O and Zhou, Y, (2011), "Is cooperation the only way to enhance knowledge transfer within multinational corporations?: a study of intrafirm competition from knowledge transfer perspective", MSc Paper http://gupea.ub.gu.se/handle/2077/26 239	2	2	2	6	YES
Ziss, S. (2007), "Hierarchies, intra-firm competition and mergers", <i>International Journal of Industrial Organization</i> , vol. 25, no. 2, pp. 237- 260	3	3	3	9	YES

Appendix C Data Extraction Tables

For further information regarding the cells that do not contain information please contact the author as the information is available in paper format

Full References	Allred, C., Fawcett, S., Wallin, C. and Magnan, G. (2011), "A Dynamic
	Collaboration Capability as a Source of Competitive Advantage", Decision
	Sciences, vol. 42, no. 1, pp. 129.
Focus	Collaboration as a dynamic capability -collaboration skills/competencies;
Unit of Analysis	cross functional
Research Context	MARKETING - 4 channel positions; retailers, finished goods service
	providers,
Research Question / Aim	test and enrich theory regarding how decision makers use collaboration to
	enable their firms to combine and configure resources across organisational
CI.:	boundaries
Claims	E over 6 years
Operationalisation of Variables	no definition of collaboration provided as a dynamic capability
for Collaboration or Competition	10' 4 1
Methodology	multi-method:
	literature review,
Theory/Denomenting /literature	survey and interviews/ case study methodology/ SEM RBV
Theory/Perspectives /literature base	dynamic capabilities
base	resource advantage theory
Definition of	No definition of collaboration High -level collaboration???? Not
Collaboration/Competition	explained or described
Conaboration/Competition	antecedents - culture (inertia) and structural change; have to change
	mindset and structure p. 151
Factors	minuset and sudetale prints
/Antecedents/Conditions	
Mechanisms	dynamic challenges inherent in establishing collaborative mechanisms
Structural enablers	Table 6 p.152 4 ways to improve collaboration 1. collaborative process
	redesign 2) improved info sharing 3) aligned goals and metrics 4) training in
	process thinking and collaborative behaviours
Barriers /Facilitators to	5 barriers to intra-organisation collaboration between functions - 1)
collaboration/ competition	organisation structure/turf; 2) resistance to change; 3) poorly aligned
	performance measures; 4) levels of trust - high levels of power asymmetry
	5) inadequate managerial support (compare with Hansen) <u>Internal Culture</u>
	inertia slows the momentum for collaboration
Frameworks, models	model of mediating influence of a collaboration capability on firm
F: 1: (G 1 :	performance
Findings /Conclusions	p. 147 response clearly suggests that establishing the mechanisms to share
	information, mitigate conflicts and collaboration across functional
	boundaries is difficult (see Mena et al) not made much progress in diminishing internal cultural barriers; internal collaboration more influential
	than external collaboration.
	collaboration capability & customer/supplier orientation - customer
	satisfaction and productivity - collaboration mediates orientations and
	performance
Theoretical/ Contribution	test and enrich THEORY; documenting the value of collaboration:
	PRACTICE - managerial implications
Future Research	1
Themes and Thoughts	evolution of collaboration - Cross functional collaboration hard to do even
	internally as Mena et al found. Needs to be maintained as part of the culture
	otherwise inertia sets in and collaboration stops p. 150

Full References	Barner-Rasmussen, W. and Björkman, I. (2007), "Language Fluency, Socialization and Inter-Unit Relationships in Chinese and Finnish Subsidiaries", <i>Management &</i>
	Organization Review, vol. 3, no. 1, pp. 105-128.
Focus	language fluency and socialization mechanisms to interunit shared vision and trustworthiness
Unit of Analysis	310 interunit relationships involving subsidiaries of MNC in China and Finland
Research Context	Chinese and Finnish subsidiaries of foreign multinationals. 310 dyadic relationships between 2000 - 2002
Research Question / Aim	test the influence of socialization mechanisms. Examine the interaction effects of
research Question / Time	language fluency and socialization. Practices on interunit relationships
Claims	argue that shared vision and perceptions of trustworthiness of other units are
	associated with the subsidiary's linguistic ability to interact with their colleagues in
	these units; not collaboration or competition - trust and shared vision are
	conceptualized as interrelating but overlapping different dimensions of social capital;
	knowledge transfer
Operationalisation of Variables	asked about knowledge sharing relationship
for Collaboration or Competition	
Methodology	survey
	confirmatory factor analysis
Theory/Perspectives /literature	social identity theory
base	social capital
Definition of	none provided
Collaboration/Competition	•
Factors	(trust; shared vision) language fluency;
/Antecedents/Conditions	p. 109 linguistic competencies of subsidiaries may sign. Influence inter-unit
// intecedents/ conditions	collaboration (Marshan-Piekkari (1999)
	High levels of trust and shared vision contribute to collaborative behaviour:
Mechanisms	language fluency and socialization mechanisms;
Structural enablers	identification with and adoption of shared goals and aspirations across units
	belonging to the same MNC is positively related with inter-unit collaboration see
	authors p. 107 - Tsai (shared vision)
Barriers /Facilitators to	rewards system competitive - based on subsidiaries own financial performance
collaboration/ competition	rather than the firm as a whole p. 846
Frameworks, models	
Findings /Conclusions	p. 147 response clearly suggests that establishing the mechanisms to share
	information, mitigate conflicts and collaboration across functional boundaries is
	difficult (see Mena et al) not made much progress in diminishing internal cultural
	barriers; internal collaboration more influential than external collaboration.
Theoretical/ Contribution	institutionalism discussions about the organisational evolution of MNO's
Future Research	
Themes and Thoughts	MNC are almost by definition multilingual entities p. 106 - importance of inter
	unit communication and collaboration; INTEGRATION
	work out relationship of integration to collaboration DIVERSITY (language fluency)

E II D C	D d C + 1 Cl + 1 C (100T) ID 5
Full References	Bartlett, C. A. and Ghoshal, S. (1987), "Managing across
	Borders: New Organizational Responses", Sloan Management
	Review (1986-1998), vol. 29, no. 1, pp. 43-52.
Focus	
Unit of Analysis	MNCs
Research Context	
Research Question / Aim	
Claims	
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	
base	
Definition of	
Collaboration/Competition	
Factors	
/Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

EUDC	D 1 D' 1 E 1 D 1 1 C (2000) III (C'
Full References	Becker-Ritterspach, F. And Dorrenbacher, C. (2009), "Intrafirm
	competition: a political ", Competition & Change, vol. 13, no. 3, pp. 119-213
Focus	political/ industrial relations focus of intrafirm competition in MNCs; whether HQ or subsidiary initiated
Unit of Analysis	macro - society; meso - MNC and micro-level of the subsidiaries
Research Context	HQ and subsidiaries of MNCs - however no explanation of why MNCs were chosen as context for theorizing (see Roth et al for MNC use)
Research Question / Aim	What are the interests and strategies of HQ and subsidiary exec in I-F Competition? How do they relate to other stakeholders in I-F competition both on micro, meso and the macro level and how do they interact among themselves in political games surrounding I-F comp.
Claims	despite conflict in intrafirm competition - political dimension of I-F competition omitted therefore developed in paper
Operationalisation of Variables	intrafirm competition - conceptualized as consisting of different
for Collaboration or Competition	kinds of political games
Methodology	NA
Theory/Perspectives /literature base	Organisational politics approaches - aimed at overcoming some of the shortcomings of the contingency theory-oriented literature for reasons p. 204 add political dimension in framework
Definition of Collaboration/Competition	what determines intrafirm competition in MNCs reveals that an overlap in products, markets, or technologies among MNC subsidiaries seems to be an important foundation
Factors /Antecedents/Conditions	p. 204 structural conditions - strategic environment home and host country institutional influences, organisational and institutional influences p. 202 B & L (2005) - mature or homogenous industries I-C stronger; Luo (2005) prospering markets higher I-C; Cerrato(2006) market uncertainty
Mechanisms	internal market mechanisms (Cerrrato 2006)
Structural enablers	see list on p. 202 of organisational variables that influence intrafirm competition
Barriers /Facilitators to collaboration/ competition	immune systems that block I-F competition in Birkinshaw and Ridderstale (1999) - suboptimal
Frameworks, models	framework - summary of environmental, organisational and
	resource/knowledge that positively or negatively influence competition
Findings /Conclusions	It is these <u>actors' individual interests</u> , <u>resources</u> , <u>strategies and interactions</u> that shape the course of intrafirm competition to a large extent.
Theoretical/ Contribution	extended the current theoretical application of contingency theory to include political framework
Future Research	little is known so far about <u>different types of HQ exec and their basic orientation</u> toward and interest in intrafirm competition; literature on interests and strategies of subsidiaries in intrafirm competition is even scarcer than that on HQ
Themes and Thoughts	LEADER - key actors influence; interests and rationale - are there games of collaboration? Little research done on me-? comp so far p. 201; nice piece for rationale for inclusion of papers in review and the literature that they come from; 2) do competition games overlap with 'will not 'collaborate games (as in Lexis Nexus example where would not
	collaborate as in competition to see who would win control of the merged business line (US or UK?)) little research done on I-? comp so far p. 201; nice piece for rationale for inclusion of papers in review and the literature that they come from; 2) do competition games overlap with 'will not 'collaborate games (as in LN example where would not collaborate as in competition to see who would win control of the merged business line (US or UK?))

= 115.0	
Full References	Birkinshaw, J. and Lingblad, M. (2005), "Intrafirm Competition
	and Charter Evolution in the Multibusiness Firm", Organization
	Science, vol. 16, no. 6, pp. 674-686.
Focus	theoretical framework and research agenda to explain phenomena
	of intrafirm competition - what forms does I-F Competition take
	emphasizes POSITIVE side to competition
Unit of Analysis	multibusiness - organisational unit (division or business unit)
Research Context	charter evolution
Research Question / Aim	coherent insight into how or why intraorganisational competition
	occurs - make sense of the causal logic of the structure of the
	organisation
Claims	put forward theoretical framework to specify the environmental
	and organisational conditions under which each form of I-F
	competition is expected to occur; phenomena better understood as
	manifestations of competition between organisational units
Operationalisation of Variables	Organisation charter - overlapping between the charters of two or
for Collaboration or Competition	more units in a single organisation. Challenge to establish
	relationship between I-F Competition and performance
Methodology	N/A
Theory/Perspectives /literature	organisation charter (Galunic & Eisenhardt, 2001); dynamic
base	community and coexistence model - economies of scope and
	differentiation of unit charters; evolutionary theory - possible
	contingency theory
Definition of	intrafirm competition manifestation - overlap between the
Collaboration/Competition	charters of two or more units in a single organisation; narrower
	definition than scarce resources - expressed in state not process
	terms 3 elements - product markets served, capabilities & Stated
	charter
Factors	decentralization of decision making/ norms of cooperation;
/Antecedents/Conditions	organisational slack (competition) is good to a point - then
	ineffective in innovation; internal organisational structure that
	encourages strategic behaviour by business units
Mechanisms	
Structural enablers	rules of engagement, degrees of freedom, interaction between
	units - consequence of that chosen structure; Environmental
	equivocality (overlap and fluid charters) industry maturity
	(technology/standards) market heterogeneity decentralization/
D : 75 11:	normative integration /fungibility of unit capabilities
Barriers /Facilitators to	
collaboration/ competition	anvisonmental and arganization-1 liti
Frameworks, models	environmental and organisational conditions
Findings /Conclusions	model - identification of 2 generic forms: dynamic community
Theoretical/Cartaile	and coexistence model
Theoretical/ Contribution	theoretical framework - extends thinking on dynamic community (E & G)
Future Research	look at organisational level of phenomena versus units within one
	market/ what are the COSTS of intrafirm competition/ role of top
	management; make sense of the three different types of intrafirm
	competition p. 683; across entire organisation 1)
Themes and Thoughts	Evolution of intracompetition - theme of EVOLUTION process
ug.no	of variation, selection and retention; view Competition as a
	STRUCTURAL CHARACTERISTIC of all organisations e.g.
	Dualism/duality; CONTINGENCY /CONFIGURATION
	THEORY??? INFLUENCE OF THE LEADER:
	ORGANISATION DESIGN; NEW BEHAVIOURS
	Origins of intrafirm competition - structural fit between
	environment and structural characteristic in question

Full Deferences	Birkinshaw, J. (2001) Conference Paper
Full References Focus	Intraorganisation competition using evolutionary theory
Unit of Analysis	business unit
Research Context	
Research Question / Aim	phenomenon of competition inside organisations
Claims	Literature Review
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	Competition as parallel/coexisting - overlap duplicate activities
	run in parallel inside the firm (acknowledge traditional view of
	competing for resources within the firm)
Theory/Perspectives /literature	evolutionary theory
base Definition of	:
Collaboration/Competition	internal competition refers to parallel or overlapping activities inside the boundaries of the firm p.22 competing for rights to a
Conadoration/Competition	particular technology or product charter and not just access of
	financial resources
Factors	environmental uncertainty; marginal cost of duplicating;
/Antecedents/Conditions	decentralization of decision-making conditions where intra-org
	competition will begin and finish p. 14; decentralised vs. centralized
	decision making
Mechanisms	
Structural enablers	"Selection is the mechanism by which intra-organisational
	competition is terminated". pp. 10
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	Innovation literature - new product development - how about
	collaboration - where is the value or performance enhanced? Is it
	the same?
Findings /Conclusions	Model of Intra-organisational competition (establishment and
The anticel / Containution	termination) see p12
Theoretical/ Contribution	Conclude that intra org competition is such a temporary organisational structure - BUT What if it is coexistent in the
	organisation - bring up the idea of duality/dualism.
Future Research	builds on - explore internal dynamics using an evolutionary
Tuture Research	framework - looks at overlapping internal variations; puts forward a
	model identifying the conditions under which intraorganisational
	competition is like to be observed.
Themes and Thoughts	mentions other factors - values of the dominant coalition, the
	size of the organisation, the nature of competition in the industry
	DECENTRALISED vs. CENTRALISED decision making - a
	question of POWER; planned and emergent competition/cf
	strategy/ cf conflict management (reactive /proactive); where does
	power fit in the picture
Full References	Birkinshaw, J. (2001), Strategies for Managing Internal
	Competition, California Management Review, vol. 44, no. 1,
Econo	pp.21-38 strategies for managing internal competition
Focus Unit of Analysis	internal competition
Research Context	NA
Research Question / Aim	What criteria to decide whether inter. Competition is terminated
Research Question / Allii	or allowed to continue?
Claims	
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	N/A - article refers to where research published - questionnaire
	survey
Theory/Perspectives /literature	
base	
Definition of	internal competition refers to parallel or overlapping activities
Collaboration/Competition	inside the boundaries of the firm p.22 competing for rights to a
	particular technology or product charter and not just access of
	financial resources

.	
Factors /Antecedents/Conditions	Criteria to decide whether internal competition is terminated or allowed to continue p. 24. Two types of competition - 1) between product lines - senior executives make choice 2) between 2 bus lines competing for same customers - customer makes choice. Other factors - mandated from above (managing the loser) or skunk works
Mechanisms	Internal competition lifecycle is it emergent or planned. Specific incentive schemes
Structural enablers	competing business lines end up fighting it out in the marketplace - rather than for attention and resources of top management - competing business lines to to allow fight it out. Level of Internal competition is a function of the organisational systems - including the way resources are allocated & attitude towards risk taking.
Barriers /Facilitators to collaboration/ competition	internal competition can be useful under certain conditions - aware of how it fits into the broader strategic objective of the company
Frameworks, models	
Findings /Conclusions	3 benefits to competition flexibility, challenge the status quo and motivates greater effort p. 22 Also costs of competition p. 23
Theoretical/ Contribution	
Future Research	
Themes and Thoughts Full References	Carefully controlled competition. Inertia link Boussebaa, M. (2009), "Struggling to organize across national borders: The case of global resource management in professional service firms", Human Relations, vol. 62, no. 6, pp. 829-850.
Focus	Growing body of research has challenged the commonly accepted view that multinationals have evolved into globally integrated networks, demonstrating instead that such organizations are sites of conflict between competing rationalities emerging from distinctive national institutional contexts.
Unit of Analysis	Professional service firms
Research Context	firms seek to facilitate and coordinate the horizontal flow of their human resources
Research Question / Aim	
Claims	
Operationalisation of Variables	flow of human resources in PSF
for Collaboration or Competition	
Methodology	Qualitative interview - semi structured Used nVivo to code
Theory/Perspectives /literature base	evolutionary literature - problem written from perspective of the parent company re PSF
Definition of Collaboration/Competition	
/Antecedents/Conditions	town time!
Mechanisms Structural analysis	transnational rewards
Structural enablers Barriers /Facilitators to collaboration/ competition	lack of transnational reward and recognition creates sign conflicts and militates against cross national collaboration and knowledge sharing (Fenton & Pettigrew, et al. p. 833) also incompatible goals
Frameworks, models	
Findings /Conclusions	transnational org reality being constructed in MNO than previously acknowledged in institutionalist studies; global organisational structure emerges; shed light on internal market
Theoretical/ Contribution	
Future Research Themes and Thoughts	Operate reward and recognition systems that implicitly favor competition over collaboration PSFs are also conflictual entities and find it difficult to integrate their globally dispersed networks raises concerns about MNC viewed as global integrated networks (GIN). Talks about Birkinshaw identifying 'internal market' therefore in competition with each other. Does this break down the integration of the network discussed p. 832 REWARD Systems - competitivep. 844

E HD C	
Full References	Cerrato, D The multinational enterprise as an internal market
Г	system, International Business Review, vol.15, pp. 253-277
Focus	MNE as an internal market - how the internal market model
Unit of Analysis	relates to modern network-based configurations of the MNE;
Unit of Analysis Research Context	MNE
Research Question / Aim	Expand concept of internal market and analyse the logic behind internal competition by considering more fully existing literature
	and developing an organizing framework to position such a model
	within that literature.
Claims	theoretical foundations of the Birkinshaw's model remain
Ciamis	undeveloped - fill this gap using internalization theory, RBV and
	organisation learning perspective
Operationalisation of Variables	Charter - is a business or an activity for which a subsidiary has
for Collaboration or Competition	responsibility for the whole MNE (Galunic and Eisenhardt, 1996)
r	charter where Subsidiary acts more like an equal partner
Methodology	NA NA
Theory/Perspectives /literature	internalization theory,
base	resource based view
	organisational learning literature
Definition of	more focused on the MNE as an internal market system within
Collaboration/Competition	which intrafirm competition can occur
Factors	
/Antecedents/Conditions	
Mechanisms	(internal) market based mechanisms
Structural enablers	
Barriers /Facilitators to	p. 270 knowledge transfer: Gupta and Govindarajan (2000) <u>5</u>
collaboration/ competition	factors barriers/ facilitators to knowledge transfer: value of the
	source units knowledge stock, motivational disposition, existence
	and richness of transmission channels, motivational disposition of
	the target unit to acquire knowledge, absorptive capacity of the
	target unit.
Frameworks, models	model addresses the issues related to the emergence of market
	based mechanisms of coordination within the MNEs and the
Findings /Conslusions	strategic decisions that affect internal competition
Findings /Conclusions Theoretical/ Contribution	analysis of internal market deepened (modern network) developed a stronger theoretical base of the internal market
Theoretical/ Contribution	model and focusing on the logic behind internal competition in the
	modern network based MNE, provides a contribution to that
	literature. 2) the lit on internalization theory, RBV and Organisation
	Learning help understand when we see the 3 different types of
	internal market within an MNE
Future Research	the analysis of the coordination mechanisms within the MNE
	network, made of a number of dispersed and interdependent
	subsidiaries is an increasingly relevant issue
Themes and Thoughts	A modern multinational works like a global network of units
	characterized by different capabilities. When a resource based
	approach is used the company profile is defined in terms of its
E UP C	resources and capabilities instead of its markets
Full References	Chen, G. and Tjosvold, D. (2008), "Organizational values and
	procedures as antecedents for goal interdependence and
	collaborative effectiveness", Asia Pacific Journal of Management, vol. 25, no. 1, pp. 93.
Fogus	
Focus	extension to intergroup interactions as work previously done at interpersonal level
Unit of Analysis	inter group - test out whether values from the West apply in
Ont of Analysis	organisation in China
Research Context	goal interdependence
Research Question / Aim	how values of people and respect and the structure of teams and
Alli Question / Alli	task interdependence effect interdepartmental relationships
Claims	argues that the values of people and respect and the structures of
Ciamis	task interdependence and team procedures that induce cooperative
	goals among departments also then promote productive interaction

Oti1iti	
Operationalisation of Variables	cooperation: mutual goals shared rewards; common tasks;
for Collaboration or Competition	competition- incompatible goals and rewards
Methodology	SEM
Theory/Perspectives /literature	Cooperation and competition (Deutsch 1973)
base	- has been applied in dyads at the interpersonal level - does it apply
	at the intergroup level?
Definition of	collaborative effectiveness - effectiveness of relationships
Collaboration/Competition	among departments (Van der Vegt, 2000)
Factors	values and structure - antecedents to goal interdependence -
/Antecedents/Conditions	collaborative effectiveness; p. 95 showing respect - promotes
	collaboration (Goffman ,1967)
Mechanisms	
Structural enablers	Cross functional teams believed to aid interdepartmental
	collaboration (Bain et al, 2001 etc) p. 97
Barriers /Facilitators to	task forces and x functional teams overcome barriers to
collaboration/ competition	collaboration p. 95 (Cites Keller, 2001; Pelled & Adler, 1994;
•	West, 2002)
Frameworks, models	,
Findings /Conclusions	
Theoretical/ Contribution	Provides a test of usefulness of cooperation and competition to
	develop a model of how organisation values and coordination
	structures affect the interaction among departments intergroup
	relationships 2) Western concepts apply in China
Future Research	1117
Themes and Thoughts	

E 11 B A	D 7 7 7 1 1 1 0 0 77 (200E) (27 1
Full References	De Luca, L. M. and Atuahene-Gima, K. (2007), "Market
	Knowledge Dimensions and Cross-Functional Collaboration:
	Examining the Different Routes to Product Innovation
	Performance", Journal of Marketing, vol. 71, no. 1, pp. 95-112.
Focus	cross functional collaboration and marketing knowledge on KIM
	on New Product Performance
Unit of Analysis	random selection of 750 high technology Chinese firms
Research Context	Product Innovation
Research Question / Aim	Argue that increased functional collaboration leads to the greater
	use of KIMs to regulate communication flow and learning in new
	product projects - untangle the complex relations among market
	known dimensions, cross-function collaboration and product
	innovation performance.
Claims	product innovation performance is influenced by 3 broad factors:
	market knowledge, cross functional collaboration and knowledge
	integration mechanisms within the company
Operationalisation of Variables	Cross functional Collaboration - 3 items on extent of cooperation
for Collaboration or Competition	among functions (as per Li and Calantone, 1998) - goal
	establishment and priorities - is this a sufficient indication of
	collaboration - goal focused NOT on the act of collaborating itself
Methodology	Survey questionnaire - structured equation modeling (SEM)
Theory/Perspectives /literature	p. 59 knowledge based view of the firm; structural contingency
base	theory suggest that the flow and sharing of information among
	functional units helps determine the nature of the knowledge
	integration mechanisms that eventually come into play - refer to
	chicken and egg debate - which comes first?
	Contingency theory - performance - match between strategic
	behaviour and internal/ external environment AF13
Definition of	Functional areas involved in prod innovate process - cross
Collaboration/Competition	functional collaboration - the degree of cooperation and the extent
•	of representation by mktg, R& D and other functional units in the
	product innovation process. CRITIQUE Full collaboration = goal
	congruence (Grant 1996) Collaboration is more than goal
	congruence and ignores the act of collaborating by narrowly
	defining as goal congruence. Volitional and unstructured? p. 99
Factors	Cooperation reflects willingness of functions to collaborate yet
/Antecedents/Conditions	firms need to provide structural mechanisms to put such willingness
	into action . P. 99
Mechanisms	knowledge integration mechanisms (KIM)- anecdotal evidence
	supports distinction between cross-functional collaboration and
	KIMs' p. 99 KIM include formalized work processes, problem
	solving meetings etc to ensure KS and integration among its
	different units - despite high degree of cooperation proclivity
Structural enablers	<u>Define of integration mechanisms:</u> are lateral linkage devices or
	structural coordination mechanisms" that firms use to coordinate
	cross functional interactions see. P. 97
Barriers /Facilitators to	acknowledges diversity - of functional information,
collaboration/ competition	backgrounds, experiences and thought worlds - complicates (the
	recombination's of firms knowledge)
Frameworks, models	conceptual model of role of cross functional collaboration, mkt
	knowledge dimensions and KIM in product innovation
Findings /Conclusions	1) Found NO support for direct positive effect of cross functional
	collaboration on product innovation. X-functional positively affects
	prod innovation through KIMs. Consistent with structural
	contingency theory - increase info processing demands
	(interdependence of Fn units) determine the degree to which KIM is
	adopted. 2) failure of firms - may not be due to failure in
	collaboration - perhaps because they do not have broad, deep and
	specific mkt knowledge
	Product innovation performance - 5 items - indicate extent to which
	the firm has achieved its product dev objectives such as mkt share
	and profitability (survey went to mkt mgr/dir) - what others ways
	are there to measure product innovation? No. of new products?
	And contribution?

Theoretical/ Contribution	p. 60 Mgr: the use of structured and accessible knowledge integration mechanisms that enable cross functional collaborations so critical to innovation success.
Future Research	mktg bias towards cross functional collaboration for new product dev - what other mediating variables are there that impact on new product innovation rather than seeing cross functional teams as a mechanism in themselves this study suggests that other active mechanism are required to move willingness to action
Themes and Thoughts	Collaboration - volitional and unstructured - question definition as goal congruence ONLY. Not just goal alignment. Is more than goal alignment - as component of collaboration is aligned goal but collaboration is more than that>
	Is there a difference between cross functional collaboration and Knowledge Integration mechanisms - used anecdotal evidence as support for this. Concern is that others use the knowledge integrations as mechanisms to achieve collaboration. IS Collaboration - KIM or KIM - collaboration? Is this an area for review?

Full References	Eisenhardt, Kathleen M.; Galunic, D.C. (2000) Coevolving, Harvard Business Review, vol. 78, issue. 1, pp. 91-101,
Focus	coevolving companies - capturing cross business synergies
Unit of Analysis	coevolving companies
Research Context	
Research Question / Aim	new rules of collaboration are counterintuitive
Claims	coevolving companies let collaboration and competition coexist
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	evolutionary theory
base	
Definition of	non provided
Collaboration/Competition	
Factors	coevolving (as a cooperate strategy); established clear turf
/Antecedents/Conditions	boundaries; reward individual performance; occurs when it makes
	sense for their respective businesses
	p. 94 managers create culture and opportunities; coevolving versus
	traditional companies; higher velocity market; changes in the
Mechanisms	market; changes in the BU's frequent data focused meetings among BU leaders, external
Mechanisms	metrics, incentives that favors self interest
Structural enablers	reward for individual performance (self interest) not for
Structural enablers	collaboration 'regular meetings; let business units rule;
Barriers /Facilitators to	Collaborations among businesses often freeze into fixed patterns.
collaboration/ competition	P. 94 - not revisited regularly; senior executives create the context;
conaboration/ competition	build the Multibusiness team; establish turf boundaries; get the
	incentives right
Frameworks, models	good examples of businesses where they have competed and
1 14110 (101115), 1110 00 15	collaborated at the same time
Findings /Conclusions	let businesses decide when to work together - where they
	compete and collaborate
Theoretical/ Contribution	reward self interest and let competition flourish
Future Research	•
Themes and Thoughts	

5 U.D. 6	
Full References	Ellinger, A. E., Keller, S. B. and Hansen, J. D. (2006), "Bridging
	the Divide between Logistics and Marketing: Facilitating
	Collaborative Behavior", Journal of Business Logistics, vol. 27, no.
	2 pp. 1-27
Focus	behavioural factors that facilitate or inhibit interfucntional
	collaboration
Unit of Analysis	logistics and marketing functions - 6 logistics and 6 marketing
	managers
Research Context	12 US firms B2B
Research Question / Aim	interfucntional collaboration l use descriptive interview based
	approach for nuance - not adequately captured with survey based
	research p. 2
Claims	develop a more comprehensive understanding of the behavioural
	factors that facilitate (or inhibit) interfucntional collaboration;
	shortage of research that evaluates and describes individual
	experiences
Operationalisation of Variables	describe incidents of a positive or negative interaction - 12 in-
for Collaboration or Competition	depth interviews
Methodology	Qualitative approach - descriptive interview based <u>Critical</u>
niediodology	Incident . 1) perceptions of each other 20 facilitators 3) inhibitors
Theory/Perspectives /literature	collaboration literature AF16 (Gray); management literature
base	Condociation increase in 10 (Oray), management increase
Definition of	Interfucntional collaboration is an informal integrative work
Collaboration/Competition	management approach that involves departments working together,
Conaboration/Competition	having a mutual understanding, sharing a common vision, sharing
	resources, and achieving goals collectively (Schrage, 1990). Inter-
	functional collaboration is an <u>unstructured</u> , informal communicative
	process that is dependent on people s abilities to trust each other,
	build meaningful relationships and appreciate one another's
	expertise and therefore <u>cannot be mandated</u> . (Mintzberg, 1996, p.
F	25)
Factors	Behavioural factors: inclusive communication; strong working
/Antecedents/Conditions	relationships. Joint accountability for outcomes, senior management
	involvement + sub themes p. 9 perceptions of behavoiural factors
	that positively and negatively
	levels of collaborative behaviour may be influenced by managers
	attitudes towards the other function - firmly held beliefs about each
	other as a department; senior management promote interfucntional
	interaction p.16
Mechanisms	
Structural enablers	
Barriers /Facilitators to	Behavioural factors that facilitate or hinder collaboration. p. 12
collaboration/ competition	insufficient knowledge of the other function, lack of
	communication, poor working relationships, conflicting goals, lack
	of direction from senior management - see chart
Frameworks, models	model proposed for further research - effect if outcomes and
	senior management involvement on knowledge/ communication/
	working relationships table of facilitators and inhibitors
Findings /Conclusions	what is needed is how to promote more effective interaction -
	found two tiers p. 18 congruence priorities and objectives - major
	effect on interactions; senior level management "critical catalyst" p.
	18
Theoretical/ Contribution	constituency based view of the firm - views each functional area
	as a specialist that provides unique resources to the firm and
	highlights the tendency for these specialist areas to pursue their own
	goals
Future Research	Propositions to be tested - also about role of senior managers in
	effective more positive interactions - how more effective can
	interactions be? Study Failures of collaboration
Themes and Thoughts	PROCESS - CANNOT BE MANDATED (Mintzberg, 1996)
	What is required to PROMOTE COLLABORATION?
	•
	Collaboration at different levels - at subsidiary level more

autonomy; cross functional - the hierarchy plays a role - informality still needs formal authority it seems. How does collaboration and competition manifest at different levels in the organisation - so look at different units of analysis. Build competencies for developing leadership capability at how to manage the levels of competition and collaboration . How do facilitators and inhibitors line up with Leidtka.?

Full References	Ferrari,B. (2010) "Competition and collaboration in General
	Electric's Global Research Group", The McKinsey Quarterly, issue
	3, p. 105
Focus	collaboration and competition in practice at GE
Unit of Analysis	R & D unit in global company
Research Context	Head of GE Global Research Group
Research Question / Aim	
Claims	how company uses rivalry to stimulate innovation without
	disrupting a culture of collaboration
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	single Interview
Theory/Perspectives /literature	NA
base	
Definition of	what we talk about is working together, collaboration
Collaboration/Competition	
Factors	rivalry as a lever - but secondary to cultural norm of
/Antecedents/Conditions	collaboration; don't focus on people winning and losing
Mechanisms	getting outside competent people to judge these competitions;
	having people come together across disciplines p. 2
Structural enablers	
Barriers /Facilitators to	they don't talk about rivalry
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	rivalry overlooked lever of catalyzing innovation
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

Fong, C., Ho, H., Weng, L. and Yang, K. (2007), "The
Intersubsidiary Competition in an MNE: Evidence from the Greater
China Region", Canadian Journal of Administrative Sciences, vol.
24, no. 1, pp. 45.
subsidiary survival - factors have differential effects on the survival rates of a firm's foreign subsidiaries
Intersubsidiary rivalry - adds empirical support for conceptual
papers on subsidiary survival; foreign subsidiaries in manufacturing
industry
competition between cross strait subsidiaries in the Greater China
region as our empirical setting - MNE Taiwanese subsidiaries
more about the survival rate of subsidiaries under competitive
positions rather than what influences competition -
Under competitive conditions, the survival threat to the
subsidiaries within an MNE is related to the strategic importance of
a subsidiary, resource asymmetry and the characteristics of value
activities.
survival threat - extent of competitive threat it perceives from a
specific peer subsidiary of the same MNE
survey questionnaire
resource dependence theory;
resource based theory;
international business
survival threat to identify competition from mainland China
subsidiary
1) strategic importance to MNE 2) local responsiveness 3)
resource asymmetry - physical and intangible 4) Value activities -
similarity and mobility Luo (2005) local responsiveness will
intensify Intersubsidiary competition
Under Intersubsidiary competition the strategic importance
affects its survival i.e. receive more resources from MNE; local
responsiveness - aggravate competition for parent resources among
subsidiaries; IN practice. A subsidiary can consider differentiating its value activities, creating entry barriers, augmenting its subsidiary
specific advice to avoid direct competition with the subsidiaries in
proximate larger markets and enhancing its survival
study empirically related the criterion for judging the contribution
of resources to SCA (heterogeneity and immobility) Barney 1991,
and to the subsidiary survival within the MNE
Does not include the relationship of the Intersubsidiary
interactions to see if they have any impact. Detailed classification of
Intersubsidiary relationships; opinions of parent company as have
important role in determining survival of subsidiary.
what influences competition here - when resources are
asymmetric and they have to get support of MNE; when their
strategic importance threatens others survival
- ·
what influences competition here - when resources are asymmetric
The state of the s
and they have to get support of MNE; when their strategic importance threatens others survival

Full References	Gammelgaard, J. (2009), "Issue Selling and Bargaining Power in Intrafirm Competition: The Differentiating Impact of the Subsidiary Management Composition", <i>Competition & Change</i> , vol. 13, no. 3, pp. 214-228.
Focus	issues selling - prominent strategy of subsidiaries lobbing - framing and packaging issues
Unit of Analysis	5 case studies on Danish owned subsidiaries in China and India
Research Context	issue selling: parent understand an issue; attract parent co. attention to an issue; lobbying for an issue
Research Question / Aim	1) could subsidiary increase its bargaining power through its issue selling strategies 2) are PCN subsidiary managers better at selling issues than HCN subsidiary managers and therefore have more bargaining power
Claims	subsidiary issue-selling strategy influences its bargaining power in intra-firm competition within a MNC; Parent company nationals have more bargaining power than subsidiary managed by host-country nationals
Operationalisation of Variables for Collaboration or Competition	Competition - see MNC as an internal market system; purposely initiated
Methodology	Comparative case studies - explorative approach
Theory/Perspectives /literature	power (French and Raven, 1959); network - central position;
base	tacit knowledge - Nonaka & Takeuchi, 1995
Definition of	intrafirm competition not defined other than as a result of internal
Collaboration/Competition	market system
Factors	characteristics of subsidiary resources; past performance of the
/Antecedents/Conditions	subsidiary; degree of autonomy; frequent and open communication between subsidiary and PC (Cerrato, 2006)
Mechanisms	·
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	Issue Selling - Sub Bargaining - Intrafirm competition in the MNC
Findings /Conclusions	subsidiaries managed by parent company nationals (expatriates) have more bargaining power than subsidiaries managed by host - country nationals beneficial as innovations and puts pressure on general performance p. 227 however no supporting references to validate claim.
Theoretical/ Contribution	support theoretical assumption that PCN subsidiary managers of culturally distant subsidiaries have an advantage over HCN
	subsidiary managers in selling issues to the parent company
Future Research	Emerging markets effect; is issue selling in I-F competition really beneficial for the MNC?
Themes and Thoughts	POWER

Full References	Coldon D and Ma II (2002) "Mutual Forbasses Tl1f
Full References	Golden, B. and Ma, H.(2003), "Mutual Forbearance: The role of
	intrafirm integration and rewards", Academy of Management
	Review, vol. 28, no. 3 pp. 479- 493
Focus	looks at the understanding of intrafirm integration and reward
	mechanisms to be able to understand the MFS opportunities and
	whether the firm can or wants to take advantage of them
	REWRDS of multipoint competitors
Unit of Analysis	firms operating in multo markets
Research Context	ignored internal arrangements necessary for their implementation
Research Question / Aim	
Claims	ignored internal arrangements - little attention given to the
	incentives to cooperate across businesses within the firm
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	mutual forbearance
base	
Definition of	
Collaboration/Competition	
Factors	divisional <u>rewards</u> effect on willingness to engage in cooperative
/Antecedents/Conditions	behaviours
Mechanisms	internal Integrating and reward mechanisms
Structural enablers	
Barriers /Facilitators to	internal integrating and reward mechanism & organisation
collaboration/ competition	design need to align
Frameworks, models	predicted relationships between integrating mechanisms and
,	incentives to cooperate
Findings /Conclusions	at its core mutual forbearance is collusion between firms: firms
	may be inappropriately aligned that limits their ability to recognize
	or pursue MFS
Theoretical/ Contribution	Propositions reinforce change to way conceptualize and research
Theoretical Controllion	MFS. Develop intra-organisational focus to complement
	extraorganisational focus to aid understanding
Future Research	
Themes and Thoughts	understanding of internal dynamics (intrafirm) to assist in
menies and moughts	understanding of interfirm possibilities - refer to Supply chain
	examples also
	Champics also

Goold, M. and Campbell, A. (2003), "Structured networks:
towards the well designed matrix", Long range planning, vol. 36,
no. 5, pp. 427.
matrix organisations as structured networks - enough structure
but not too much
identifies 8 business units and roles for clarity
matrix organisations as structured networks
NA
organisation design
No definition of collaboration - speaks of collaboration, rather
than cooperation.
clarity of business unit roles (see 8 roles) provide ground rules to
guide collaboration
TOO MUCH, NOT ENOUGH

Full References	Gynawali et al , (2009), "Knowledge ties among subsidiaries in
	MNCs: A multi-level conceptual model", Journal of International
	Management, vol. 15, no. 4, December, 2009, pp. 387-400
Focus	Antecedents and consequences of ties not been examined.
Unit of Analysis	
Research Context	key players in MNC network; MNC that are transnational in
	nature - global integration and local responsiveness
Research Question / Aim	1) What factors influence the likelihood of inter-subsidiary tie
	formation within an MNC 2) how do various contextual factors
	influence the effectiveness of knowledge flow between the partners.
Claims	advances the notion of subsidiary knowledge networking
O C C T C C C C C C C C C C C C C C C C	capability
Operationalisation of Variables	Inter-subsidiary knowledge ties = direct collaborative
for Collaboration or Competition	relationships between 2 subsidiaries within the MNC involving
	creation, transfer, and/or exchange of valuable knowledge.
	(establish a tie i.e. collaborate with each other for the creation and sharing of knowledge)
Mathadalaay	NA
Methodology Theory/Perspectives /literature	intra-firm network.
base	knowledge based view of the firm; subsidiary exchange;
base	learning literature;
	organisational literature;
	social capital;
	geographic cluster;
Definition of	Intersubsidiary ties; as direct i.e. Collaborate with each other for
Collaboration/Competition	the creation and sharing of knowledge p. 394
Factors	factors influence subsidiaries collaborating: goal congruence,
/Antecedents/Conditions	intellectual and social capital, dyadic dynamics, motivation
	(entrepreneurial and strategic vulnerability)
	contextual factors HQ support; nature of knowledge specifies
	conditions p. 297
	strong ties and support from headquarters
Mechanisms	knowledge sharing mechanisms but does not elaborate on what
	they are
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	Develop a multilevel model consisting of subsidiary
	characteristics, dyadic dynamics, salient contextual factors to
	explain the inter-subsidiary collaboration for knowledge
Fig. 1: /C1:	development and exchange.
Findings /Conclusions	set of propositions to explore empirically
Theoretical/ Contribution	1) conceptual model that investigates inter-subsidiary tie
	formation (the foundation of any MNC network); advances notion of subsidiary knowledge networking capability - the ability to form
	manage, and leverage a network for gaining and sharing knowledge
Future Research	p. 398 suggests that managers can seek out partners that are
Tuture Research	culturally and technologically similar i.e Have low
	institutional distance. Reaction: What about the benefits of
	diversity. Subsidiary evolution p. 397
Themes and Thoughts	
	ı

Full References	Hansen, M. T. and Nutria, N. (2004), "How to Build Collaborative Advantage", <i>MIT Sloan Management Review</i> , vol. 46, no. 1, pp. 22.
Focus	interunit collaboration in MNC
Unit of Analysis	inter unit
Research Context	MNCs
Research Question / Aim	
Claims	management levers to promote collaboration
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	
base	
Definition of	
Collaboration/Competition	
Factors	leaders signals; need to learn to work together;
/Antecedents/Conditions	
Mechanisms	change the promotion criteria; recruitment; management levers
	(3) leadership; values & goals; HR procedures; cultivation of
G 1 11	connectors,
Structural enablers	peer assist'- BP, promotion and rewards
Barriers /Facilitators to	identifies 4 barriers: p. 24 unwillingness to seek input; inability to
collaboration/ competition	seek and find expertise; unwillingness to help; inability to work
Formania and de	together; management levers to promote collaboration
Frameworks, models	framework for creating value through interunit collaboration - management levers, barriers to collaboration, value creation
Findings /Conclusions	which management levers to use to reduce barriers to
rindings /Conclusions	collaboration
	collaboration can be a source of competitive advice - reduce 4
	specific types of barriers - benefits from 5 major categories -
	creating additional value from collaboration central to organisation;
	down side - may be overdone - too much
Theoretical/ Contribution	,
Future Research	
Themes and Thoughts	Learn how to work together - this is assumed but not as easy to
	achieve TOO MUCH COLLABORATION, NOT ENOUGH

Full References	Hansen, M. (2009), Collaboration: How Leaders Avoid the
	Traps, Create Unity and Reap Big Results,
Focus	Collaboration within the organisation
Unit of Analysis	
Research Context	multiple research contexts
Research Question / Aim	
Claims	
Operationalisation of Variables	collaboration - working together
for Collaboration or Competition	
Methodology	surveys
Theory/Perspectives /literature	
base	
Definition of	
Collaboration/Competition	
Factors	
/Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	
Theoretical/ Contribution	contribution to the understanding of intraorganisational
	collaboration
Future Research	
Themes and Thoughts	

Full References	Hill, C.W.L., Hitt, M.A. and Hoskisson, R.E. (1992), "Cooperative versus
Full References	competitive structures in related and unrelated diversified firms",
	Organization Science, vol. 3, no. 4, November, pp. 501 - 521
Focus	Cooperative versus competitive structures in related and unrelated
	diversified firms
Unit of Analysis	business unit in multidivisional company
Research Context	CEO (780 largest US firms)
Research Question / Aim	objective of current study is to explore how organisational factors influence the relationship between diversification strategy and economic performance
Claims	Distinctly different internal organisation arrangements are required to realize different benefits hypothesize that 1) firms attempting to realize economies of scope need organisational arrangements that stress cooperation between business units 2) efficient internal governance need arrangements that stress competition between business units. must achieve appropriate fit between strategy, structure, control systems
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	Survey
Theory/Perspectives /literature	Differences in diversification strategy to differences in internal
base	organisational arrangements and managerial rewards systems.
Definition of	
Collaboration/Competition	
Factors /Antecedents/Conditions	COMPETITIVE ENVIRONMENT the system of unrelated firms is predicted to produce competition among divisions for capital (Williamson, 1975)
Mechanisms	integrating mechanisms to achieve lateral communications between
	divisions - not necessary in unrelated diverse firms
Structural enablers	p. 505 coordination enhanced if reward and incentive schemes emphasis interdivisional cooperation rather than performance of each division as an independent unit (Gupta et al, YEAR); p. 508 <u>argue that it is difficult to mix the STRUCTURES required to implement each effectively.</u>
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	Cooperation between business units (economies of scope) 2) competition between business units (internal governance) p. 508 a firm has to choose whether to implement a competitive or cooperative structure. This choice has implications for the value that a firm can create from its corporate strategy.
Theoretical/ Contribution	
Future Research	Competitive and cooperative organisations have different internal configurations with regard to centralization, integration, control practices, and incentive schemes. As a consequence, the internal management philosophies of cooperation and competition organist ions are incompatible. In cooperative organisations, cooperation between divisions is fostered and encouraged. In competitive organisations, competition between divisions is fostered and encouraged. It is exceedingly difficult to simultaneously encourage competition and cooperation between divisions. p. 507 COOPETITION?????
Themes and Thoughts	Competition and cooperative structures as a corporate strategy - is it possible at the same time If so can you realize the value from governance or scope?
	Firms are supposed to be autonomous and yet paradoxically/ contradictory - need to collaborate and hence interdependent - hence move to multidimensional firms; SEE P. 507 - it is exceedingly difficult to simultaneously encourage competition and cooperation between divisions p. 507 (my words) unless in different areas of the business - think coopetition internally) Also synergies - Eisenhardt ???

Full References	Houston, M. B., Walker, B. A., Hutt, M. D. and Reingen, P. H. (2001), "Cross-Unit Competition for a Market Charter: The Enduring Influence of Structure", <i>Journal of Marketing</i> , vol. 65, no. 2, pp. 19-34.
Focus	Interplay among business units as established charters are altered to meet changing customer requirements or capture new market opportunities.
Unit of Analysis	By adopting the business unit as the unit of analysis, study moves beyond cross-functional comparisons to reveal the strategy beliefs that divide senior executives and marketing managers who represent one business unit versus another
Research Context	Cross Business Unit competition for a new charter - high - technology firm
Research Question / Aim	structural realignment on the identities, beliefs and patterns of social ties of managers across Business Units
Claims	Cooperative structures are more conductive to charter development that competitive structures are. Cooperative behaviour enhanced when organisational members have a common identity
Operationalisation of Variables for Collaboration or Competition	cross unit collaboration - communication across units p. 28
Methodology	case study - in depth interviews and post study questionnaire
Theory/Perspectives /literature base	collective action theory of strategic decision processes; social identity theory (Tajfell and Turner, 1985) marketing strategy; marketing literature - politics of charter change
Definition of Collaboration/Competition	competition - charter change
Factors /Antecedents/Conditions	charter development increases competition among units as lobbying for a piece of the pie; management influence - let internal competition flourish across the business units, especially when there is uncertainty involved (Eisenhardt and Galunic, 2000)
Mechanisms	strong identification prompts cooperation with members of group p. 21
Structural enablers	communication across units (cross unit collaboration); patterns of social ties
Barriers /Facilitators to collaboration/ competition	organisational inertia p. 22; strong functional identity inhibits cross functional communications, strong Business Unit identity can impede knowledge flows that a freshly chartered Business Unit was created to capture p. 31
Frameworks, models	good discussion of competitive and cooperative structures affecting different organisational configuration (Hill, Hitt and Hoskisson, 1992)
Findings /Conclusions	results suggest that the identity, beliefs and social ties of managers - endure after a structural alignment, thereby hampering development and implementation of marketing strategy; Roas (1999) knowledge structures; internal forces that develop around the product markets served by Business Unit - isolate empirically the internal forces that endure despite physical separation - strong Business Unit identity can impede knowledge flows
Theoretical/ Contribution	Contributes to strategy -structure performance literature: isolates internal barriers in search for fit: responds to all of evolving nature of markets; the inertial forces that develop around product markets served by Business Units. INERTIAL OR INTERNAL??
Future Research	Alternative approaches that firms use in implementing charter changes and the performance consequences of those approaches - how firms move from one strategy -structure culture position to another - possible thesis area ?????? -how do alternative structural configurations inhibit or support the creation of new charters and the transfer of knowledge across business units.
Themes and Thoughts	Compete for FINANCIAL RESOURCES, INFORMATION, POWER, SUPPPORT AND LEGITIMACY that a new expanded charter provides (Dutton, 1993). The nature of competition among business units varies by organisation p. 21

competitive and cooperative structures - is there the assumption that if they are not competitive they are collaborative and if they do not demonstrate cross unit collaboration they are competitive or
rivals

Full References	Jassawalla, A. R. and Sashittal, H. C. (1998), "An examination of
Full References	collaboration in high-technology new product development
	processes", The Journal of Product Innovation Management, vol.
	15, no. 3, pp. 237-254.
Focus	high technology collaboration
Unit of Analysis	NA NDD
Research Context	high tech firms - NPD
Research Question / Aim	develop a conceptual definition and framework that stimulate
	thinking about collaboration; compare and contrast conceptual
ar :	underpinnings og integration and collaboration
Claims	in NPD literature integration and collaboration used
	interchangeably
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	qualitative exploratory
	grounded study
	content analysis
Theory/Perspectives /literature	new product development literature
base	
Definition of	cross functional collaboration as a type of cross functional
Collaboration/Competition	linkage which in addition to high levels of integration, characterized
	by participants who achieve high levels of at-stakeness,
	transparency, mindfulness and synergies from their interactions p.
	239
Factors	characteristics of the organisations p. 238; macro environmental
/Antecedents/Conditions	forces and impact of participants (micro) - propensity to change,
	cooperate, level of trust, managerial initiatives; organisational
	priority, decentralization of NP needs; leadership - who and how
Mechanisms	structural mechanisms - cross functional teams; marketing
	partnership team, engineering team, cross functional team
	experience, cross functional team (young)
Structural enablers	
Barriers /Facilitators to	generates high - low levels of collaboration
collaboration/ competition	
Frameworks, models	differentiating integration and collaboration
Findings /Conclusions	disinterested participants; high levels of at-stakeness,
	transparency and mindfulness, and synergy - features of cross
	functional linkages
Theoretical/ Contribution	qualitative study of managerial perceptions
Future Research	
Themes and Thoughts	

Full References	Jassawalla, A.R. and Sashittal ,H.C. (1999), "Building collaborative cross-functional new product teams", Academy of Management Executive, vol. 13, no. 3, p. 50-63
Focus	Team formation - collaborative behaviours
Unit of Analysis	Cross functional teams in high technology firms
Research Context	high tech firms
Research Question / Aim	
Claims	
Operationalisation of Variables	NA
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	
base	
Definition of	Collaboration has emerged as a popular metaphor for describing
Collaboration/Competition	a more complex, more productive linkage p. 51. Originating in the
	conflict literature - win win
Factors	Collaborative Teams: at stakeness; transparency; mindfulness;
/Antecedents/Conditions	synergies; accelerators of collaborative behaviours
	environments that promote risk taking and tolerate failure appear to
	foster collaboration p. 61
Mechanisms	
Structural enablers	
Barriers /Facilitators to	senior management emphasis on decentralization, and high levels
collaboration/ competition	of tolerance for delays and failures emerge as accelerators of
E 1 11	collaborative behaviours
Frameworks, models	good model of collaborative cross functional teams
Findings /Conclusions	collaborative behaviours emerge when participants agree on a
	common agenda, openly share concerns and power, commit to
	building trust
	clear signs that collaborative teams bring effective new products to market faster and cheaper p. 52
Theoretical/ Contribution	market faster and cheaper p. 32
Future Research	
Themes and Thoughts	The virtues of collaboration - less as a result of seen
Themes and Thoughts	management directives. Acknowledges the distinction between
	cooperation and collaboration. META CAPABILTIY
	cooperation and conductation. WETA CALABIETT

Full References	Kalnins, A (2004), "Divisional Multimarket Contact Within and
	Between Multiunit Organisations ", Academy of Management
	Journal, Vol. 47, No. 1, pp. 117-128
Focus	divisional multimarket within and between multi-unit
	organisations; assignment to divisions of mandates to operate in
	new markets
Unit of Analysis	HQ and Divisions
Research Context	franchised hamburger organisations MNE
Research Question / Aim	Multimarket dynamics (intraorganisational) simple analogues
	that occur between firms?
Claims	different intra dynamics than inter; developed theory is broad
	enough to apply to other M form organisations
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	Logit regression analysis
Theory/Perspectives /literature	theories of intraorganisational competition and multimarket
base	contact levels;
	mutual forbearance (collusion)
Definition of	
Collaboration/Competition	
Factors	HQ induced competition - new charter (may decrease the
/Antecedents/Conditions	cooperation - i.e. unwanted coalition formation)
	if a firm's divisions face high rivalry from external competitors,
	depressing rival entries via intraorganisational competition p. 127
Mechanisms	
Structural enablers	firm level incentives to induce intraorganisational competition
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	competition between divisions occurs in multimarket setting;
	processes of mimetic isomorphism and localized search differ intra
	from inter
	efficient as a result of competition
Theoretical/ Contribution	logics of divisional autonomy; application of multimarket theory
	to intra organisational setting
Future Research	
Themes and Thoughts	

Full References	Khoja, F. (2008), "Is sibling rivalry good or bad for high
	technology organizations?", Journal of High Technology
	Management Research, vol. 19, no. 1, pp. 11.
Focus	pro - inter unit competition although recognizes that it is a mixed
	bag of opinions
Unit of Analysis	business units or divisions
Research Context	high technology organisations
Research Question / Aim	3 research questions - what facilitates, what role, under what
Research Question / Aim	conditions harmful/beneficial
Claima	
Claims	autonomy to choose market breadth facilitates and promotes
	interunit competition; competition increases innovation
Operationalisation of Variables	NA
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	industrial organisation; game theorists
base	organisational behaviour
	management;
	paper integrates theories from management, marketing, economics,
	and sociology to extend literature on intra-firm competition with a
	new framework
Definition of	"rivalry among business unit or division for current and potential
Collaboration/Competition	product markets and technology and for organisational resources" p.
Condotation Competition	12
Factors	Autonomy; market breadth (overlap in competing technologies),
/Antecedents/Conditions	Ref Mintzberg (1991) - internally influenced by direction,
// intecedents/ conditions	efficiency, proficiency, concentration and innovation . Birkinshaw
	(2001) technological uncertainty, market uncertainty &
	heterogeneity, cost of duplication, size of market, decision to make
	or buy, critical mass, etc p. 12
	ref Fauli-Oller and Giralt (1995) 2) econometric models - divisions
	occur positive spillover (share tech) cooperate; negative spillover
	(substitute prod) competition is needed.
Mechanisms	outcome based (objective) or behaviour based (subjective)
	influence competitive or cooperative behaviours p. 14
Structural enablers	autonomy - managers empowered
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	proposed model of antecedents, moderators and consequences of
	inter-unit competition
Findings /Conclusions	focus and understand the dynamics of intra-firm competition -
e e e e e e e e e e e e e e e e e e e	double edged sword for managers
	Innovation and Performance
Theoretical/ Contribution	theoretical - identify internal/ external contingency factors;
2.11013tical, Contribution	phenomenon of autonomy of market breadth; managerial - allows
	managers to rationally consider I-F Comp
Future Research	study additional predictor variables e.g. organisational culture,
Future Research	also proposed model empirically examined to determine theoretical
	• • • • • • • •
(F) 1 (F) 1	validity
Themes and Thoughts	Paradox between cooperation and competition; coexistence of
	competition and cooperation

Full References	Koulikoff-Souviron, M. and Harrison, A. (2010), "Evolving HR
	practices in a strategic intra-firm supply chain", Human resource
	management, vol. 49, no. 5, pp. 913.
Focus	provide a better understanding of how an intra firm SC initiative
	can change HR practices from being managed separately to
	fostering a more collaborative approach
Unit of Analysis	inter store relationship (intra -firm supply chain)
Research Context	MNC pharmaceutical organisation -business and political issues
	at expense of cultural aspects of the relationship
Research Question / Aim	Seek to provide understanding of how an intra-firm SC initiative
	can change HR practices from being managed separately to foster a
	more collaborative approach How do HR practices evolve within an
	intra-firm supply relationship?
Claims	analysis of intra-firm dyadic level has largely been ignored
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	Case study - exploratory grounded theory
Theory/Perspectives /literature	human resource management
base	supply chain
Definition of	No definition of collaboration provided
Collaboration/Competition	•
Factors	communicating the strategic features of a relationship and mutual
/Antecedents/Conditions	gains by collaborating, facilitates reaching the strategic relationship
	goals
Mechanisms	HR practices - positive effects (high turnover levels disrupt
	social network) - on the job training, exchanges and transfers =
	powerful ways to bridge organisational barriers.
Structural enablers	
Barriers /Facilitators to	barrier to inter-site collaboration - no shared vision, local
collaboration/ competition	national regulatory specificities p. 919
Frameworks, models	
Findings /Conclusions	Illustrates the role of hierarchy in aligning the sites in accord with
	Makela and Brewsters
Theoretical/ Contribution	Contribution to intra supply chain enabling a comparison of inter
	and intra.
Future Research	
Themes and Thoughts	

7 U.S. 4	
Full References	Le Meunier-FitzHugh, K. and Piercy, N. F. (2008), "The
	importance of organisational structure for collaboration between
	sales and marketing", <i>Journal of General Management</i> , vol. 34, no. 1, pp. 19-35
Focus	effective cross functional partnerships between sales and
rocus	marketing
Unit of Analysis	high and low performing companies in large UK organisations in
One of Final Siles	B2B companies
Research Context	explore the role that structure and location of sales and marketing
	functions play in influencing inter-functional collaboration and
	business performance
Research Question / Aim	discover if large organisations have separate or joint management
	depts.; are sales & marketing restructured to improve collaboration
-	and/or performance
Claims	collaboration between sales and Marketing may be important in reducing inter-functional conflict and creating high performance
Operationalisation of Variables	items on collaboration - adapted from a measure "team
for Collaboration or Competition	orientation" (Hult et al , 2002) - members stress collaboration and
The state of the s	cooperation (Tantot at 1, 2002)
Methodology	Quant - compares structure of high and low performance -
	survey . Multi page questionnaire to MD/CEO - scales and
	questions not provided - difficult to assess applicability of
	measures for collaboration
Theory/Perspectives /literature base	
Definition of	
Collaboration/Competition	
Factors	
/Antecedents/Conditions	
Mechanisms	
Structural enablers	Role of structure and location of sales and marketing in
	influencing inter - functional collaboration - organisation structure
D : /E :::/	blunt tool to improve collaboration.
Barriers /Facilitators to collaboration/ competition	sales and marketing in competition for resources and hence do not work well together p. 29
Frameworks, models	not work wen together p. 27
Findings /Conclusions	Suggest that structuring sales and marketing as one joint
1 manigo / conclusions	department does not appear to be associated with greater
	collaboration between sales and marketing. p. 27; contrary to
	previous research, joining up departments and close physical
	proximity show little relationship to collaboration
	p. 21 proper levels of interaction and collaboration across functions
	promises greater performance and success (Morgan and Turnell,
The same of the control of the contr	2003)
Theoretical/ Contribution	Empirically tested the hypothesis that structure and location have
	significant impact on the relationship between sales and marketing and business performance.
Future Research	how collaboration between sales and marketing can be facilitated
ruture Research	without unnecessary restructuring
Themes and Thoughts	COUNTRADICT: CLOSE PROXIMITY - p. 22 if physical
	separation, problems with communication and collaboration.
	(Griffin and Hauser, 1996); INTERNAL COMPETITION FOR RESOURCES p. 29
	consider that joining two departments together like sales and
	marketing will not improve collaboration as two distinct job roles.
	Conflict generated may in fact impede effectiveness.
	Commer generated may in fact impede effectiveness.

Full References	Le Meunier-FitzHugh and Nigel F. Piercy (2007), "Does Collaboration between Sales and Marketing Affect Business Performance?", Journal of Personal Selling & Sales Management, vol. 27, no. 3, pp. 207-220
Focus	
Unit of Analysis	B2B UK based
Research Context	
Research Question / Aim	5 hypotheses
Claims	improving collaboration between sales and marketing benefits the organisation in terms of business performance
Operationalisation of Variables	collaboration measure adapted from Hult, Ketchen and Slater (
for Collaboration or Competition	2002) - team orientation defined the degree to which the members
	of the organisation stress collaboration and cooperation in
	performing activities and making decisions
Methodology	mail survey questionnaire and SEM
Theory/Perspectives /literature	
base	
Definition of	collaboration represents the unstructured affective nature of
Collaboration/Competition	interdepartmental relationships (Kahn, 1996, p. 139)
Factors	5 antecedents: The findings indicate that 1) a positive senior
/Antecedents/Conditions	management attitude toward collaboration between sales and
	marketing, 2) the reduction of interdepartmental conflict, 3) the
	improvement of communications, 4) the establishment of
	organizational learning, and 5) effective market intelligence systems
	- are important antecedents to effective collaboration between sales
Mechanisms	and marketing.
Structural enablers	
Barriers /Facilitators to	interdepartmental conflict
collaboration/ competition	interdepartmentar connect
Frameworks, models	model of interaction proposed
Findings /Conclusions	organisational learning (working together, sharing best practice)
i manigo / Conclusions	is positively associated with collaboration; interdepartmental
	conflict has a negative impact on collaboration p. 214
	internal collaboration improves performance see p. 209
Theoretical/ Contribution	F 2000 F 2000 F 2000 F 2000
Future Research	
Themes and Thoughts	

Full References	Liedtka, J. M. (1996), "Collaborating across lines of business for competitive advantage", Academy of Management Executive, vol.
Focus	10, no. 2, pp. 20-34. focus on partnerships but good practitioner piece -
Unit of Analysis	internal collaboration
Research Context	partnerships in professional services firm
Research Question / Aim	explores the changes in managerial thinking and marketplace
	realities - new strategic significance of internal collaboration
Claims	art of building and sustaining relationships - prerequisite for competitive success - collaboration across lines of business been underrepresented: collaboration is a meta-capability
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature	strategy (competitive advantage)
base	capabilities (essence of advantage) focuses on identification and
	development of processes rather than on particular products or
	markets
Definition of	collaboration - meta -capability - process of decision making
Collaboration/Competition	among interdependent parties: it involves joint ownership of
	decisions and collective responsibility for outcomes (Ref; B Gray,
	(1991) Collaborating, San Francisco,: Jossey-Bass p. 227)
Factors	Partnering Mindset; Partnering Skill set - specific skills
/Antecedents/Conditions	(capability) listening, leading, designing etc ' 'at stakeness' -
	skin in the game cross reference to Le Menieur; trust
	supportive context = commitment, processes and resources to
	facilitate; in PSFs current competitors rather new entrants drive
	changes and increase need for collaboration; pressures from simultaneous centralization and decentralization - need for
	collaboration
Mechanisms	creating shared goals and realistic expectations; conflict
Wiccianisms	productivity; redesigning systems; organisational architecture;
	leadership, joint budgeting and planning processes; reward systems
Structural enablers	successful collaboration requires the development of new skills,
Zuuciaiai chaolois	mindsets, and corporate architectures p. 23
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	Components of effective partnering
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	COLLABORATIVE CAPABLITY - NEW MINDSET OF MGT
	- Collaboration skills New mindset similar to making the matrix work - Ghoshal ?? Date around the same time
	Partnership - across divisions - relationship based. Capability -
	learn new skills and mindset - a new way of working. Urged to take
	ownership but forfeit control

Full References	Loch, C. H., Galunic, D.C., Schneider, S., (2006), "Balancing cooperation and competition in human groups: the role of emotional algorithms and evolution", Management Decision Economics, vol.
	27, no. 2-3, pp. 217-233
Focus	role of emotions to compete or cooperate
Unit of Analysis	groups
Research Context	organisational settings
Research Question / Aim	role of emotions in corporate settings competition and cooperation
Claims	role of emotions in the decision process is ignored p. 218; emotional algorithms programmed through evolution to manage dilemma "me vs. we"
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	MNA
Theory/Perspectives /literature	economics (self interest);
base	theories of emotions;
	evolution;
Definition of	
Collaboration/Competition	
Factors /Antecedents/Conditions	competitive emotional algorithms - seek to maximize their own
/Antecedents/Conditions	welfare (Greed); reward systems (emotionally driven resource
	striving may override rational conduct and induce
M 1 '	(hypercompetitive) behavoiur
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	. 1 1 24 6 1 2 226
Frameworks, models	emotional algorithms form a dynamic system p. 226
Findings /Conclusions	semblance of balance seems key p. 229; need to explore cultural
	evolution as well; social structures need to be designed with our instincts and needs in mind.
Theoretical/ Contribution	new perspective to consider in the balancing of competition and
	cooperation in organisations
Future Research	
Themes and Thoughts	

Full References	Luo, X., Slotegraaf, R. J. and Pan, X. (2006), "Cross-Functional "Coopetition": The Simultaneous Role of Cooperation and Competition Within Firms", <i>Journal of Marketing</i> , vol. 70, no. 2, pp. 1.
Focus	Marketing cross functional
Unit of Analysis	cross functional relationships
Research Context	Marketing
Research Question / Aim	Joint occurrence of cross functional competition and cross
,	functional cooperation (intensity and ability) improve customer and final performance.
Claims	Strategic links between peer subunits has not been adequately addressed. Knowledge sharing captures only cooperative
Operationalisation of Variables for Collaboration or Competition	
Methodology	survey responses from mid level managers & top executives
Theory/Perspectives /literature	RBV;
base	social structure (sociology) - embeddedness (weak and strong ties); marketing
	strategic management
Definition of	Of combining cooperation and competition.
Collaboration/Competition	
Factors	
/Antecedents/Conditions	
Mechanisms	underlying learning mechanism
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	Cross functional coopetition enhances a firm's customer and financial performance. This influence is mediated by market learning, indicating that performance returns to cross functional cooperation occurs through an underlying learning mechanism
Theoretical/ Contribution	Theoretical/ Managerial - right to pursue both cooperative and competitive strategies but does not say how or in what context to do this. Inverted U - at what point is it too much - how do you get the optimal balance?
Future Research	
Themes and Thoughts	COOEPRATION ANTECEDENT OF COLLABORATION; Definitional issues of collaboration and cooperation; Competition not unfavorable is some cases - see Birkinshaw and Khoja

Full References	Luo, Y. (2005), "Toward coopetition within a multinational
	enterprise: a perspective from foreign subsidiaries", Journal of
	World Business, vol. 40, no. 1, pp. 71.
Focus	inter-unit coopetition - COOPERATION and Competition
Unit of Analysis	Foreign (Peer to peer) between geographically dispersed sub-
	units in MNE compete and cooperate with themselves
Research Context	
Research Question / Aim	seeks to provide a conceptual and typological framework of
	coopetition - by content, typology, determinants and infrastructure
Claims	Synchronically competing for parent resources, corporate
	support, system position, and market expansion. article explains
	why coopetition occurs and in what areas they cooperate and
0 1 (37 11	compete, augments a typology that classifies;
Operationalisation of Variables	Coopetition enlightens a fundamental duality: whereas creating
for Collaboration or Competition	value is an inherently cooperative process, capturing value is
Mathadalaar	inherently competitive; cooperation - share knowledge p. 77 NA
Methodology Theory/Perspectives /literature	INA
base Definition of	Coopetition is a mindset, process, or phenomenon
Collaboration/Competition	Coopention is a minuset, process, or phenomenon
Factors	increase collaboration - increase in strategic independence,
/Antecedents/Conditions	technological linkage, transition from J-V to wholly owned sub p.
// intecedents/ Conditions	76 Increase Competition increase in local responsiveness; market
	overlap, capability retrogression (i.e. shrinking, declining, or
	weakening of critical resources and capability)
	commonalities or distances in geographic markets and product
	domains - important conditions that shape dual dynamics of
	cooperation and competition between sub-units - ENVIRONMENT
	or MKT conditions
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	aggressive demander; silent implementer; ardent contributor;
T. 11 (2)	network captain
Findings /Conclusions	Foreign sub-units vary in their levels of cooperation and
	competition - 4 types of situations or identities that broadly reflect
	different arrays of inter-unit cooperation and competition in the
	coopetition matrix. Fig 1 Also intranet system, encapsulation, incentive & coordination
	creating value - cooperative; capturing value - competitive
Theoretical/ Contribution	Rich 1992 note that original classifications exp where
Theoretical/ Contribution	multidimensional sign contribute to theory development by
	parsimony -
Future Research	The individual level of analysis (senior managers of subunits) -
r dedic rescaren	how country managers vision and merits may influence inter-unit
	cooperation and competition.
Themes and Thoughts	varying <u>levels of</u> competition and cooperation; <u>voluntary or</u>
	enforced - check definition of Gray which states that it is a
	voluntary activity - COMPULSORY OR SPONTANEOUS _ HQ
	or subsidiary related p. 80

7 U.D. 4	
Full References	Martin, J. and Eisenhardt, K. (2010), "Rewiring: Cross-Business-
	Unit Collaborations in Multibusiness Organizations", Academy of
	Management Journal, vol. 53, no. 2, pp. 265-301.
Focus	how executives create collaborations that perform at high levels
	- focus is on what generates a high or low performing collaboration
***	- these are reflected in the influences as factors, etc
Unit of Analysis	Cross business unit
Research Context	software industry - knowledge based industries have many
	opportunities for cross Business-Unit collaborations (Grant 1996)
Research Question / Aim	How do executives create high (versus low) performing cross-
	Business-Unit collaborations in Multi Business Unit organisations?
	- (process theory) executives create collaborations that perform at
	high levels
Claims	The question of how executives create cross Business Unit
	collaboration that perform well (versus poorly) is unexplored.
Operationalisation of Variables	Gupta and Govinarajan, 2000 - collaboration (aggregate
for Collaboration or Competition	knowledge flows); earlier 1986 study - collaboration (measured as
	general resource sharing)
Methodology	grounded theory building approach - embedded multiple cases -
	polar sampling (successful/ unsuccessful collaborations); semi
	structured interviews; compare how the same executives in the
	same firms create high and low) performance collaborations
Theory/Perspectives /literature	1) information processing view
base	- addresses cognitive limits of individual (Chandler , 1962)
	2) TCE - potential opportunism
	3) social network theory;
	4) Multibusiness organisation and the study of large firms
Definition of	cross business unit collaboration as collective activity by two or
Collaboration/Competition	more business units within a multibusiness organisation to create
	economic value
Factors	p. 266 social relationships among Business Unit executives -
/Antecedents/Conditions	facilitate creation of high-performance cross-Business Unit
	collaboration by improving familiarity and trust (Hansen, 1999; Tsai and Ghoshal, 1998). Business Unit with high mutual trust -
	likely to form collaborations (Tsai, 2000); multi business team
	decision; self interest p. 287
Mechanisms	Deliberate learning activities that occur prior to the collaboration
Wiccianisms	decision increase motivation to pursue a collaboration p. 282 (
	Executives - low performance ones <u>after</u> the collaboration)
Structural enablers	engage in specific learning activities before the collaboration p.
Structurar chablers	279; aligning motivation with formal incentives and social rapport
	but not enough p. 283; centralized decision making and firm wide
	incentives - higher Business Unit collaboration p.267
Barriers /Facilitators to	complexity - reluctance to collaborate p. 283; executive initiated
collaboration/ competition	collaboration - abandon learning activities prior; poor or
	nonexistent social ties probably barriers to collaboration, p. 293
Frameworks, models	Theoretical framework for the rewiring process that enables
	prediction of how high performance cross-Business Unites
	collaboration occurs.
Findings /Conclusions	Unexpectedly Business Unit members originated ALL the high-
	performance collaborations. how Business Unit self-interest
	promotes, not impedes, cross-Business Unit collaboration;
	Business Unit Centric process leads to better collaboration than
	corporate centric process, importantly, Multibusiness organisations
	operate as complex adaptive systems
	p. 265 Cross -Business Unit collaboration can be a significant
	source of economic value for business units and their parent
	corporations. Bowman and Helfat, 2001; diversification, acquisition
	and value creation in large firms
Theoretical/ Contribution	extend complexity theory multibusiness organisations operate as
	complex adaptive systems; empirical evidence of executives take
	to create effective cross-Business Unit collaborations
Future Research	

Themes and Thoughts	LEADERSHIP influence on collaborations; collaborations are ILL FORMED at the beginning and require learning about what and how to collaborate; SELF INTEREST Business Unit members were not actively searching for collaborations.
	5 specific types of cross-Business Unit collaborations.

Full References	Martin, Jeffrey A.; Eisenhardt, Kathleen M. (2001), Exploring
	Cross-Business Synergies, Academy of Management Proceedings
	& Membership Directory, pp. H1-H6, Academy of Management
Focus	
Unit of Analysis	
Research Context	
Research Question / Aim	
Claims	
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	Literature review on synergies
Theory/Perspectives /literature	
base	
Definition of	Coevolving - routinely changing the collaborative links and
Collaboration/Competition	relationships among the business units - what is the impact of
	friendship and influence in these situations of Rank (2010)?
	Balance the autonomy and coordination of business units. <u>Co-</u>
	evolving - relinking the web of Business Unit collaborations
Factors	
/Antecedents/Conditions	
Mechanisms	H5, processes of knowledge transfer (transferring knowledge
	based resources between Business Unit), coevolving (relinking the
	web of Business Unit collaborations) and patching (reconfiguring
	the Business Unit to address changing market opportunities) . These
	process help bring the market inside the corporate and thereby
	facilitate the coexistence of collaboration and competition among the businesses
Structural enablers	<u>ine businesses</u>
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	3 major sources of synergy: economies of scope, market power,
Tilidings /Coliciusions	and internal governance advantages; 3 processes; knowledge
	transfer, co-evolving (relinking) patching
	Economies of scope (Spreading costs) that have most value
	creating potential 2. Internal governance (internal efficiencies)
	advanced by selectively limiting the coordinated action of Business
	Units - to those that have great probability of revenue
	enhancements 3. Patching adding, cost splitting, transferring,
	combining businesses. ALSO synergies realized through internal
	competition for BU charters p. H5
Theoretical/ Contribution	cross-business synergies
Future Research	
Themes and Thoughts	p.

Full References	Mena, C., Humphries, A. and Wilding, R. (2009), "A comparison of interand intra- organizational relationships: Two case studies from UK food and drink industry", <i>International Journal of Physical Distribution & Logistics Management</i> , vol. 39, no. 9, pp. 762-784
Focus	intraorganisational relationships
Unit of Analysis	2 case studies in the UK food industry
Research Context	UK food and drink industry - supply chain
Research Question / Aim	
Claims	Question theoretical models of collaboration assume that intra- organisational relationships are more collaborative than inter-organisational ones; the information processing view does suggest that corporate executives are likely to have the best information about the most valuable Cross- Business Unit collaborative opportunities.
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	2 case studies -1 inter- and 1 intra- organisational
Theory/Perspectives /literature base	relational view of the firm (Dyer 1998) collaborative adv but does not explain in which collaboration can be more or less effective - when and how close to collaborate; Transaction cost economics market (inter) /hierarchy (intra) Williamson (1975); supply chain - collaboration
Definition of Collaboration/Competition	p. 764 internal collaboration as "an effective process, where departments work together willingly" (Kahn and Metzer, 1996) AND collaboration means working jointly to bring resources into a required relationship to achieve effective operations in harmony with the strategies and objectives of the parties involved, thus resulting in mutual benefit" Humphries and Wilding (2004)
Factors /Antecedents/Conditions	recombinant benefits; potential opportunism (TCE); social relationships (social network theory) Degree of collaboration impacted by power, value, frequency, risk
Mechanisms	110411011, 11011
Structural enablers	
Barriers /Facilitators to	reliance on key individuals can lead to failures to collaborate (Hanbrick et
collaboration/ competition	al, 2001) p. 768
Frameworks, models	collaboration an essential element to integration (Kahn & Metzer, 1996); business relationships failure and success cycles (Humphries and Williams, 2004) - based on Williamsons Organisational Failures Framework
Findings /Conclusions	exploratory research indicates that in both cases intra-organisational relationships have lower levels of collaboration than inter - organisational - As one respondent said: "we work better with our customers than with the other functions in our business" p.777 Why is that?
Theoretical/ Contribution	Practical - managers make better decisions about how their organisation relates internally and externally _ Research - evidence contradicts relationships continuum assumption - possible to have relationships with customers and suppliers that are more collaborative than those between departments
Future Research	the relationships continuum is a widely accepted construct and presenting evidence is a call for further research
Themes and Thoughts	Better INTERNAL INTEGRATION Has an effect on external integration; high end ignores conflict, and lack of internal collaboration p. 766 'we work better with our customers than with other functions in our business "p. 777 MNC as an internal market in MNCs? (TCE inter Market /intra hierarchy) how does this operate in MNCs

Full References	Mintzberg, H., Jorgensen, J., Dougherty, D. and Westley, F. (1996), "Some Surprising Things About CollaborationKnowing How People Connect Makes It Work Better", <i>Organizational dynamics</i> , vol. 25, no. 1, pp. 60-71.
Focus	break out of market/ hierarchy fix and concentrate on how people connect with one another
Unit of Analysis	
Research Context	
Research Question / Aim	
Claims	shifting focus to formal techniques of collaboration may reduce their capacity to collaborate; collaboration needs to occur in context - the customers setting, the plant, the lab; "collaboration is neither consistently good nor pervasively beneficial" p. 70 (see also Hansen); collaboration is a process not an event
Operationalisation of Variables	
for Collaboration or Competition	
Methodology	
Theory/Perspectives /literature	
base	
Definition of Collaboration/Competition	does not actually define what collaboration is but puts in inter/ intra/ govt etc but provides a dictionary defn "to work, one with another; cooperate"; people working in teams, resolving their problems collectively and harmoniously"
Factors	trust; appreciation of others expertise (NPD)
/Antecedents/Conditions	• • • •
Mechanisms	
Structural enablers	
Barriers /Facilitators to	may be vertical hierarchy
collaboration/ competition	
Frameworks, models	A model of collaboration p. 61
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	Role of PHYSICAL SPACE AND TECHNOLOGY - does it facilitate collaboration? COLLABORATE WITH THE ENEMY "for certain activities, it is easier to collaborate with people you don't live with. Good fences can make good collaborators, too" p. 68; POSITIVE CONNOTATION of collaboration: collaboration depends on a degree of BALANCE (inverted U) too much, not enough (see Goold and Campbell) AT36

Full References	Oliver, A.L. (2004), "On the duality of competition and collaboration: network-based knowledge relations in the biotechnology industry", Scandinavian Journal of Management, vol. 20, pp. 51–171
Focus	organisational innovation within knowledge intensive firm, (biotechnology industry)
Unit of Analysis	Networks within biotechnology industry - interorganisational networks
Research Context	knowledge intensive industries
Research Question / Aim	
Claims	flexible prism approach suggested for exploring the competition/collaboration duality -
Operationalisation of Variables for Collaboration or Competition	collaboration - knowledge sharing
Methodology	NA
Theory/Perspectives /literature	networks
base	game theory
Definition of Collaboration/Competition	(inter-firm) collaboration occurs when firms work jointly on the development of products: competition exists in situations in which a set of organisational are providing the same or related products (Callon, 1998, p.44)
Factors /Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to collaboration/ competition	
Frameworks, models	
Findings /Conclusions	integration/ exploitation; stochastic integration and Cartesian distribution of learning; knowledge transfer
Theoretical/ Contribution	application of prism to look at the situations in terms of duality of competition and collaboration
Future Research	which direction to adopt in exploring the duality of the two relational forms
Themes and Thoughts	Duality of competition /collaboration at the inter firm level - what can we learn from this to apply to internal markets of MNC (Birkinshaw)

Full References	Persaud, A. (2005), "Enhancing synergistic innovative capability in multinational corporations: An Empirical Investigation", Journal of Product Innovation Management, vol.22, pp. 412-429
Focus	investigates how intrafirm collaborative relationships among globally dispersed R & D units of MNCs enhance the synergistic capabilities of the MNC group
Unit of Analysis	79 R & D units
	North American, Japanese and European MNCs in the
Research Context	telecommunications, biotechnology, pharmaceutical, chemical and automotive industries.
Research Question / Aim	the nature of the <u>collaborative relationships</u> among globally dispersed R & D units is evaluated in the context of four well established structural constructs
Claims	initiates analysis of relationship - <u>extent to which coordination</u> <u>structures foster close collaborative relationships</u> among R & D units; the global dispersion of R & D activities - innovation + <u>effective cross</u> <u>border coordination and integration</u>
Operationalisation of Variables for	synergistic innovation capability -
Collaboration or Competition	
Methodology	SEM
Theory/Perspectives /literature base	international business and global R & D
Definition of	formalization, social, autonomy, communications - define the
Collaboration/Competition	relationship at inter-subsidiary level
Factors /Antecedents/Conditions	socialization - determined by level of <u>cultural diversity and level of</u> <u>trust</u> among the units; autonomy encourage them to collaborate; communication different from HQ to subsidiary - than inter-subsidiary - trust, encouraging knowledge share etc see p. 416
Mechanisms	control mechanisms - formalization and centralization - socialization mechanisms - (see p. 416) constant travel, language training, conferences, seminars, expat managers 2) communication mechanisms - F2F, internet etc essential for smooth flow
Structural enablers	1) 4 structural variables defining the nature of <u>collaborative</u> <u>relationships (autonomy, formalization, socialization, and communication) p. 412 2) <u>formalization (rules) provides structured context</u> - facilitates collaboration</u>
Barriers /Facilitators to collaboration/ competition	willingness to collaborate positive increase when: complementary skills, knowledge or resources or when costs or risks associations are beyond the single unit p. 416 OR pursue own agenda
Frameworks, models	conceptual and empirical model
Findings /Conclusions	negative link between cultural diversity and socialization raises questions about the effectiveness of cross-border teams p. knowledge generation - synergistic innovation capability
Theoretical/ Contribution	nuanced view of synergistic innovative capability - and unique relationship to coordination structures is significant
Future Research	
Themes and Thoughts	collaborative relationships; use of SEM modeling - look to stats notes for description about why so useful to look at collaboration - works well with small datasets
	datasets

Full References	Phelps, N.A. and Fuller, C (2000), "Multinationals, Intracorporate Competition, and Regional Development", Economic Geography, vol. 76, no.3, July, pp. 224-243
Focus	process of restructuring of MNEs -
Unit of Analysis	Regional Development in Wales
Research Context	
Research Question / Aim	explore sorts of factors internal to parent companies which shape intracorporate competition - exploratory analysis interlocality competition on intracorporate competition for repeat investment
Claims	questions regarding intra-MNE competition - central to contemporary
Operationalisation of Variables for Collaboration or Competition	
Methodology	Case study - intrafirm competition and regional development
Theory/Perspectives /literature base	geographic
Definition of Collaboration/Competition	internally focused competition among affiliates takes place through formal lines of communication and authority, Is closely associated with the desire for "network optimization" - leads to development
Factors /Antecedents/Conditions	intra-MNE competitive processes can be parent company -led or initiated by affiliates - MNE led comp - managed to avoid excess of competition; parent company structures and local plant level factors will play a conditioning role in the type of intra MNE competition; focus of MNE comp on the allocation of technology intensive activities; local policy initiatives; repeated investment
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

Full References	Qureshi, S., Briggs, R. O. and Hlupic, V. (2006), "Value Creation from Intellectual Capital: Convergence of Knowledge Management and Collaboration in the Intellectual Bandwidth Model", <i>Group Decision & Negotiation</i> , vol. 15, no. 3, pp. 197-220.
Focus	relationship between KM and collaboration
Unit of Analysis	
Research Context	intellectual bandwidth - determined by intellectual assets and collaboration capabilities
Research Question / Aim	
Claims	knowledge management and collaboration have common, mutually interdependent purposes and practices
Operationalisation of Variables for	
Collaboration or Competition	
Methodology	literature review
Theory/Perspectives /literature base	intellectual capital; knowledge management collaboration
Definition of Collaboration/Competition	5 patterns of collaboration (Briggs et al, 2003); diverge, converge, organize, evaluate, build consensus
Factors /Antecedents/Conditions	Perceived influence, friendship ties.
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	Intellectual Bandwidth model - that through collaboration intellectual capital can be used to create value
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

D 1 0 17 11 1 (2010) ID 1 17 C	
T 11 T 4	Rank, O. and Tuschke, A. (2010), "Perceived Influence and
Full References	Friendship as Antecedents of Cooperation in Top Management Teams:
	A Network Approach", Business Research, vol. 3, no. 2, pp. 151-171.
Focus	examines the effects of perceived influence and friendship ties
1 0000	between top executives
Unit of Analysis	top management in MNC in Germany participating in strategy -
Cilit of Finalysis	making process
Research Context	2 MNCs in Germany
Research Question / Aim	examine the perceived influence and friendship ties of the formation and maintenance of cooperative relationships between corporation's top executives
Claims	perceived influence as well as friendship ties between any 2 managers will enhance the likelihood that these manager will collaborate with each other; expressive feelings of friendship between top execs
Operationalisation of Variables for	NA
Collaboration or Competition	
Methodology	comparative case study - explorative approach - different in several aspects such as size, industry and formal organisation
Theory/Perspectives /literature	social networks
base	top management theory
	balance theory (Heider, 1958)
Definition of	
Collaboration/Competition	
Factors /Antecedents/Conditions	friendship and influence of top managers; antecedents of collaborative networks - two diff levels 1) individual level determinants educational background, race, sex, citizenship 2) effects of organistional variable e.g. physical distance, procedural justice and open communication see p. 152 expressive feelings of friendship between top execs can be
Mechanisms	enpressive reenings of mondamp electron top entes can be
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models Findings /Conclusions	perceived influence and power may also have beneficial consequences as they increase the attractiveness of these managers as cooperation partners p. 166 top exec seem to trade off their perception of others influence against their friendship seeking behaviour when deciding about their collaborative relationships
Theoretical/ Contribution	
Future Research	study the interrelations between friendship, influence and cooperation ties in even more diverse organisations - different markets and different cultural backgrounds p. 167 based on Hofstede (1980) German culture - what about others; adopt a cross cultural approach -
Themes and Thoughts	Amount of influence imputed from past performance and friendships build up over time. With the amount of restructuring that has happened in the environment due to economic issues, the long established ties have been broken due to restructuring and redundancies - what does this do to the amount of collaboration that is possible with in the organisation. Need to think about first meetings and quickly establish trust and a willingness to collaborate.

Full References	Sanders, N. R. (2007), "An empirical study of the impact of e-business technologies on organizational collaboration and performance", <i>Journal of Operations Management</i> , vol. 25, no. 6, pp. 1332.
Focus	focus on collaboration as the mediating variable between e-business technology and performance
Unit of Analysis	intra-organisational
Research Context	US manufacturing firms - not multinational
Research Question / Aim	extend knowledge on how use of e-business technologies impacts organisational collaboration, a form of integration (Stank et al , 2001)
Claims	
Operationalisation of Variables for Collaboration or Competition	3 scale items: cross-functional planning strategic plan: use of an integrated database; sharing of operations information among departments - tautological defin of construct
Methodology	survey - SEM
Theory/Perspectives /literature base	
Definition of Collaboration/Competition	intra-organisational collaboration defined in depth p. 1335
Factors /Antecedents/Conditions	inter-organisational collaboration has a direct and positive impact on collaboration (Stank et al, 2001)
Mechanisms	
Structural enablers	information technologies - collaboration directly enabled by IT use (Stank et al, 2001)
Barriers /Facilitators to collaboration/ competition	
Frameworks, models	models and constructs are derived from the literature
Findings /Conclusions	Findings show that use of e-business technologies impacts performance both directly and indirectly. Mediated by inter- and intra- organisation collaboration; simple information sharing to true collaboration. intra-firm collaboration has a direct impact on performance
Theoretical/ Contribution	research and practitioner contribution
Future Research	
Themes and Thoughts	

	Singh, B. (2005) Collaborative Advantage in Volatile Business
Full References	Environments, Conceptual Paper, Case Western Reserve University,
	pp. 1-36.
Focus	intraorganisational collaboration - in volatile environments
Unit of Analysis	
Research Context	
Research Question / Aim	
Claims	
Operationalisation of Variables for	
Collaboration or Competition	
Methodology	NA
Theory/Perspectives /literature base	
Definition of	
Collaboration/Competition	
Factors / Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

Full References	Tjosvold, D. and Tsao, Y. (1989), "Productive Organizational Collaboration: The Roles of Values and Cooperation", <i>Journal of Organizational Behavior</i> , vol. 10, no. 2, pp. 189.
Focus	values and cooperation
Unit of Analysis	household appliances section of the electronics industry - part of MNCs
Research Context	
Research Question / Aim	Empirical support of cooperation and competition is based largely on Western sources test with Malay, Chinese and Indian culture
Claims	hypotheses: 1) an orientation to people, shared vision, an emphasis on productivity, procedures to exchange and cooperative interaction reinforce each other and contribute to effective collaboration and organisational commitment . 2) Which characterizes productive companies?
Operationalisation of Variables for	employee conclusions about effective collaboration - not totally clear
Collaboration or Competition	what the employee conclusions were
Methodology	questionnaire developed - 7 point likert scale -
Theory/Perspectives /literature	
base	
Definition of	no definition of collaboration offered -
Collaboration/Competition	
Factors /Antecedents/Conditions	shared vision and mission, values on people and productivity, group procedures to coordinate, and cooperative interaction among employees were strongly related and together contributed to effective collaboration and commitment to organisation
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	seem to indicate model of interdependence is valid for countries operating in Singapore (but also part of large MNC)
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

	Tool W (2002) Social Standard of Communication and the second standard of the second standa
Full References	Tsai, W., (2002), Social Structure of Coopetition within a multiunit organization: coordination, competition and intraorganisational knowledge sharing
Focus	
Unit of Analysis	intra-organisational networks - multi-unit organisation
Research Context	petro chemical plant - large multi-unit company
Research Question / Aim	Use of and effectiveness of coordination mechanisms to facilitate knowledge sharing among organisational units that are competitors. How can firm coordinate different units to enhance knowledge sharing among them?
Claims	organisational units compete with each other in different forms and require different coordination mechanisms to facilitate knowledge sharing; establish a link between coordination and organisational capability both formal hierarchical and informal lateral relations - significant impacts on inter-unit knowledge sharing
Operationalisation of Variables for Collaboration or Competition	
Methodology	Quantitative - sociometric techniques; questionnaire surveys - 'how perceptions affect' both inter-unit competition and knowledge sharing were considered asymmetric (Chen 1996)
Theory/Perspectives /literature base	interunit coopetition: social network perspective of coordination; organisational capability of the firm - RBV resources and competences - organisational capability of the firm - organisation coordination: international management literature; strategy literature; international management research - centralization (Hierarchy)/ interunit social interaction (Lateral); strategy literature
Definition of Collaboration/Competition	interunit coopetition -cooperation - knowledge sharing to pursue common interests/ competition - shared knowledge to make private gains in an attempt to outperform the partners (Khanna et al 1998)
Factors / Antecedents / Conditions	moderating role of inter-unit competition;
Mechanisms	centralization and social interaction as organisational coordination mechanisms
Structural enablers	
Barriers /Facilitators to collaboration/ competition	
Frameworks, models	propose a research model suggesting both formal and informal ways of coordinating such a social structure
Findings /Conclusions	formal hierarchical structure (centralization) negative effect on knowledge sharing; informal lateral relations (social interactions) positive effect on knowledge sharing among units that compete with each other for market share, but not among units who compete for internal resources; centralization detrimental - decentralization becoming more important.
Theoretical/ Contribution	organisational capability view of the firm by showing how an organization's ability to transfer internal knowledge is influenced but both formal hierarchical structure and informal lateral relations
Future Research	Future search might take the form of in depth interviews with employees, to provide insight into the bases for developing typologies and large scale cross-organisation surveys to confirm the existence and scope of the typologies. Possible bases of typologies and the starting point for the investigation might be 'type of organisation' and 'organisational structure' Extend from inter-firm to intra-firm - internal coopetition
Themes and Thoughts	WHAT MOTIVATES - competition motivates units to interact with each other to pursue common interests and benefit from the synergy of inter-unit knowledge sharing. P. 182; Under what circumstances are intra-organisational units competitors? What impact / effect does organisation design (coordination of tasks) have on competition and collaboration? Competition and collaboration can be motivators; multi-unit NOT MNC

Full References	Rauser, O. (2002), "Value added of Corporate Venture Capital: How do CVC units benefit their organizational core?" Uni-bamberg.deH FROM - deposit.ddb.de Msc Thesis +A45
Focus	Corporate Venture Capital interaction with BU - intra-organisational collaboration
Unit of Analysis	MNC - CVC's in Germany, England and USA
Research Context	
Research Question / Aim	
Claims	
Operationalisation of Variables for	
Collaboration or Competition	
Methodology	Case Study
Theory/Perspectives /literature base	RBV, Knowledge based and organisational learning theory, social capital, network theory, agency theory, social exchange theory
Definition of	none provided
Collaboration/Competition	
Factors /Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	many with regard to case study interviews and findings
Findings /Conclusions	
Theoretical/ Contribution	Construct an integrated theory of Intra-organisational collaboration
Future Research	
	EXPLOITATION AND EXPLORATION; motivation
Themes and Thoughts	NOTION OF VOLUNTARY ANC COMPANY ENFORCED - difference with interorganisational collaboration.

Full References	Wood, D. and Gray, B (1991), 'Toward a Comprehensive Theory of Collaboration', Journal of Applied Behavioural Science, vol. 27, no. 2, June, pp. 139-162
Focus	
Unit of Analysis	
Research Context	
Research Question / Aim	
Claims	
Operationalisation of Variables for	
Collaboration or Competition	
Methodology	
Theory/Perspectives /literature	
base	
Definition of	
Collaboration/Competition	
Factors /Antecedents/Conditions	<u>Definition</u> of collaboration; the auspices under which a collaboration is convened and the <u>role of the convener</u> , 3) implications of the collaboration for the <u>environmental complexity and participants control</u> over the environment 4) the relationship between the individual participants <u>self-interest and the collective interests</u> of all involved in the collaborative alliance.
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
F: 1: /G 1 :	
Findings /Conclusions	
Theoretical/ Contribution	

Full References	Zarzecka, O and Zhou, Y, (2011), "Is Cooperation the only way to enhance knowledge transfer within Multinational Corporations? :a study of intrafirm competition from knowledge transfer perspective", MSc Paper A48
Focus	intra-firm competition in overcoming the knowledge transfer barriers - accelerate or inhibit
Unit of Analysis	MNC - researchers employed in R & D structures - intra-firm teams
Research Context	MNC knowledge intensive industry in Nordic region
Research Question / Aim	whether competition can complement cooperation in overcoming knowledge transfer inhibitors in MNC
Claims	better perception of how cooperation and competition could complement each other and enhance the efficiency of knowledge transfer
Operationalisation of Variables for	
Collaboration or Competition	
Methodology	
Theory/Perspectives /literature	knowledge transfer,
base	coopetition
Definition of Collaboration/Competition	(p. 9) concept refers to hostile activities among peer units (Birkinshaw, 2001) which might appear in horizontal or vertical relationships (Bengtsson & Koch, 2000) "a dynamic situation that occurs when several actors in a specific area (market) struggle for scarce resources, and /or produce and market very similar products or series that satisfies the same customer need (Osarenkhoe, 2010)
Factors /Antecedents/Conditions	
Mechanisms	
Structural enablers	
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	
Theoretical/ Contribution	
Future Research	
Themes and Thoughts	

Full References	Ziss, S. (2007), "Hierarchies, intra-firm competition and mergers", International Journal of Industrial Organization, vol. 25, no. 2, pp. 237-260
Focus	
Unit of Analysis	two hierarchical firms - division and local unit
Research Context	acquisition of a rival
Research Question / Aim	ask under what circumstances the merger of two large multiproduct global firms would result in the retention of some degree of intra-firm competition in the post merger setting
Claims	Organisational restructuring following a merger has strategic implications for the intra-firm competition and can lead to an overall increase or decrease in the level of competition in a market.
Operationalisation of Variables for	assumption is that organisational structure is the only way to control the
Collaboration or Competition	degree of intra-firm competition
Methodology	Econometric analysis of oligopoly model
Theory/Perspectives /literature	differentiated Cournet competition
base	
Definition of	
Collaboration/Competition	
Factors /Antecedents/Conditions	decrease competition - transfer pricing, merge two business units; base compensation on own and competing Business Unit
Mechanisms	
Structural enablers	assumption: only way to control the degree of intra-organisational competition is through organisational structure
Barriers /Facilitators to	
collaboration/ competition	
Frameworks, models	
Findings /Conclusions	merger of hierarchical firms engaged in incentive contracting and differentiated price competition are always profitable and involve the elimination of all intra-firm competition
Theoretical/ Contribution	when merging two business units - to engage in output competition or price competition
Future Research	
Themes and Thoughts	