



# **Towards Sustainable Offshore Outsourcing: An Empirical Study on Canadian Manufacturing Small and Medium Size Firms**

**Thèse**

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## Résumé

Longtemps réalisée par les multinationales, la sous-traitance internationale (STI) devient également une réalité des petites et moyennes entreprises (PME) manufacturières. L'avancé technologique et l'ouverture des frontières permettent la répartition de la chaîne de valeurs à travers le monde, en créant des cercles vertueux de meilleures performances. La STI est menée dans ce cadre de la manufacture virtuelle et permet aux PME d'avoir accès aux ressources, compétences et habilités mises à disposition par des partenaires stratégiques tels que les fournisseurs étrangers. Malgré l'utilisation accélérée de cette stratégie d'affaires multifacettes, il y a toujours des débats en cours sur le rôle de la sous-traitance, qui n'est qu'une stratégie de réduction des coûts à court terme ou peut être une stratégie d'entreprise axée sur la croissance à long terme. L'objectif principal de cette recherche est d'étudier le rôle de cette stratégie pour la viabilité à long terme des PME manufacturières. La question de recherche principale est donc de déterminer comment la stratégie de sous-traitance internationale peut être une stratégie qui procure un avantage concurrentiel durable (ACD)? Cette problématique de recherche est analysée à travers l'étude de trois sous question: i) Comment la STI contribue à améliorer la compétitivité des PME manufacturières? ii) Quelles sont les relations entre la STI des activités clés et/ou activités de base et les performances intégrées au niveau de l'entreprise (concurrentielle, financière, stratégique)? et iii) Comment la STI contribue à développer les habiletés dynamiques organisationnelles pour ACD? Ces questions ont été abordées dans cette thèse au niveau de quatre articles en utilisant principalement la méthode qualitative d'étude de cas (à l'exception de la deuxième question, où on utilise la régression linéaire). Ainsi donc, dans un premier temps, nous avons analysé les données secondaires et fait une revue de littérature extensive pour faire les points sur les PME manufacturières canadiennes et leurs stratégies de compétitivité (article 1). Deuxièmement, nous avons étudié avec une approche d'étude de cas, les effets de la STI sur la compétitivité des PME manufacturières (article 2). Troisièmement, nous avons étudié avec l'aide de la régression linéaire les relations entre la STI et les performances intégrées (article 3). Quatrièmement, nous avons étudié avec une approche d'étude de cas, comment la STI contribue à développer les habiletés dynamiques qui peuvent redessiner, reconfigurer et réintégrer les ressources inter-entreprises pour la réalisation des ACD (article 4). Cette étude montre que la STI permet aux PME de se concentrer

sur leurs activités clés, ce qui conduit à une spécialisation et une capacité organisationnelle supérieure. Grâce à l'intégration, la reconfiguration ou le partage des ressources entre les sous-traitantes et les fournisseurs, cette stratégie permet aux entreprises d'accélérer leurs habilités d'innovations de produits et de processus et d'améliorer la part de marchés locaux et étrangers et rend l'entreprise plus flexible. Cette stratégie favorise donc la création de réseaux d'entreprises vertueuses, créant ainsi une structure de production compétitive capable de suivre et répondre aux tendances du marché.

Mots clés: Sous-traitance internationale, Petites et Moyennes Entreprises, Activité essentielle et non essentielle, Habilités dynamiques, Avantage concurrentiel durable.

## Abstract

Manufacturing small and medium size enterprises (SMEs) are increasingly jumping onto the offshore outsourcing bandwagon, which has long been driven by transnational corporations. Technological innovations and opening-up of frontiers lead to slicing up the value chain and to developing a virtuous circle of best performers across the planet. Offshore outsourcing is carrying into this virtual manufacturing framework and allows the manufacturing SMEs access to resources and competences from supplier firms. Despite accelerated use of this multifaceted business strategy, there are ongoing debates on whether offshore outsourcing is only a short-term cost reduction business strategy or can be a long-term growth-oriented strategy. The main objective of this research is to study the role of offshore outsourcing in creating long-term viability of offshoring manufacturing SMEs. The principal research question is thus to explore whether and how offshore outsourcing leads manufacturing SMEs toward sustainable competitive advantage (SCA)? This research problematic is analyzed through studying three sub-questions: i) How does offshore outsourcing contribute to improve competitiveness of manufacturing SMEs? ii) What are the relationships between offshore outsourcing of core and non-core activities and integrated firm level performance (competitive, financial, strategic, and stakeholders' performance)? and iii) How does offshore outsourcing contribute to developing organizational dynamic capabilities for SCAs? These questions were addressed in this thesis by four articles using principally a qualitative case study method (except the second question, which used linear regression). First, we analyzed secondary data and did an extensive literature review to present the state of the art of Canadian manufacturing SMEs and their competitiveness (Article 1). Second, we studied with a case study approach the effects of offshore outsourcing on competitiveness of offshoring firms and what kind of benefits this business strategy brings them (Article 2). Third, we studied with the help of linear regression the relationships between offshore outsourcing and integrated firm level performances (Article 3). Fourth, we studied with a case study approach how offshore outsourcing contributes to developing dynamic capabilities that can reconfigure and re-integrate inter-firm resources for developing capabilities that lead offshoring firms toward achieving SCAs (Article 4). This study shows that offshore outsourcing enables the offshoring manufacturing SMEs to concentrate on their core activities, which leads to superior specialization and capability. Through integrating or sharing inter-firm resources, offshore outsourcing allows firms to accelerate their product and process innovations and organizational flexibility and improve market share in local and foreign

markets. These superior capabilities enable offshoring SMEs to renew and reconfigure inter-firm resources and competencies for SCAs. Thus, the study implies that offshore outsourcing strategy transformed from being short-term arm's-length strategy toward growth-oriented strategy. It also extends the dynamic capabilities view (DCV) by demonstrating the renewing and re-configurability of organizational resources in the offshore outsourcing context.

Key words: Offshore outsourcing, Small and Medium size firms, Core and non-core activities, dynamic capabilities, sustainable competitive advantage.

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## List of Abbreviations

ACD - Avantages concurrentiels durables  
CA - Competitive Advantage  
CBC - Conference Board of Canada  
CC - Core competence  
CRIQ - Centre de recherche industrielle du Québec  
CVM - Chaînes de valeur mondiales  
DCV - Dynamic capabilities view  
DCV - Dynamic capability view  
DD - Delaying differentiation  
ECF - Emerging country firms  
FTA - Free trade agreement  
GPN - Global production network  
GVC - Global value chains  
HCC - High cost countries  
HTBG - High tech born global  
IB - International Business  
IFLP - Integrated firm-level performance  
IMS - Intelligent manufacturing systems  
LCC - Low cost countries  
LCCS - Low cost country sourcing  
LE - Large Enterprise  
MNCs - Multinational corporations  
MP - Mass-personalization  
NAICS- North American Industry Classification System  
NDTI - Nouvelle division internationale du travail  
NGDL - New global division of labor  
NPD - New product Development  
OECD - Organization for Economic Co-operation and Development  
OEM - Original equipment manufacturing  
OMP - Offshoring modular productions  
PFA - Product family architecture  
PIES - Performances intégrées des entreprises sous-traitantes  
PME - Petites et moyennes entreprises  
RBV - Resource based view  
RCA - Revealed comparative advantage  
RMS - Reconfigurable manufacturing systems  
ROI - Return on investment  
RPG - Réseau de production globale  
SCA - Sustainable competitive advantages  
SCM - Supply chain management  
SMEs - Small and medium size enterprises  
STI - Sous-traitance internationale  
TCE - Transaction cost economics  
TiVA - Trade in Value Added

VRIN - Valuable, rare, inimitability and non-substitutability  
WCED - World Commission on Environment and Development  
WEF - World Economic Forum  
WTO - World Trade Organization



## Acknowledgements

Foremost, I would like to express my sincere gratitude to my advisor Prof. Zhan Su for the continuous support of my Ph.D. study and research, for his patience, motivation, enthusiasm, and immense knowledge in the field I worked for my thesis. His guidance helped me in all the time of research and writing of this thesis. His generous supports for attending conferences and mingling with researchers from all over the world made me further dedicated to do research and immersed in the academic life. I could not have imagined having a better advisor and mentor for my Ph.D. study and academic career.

Besides my advisor, I would like to thank the rest of my thesis committee: Prof. Yan Cimon, Prof. Yvon Gasse, Prof. Sophie Veilleux and Prof. Elie Chrysostome, for their encouragement, insightful comments, and feedbacks during various stages of my thesis project.

My sincere thanks also go to all professors with whom I have taken my doctoral courses. All those courses gave me chances to working on diverse exciting projects and discussions with them in the class and out of the class helped me to develop the stamina of doing research.

I thank my fellow doctoral candidates and those who have already completed and enriched me with their experiences. Endless chats with David, Alain, Constance Van Horne, Gildas, Hamza, James, Nasser, Roli, Sidi Mahmud, Nabil, Kamal, Sana, Ana, Salman, Samira, Salma, Fatima, Sandra, Yasmine, Ousseima, Juliane, Abidi, Alexis, Parfait, Huda, Balla, Elaine, Mahfuj helped me to forget all those hardships we go through during the PhD study and Research. I am also grateful to all those who helped me in various stages of my doctoral journey specially Balla, Connie, Elaine, Marian, Xuan, Fatima, Parfait, Alexis and my nephews Samim-Al Azad, Tamim-al Mahmud and Mamunur Rashid.

I am fortunate to have a wonderful supporting family. My parents Alhaj Abdul Mannan Master (Sarder) and Alhajja Shahnaj Begum, always wanted me to complete the doctoral program and my dad passed away without seeing that I am finally getting this lifetime achievement. Therefore, I do dedicate this thesis to my parents as well as to the future generations of my family, especially to my nieces and nephews who might be influenced from my experience to undertake the PhD studies

and research. My brothers and sisters always were supportive and encouraged me to complete the PhD. My uncle and aunt, Mohammad Saifullah and Roksana Saifullah, were always encouraging and supportive and took my news while I was in my solitary office during all these years of PhD journey.

I am also grateful to the Faculty of Administrative Sciences (FSA), Laval University for providing me this opportunity to complete the PhD in a bi-lingual atmosphere where I had the opportunity to enjoy a multicultural environment that enriched me academically as well as for my personal growth. I am grateful to the SSHRC, FQRSC, FSA, CIRRELT, and Stephen A. Jarislowsky Chair on International Business for their generous scholarships and financial aids. Opportunity of teaching both undergraduate and graduate courses in International Management provided by the department of Management was determinant of making me a university level teacher. Dean's awards, FRQ-SC STAR student-researcher's award as well as the DAAD (GESIS-Leibniz Institute of Social Science, Germany) award for research methodology training motivated me greatly to work harder for improving my research capabilities.

## Preface

This thesis contributes to the advancement of our knowledge and understanding of offshore outsourcing of manufacturing SMEs as a growth strategy in the era of global value chains (GVC). We explained how the global value chains have enabled the manufacturing SMEs to develop collaboration with foreign partners for synergistic advantages. One of the ways this collaboration can be realized is through offshore outsourcing. This business strategy enables SMEs to improve their competitiveness, integrated firm level performances as well as develop organizational dynamic capabilities for sustainable competitive advantages (SCA). Each of these topics is described in an essay written as an article. These are the chapters 2, 3, 4 and 5 of this thesis. The thesis consists of six chapters. The first chapter is the introduction and the sixth chapter is the general conclusion.

The second chapter (article 1) describes the global value chains and the competitiveness of Canadian manufacturing SMEs. This paper was presented at the ASAC 2014 conference and added in the conference proceedings. This article is also accepted for publication at the *Academy of Taiwan Business Management Review*.

The third chapter (article 2) on offshore outsourcing and competitive advantage was presented at two conferences. The conceptual part was presented at the Asian Business Research Conference, 2011, and the empirical part was presented at the Academy of International Business-South East Asian Region (AIB-SEAR), conference, 2011, in Taipei, Taiwan. This article was also published to the *Journal of Applied Business Research*.

The fourth chapter (article 3) on core and non-core offshore outsourcing and integrated firm level performance was presented in two conferences. Theoretical part was presented at the Academy of International Business-MENA chapter in Dubai, 2012, and the empirical part was presented to the American Society for Competitiveness conference, 2012, in Washington, DC. USA. This article was published at the *M@N@GEMENT* journal.

The fifth chapter (article 4) on offshore outsourcing and developing dynamic capabilities was presented in two conferences. The theoretical part was presented at the Academy of International

Business (AIB) conference, 2014, in Vancouver, Canada, and the empirical part was accepted for presentation at the Strategic Management Society (SMS) conference, 2014, in Madrid, Spain. We are also working on this paper to submit to the *British Journal of Management*.

The references of these articles are:

1. Mohiuddin, M. & Su, Z. (2014). Global Value Chain and Competitiveness of Canadian Manufacturing SMEs. *Academy of Taiwan Business Management Review*, 10 (2), 2014.
2. Mohiuddin, M. & Su, Z. (2013). Manufacturing Small and Medium Size Enterprise's Offshore Outsourcing and Competitive Advantage: An Exploratory Study on Canadian Offshoring Manufacturing SMEs, *Journal of Applied Business Research*, 29(4), 1111-1130.
3. Mohiuddin, M. & Su, Z. (2013). Offshore Outsourcing of Core and Non-Core Activities and Integrated Firm-Level Performance: An Empirical Analysis on Québec Manufacturing SMEs. *Journal of 'M@n@gement'*, 16 (4), 454-478.
4. Mohiuddin, M. & Su, Z. (*forth coming*). Offshore Outsourcing of Manufacturing SMEs and Developing Dynamic Capabilities. [Will be submitted for publication to the *British Journal of Management*].

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Zhan Su (Professor) is full professor of Strategy and International Business and Director of Stephen A. Jarislowsky Chair in International Business, Faculty of administrative sciences, Université Laval (Quebec, Canada), and my thesis supervisor. As the first author, I have realized the literature review of all the articles, developed the objective of the research and research questions and research design and collected data and analysed the results. Finally I have written the paper. My co-author have contributed by several round of revisions and comments, and offered me pertinent and constructive suggestions for completing these four articles.

# Chapter 1: Introduction

## 1.1. RESEARCH CONTEXT AND PROBLEMATICS

### 1.1.1. Research Context

Globalization, emergence of new technologies, and the rise of smart manufacturing techniques have allowed firms to fragment their production processes, slice up the value chain, and distribute them across the planet. The fine slicing and modularization of manufacturing processes into manufacturing activities have transformed the manufacturing paradigm in the 21st century. Today, manufacturing of almost any product is organized along the global value chains (GVC) touching multiple jurisdictions of the world. Activities performed in a country are shifted to another for re-integrating as intermediate products or components and then again, shifted to another jurisdiction if needed, and re-integrated into the following production step of manufacturing value chains. These activities may travel several countries before they are integrated into a final good, ready for consumption. The “slicing up” of the aggregate value chain transformed the manufacturing landscape in the post-industrial era. The distributed value chains in many industries imply the transgressing of the boundaries of the firm. Offshore outsourcing strategy arose from this new production paradigm, became an important business strategy, and gradually expanded in terms of scale, scope, and pace over the last two decades (Zee & Brandes, 2007) across the value chains. That transforms the competitive ecosystem, in today’s context, from individual firms toward supply chains (Harland, 1996).

The concept of “offshore outsourcing” was first addressed, in its current understanding, by the pioneer authors Kotabe and Omura (1989). Kotabe and Swan (1994) published empirical evidence on the growing importance of international sourcing for firms in the US. Rothery and Roberson (1996) described outsourcing as “the act of turning to an external organization to perform a function previously performed in-house. It entails the transfer of the planning, administration, and development of the activity to an independent third party.” According to Casani, et al. (1996), outsourcing is the “long-term link related to the development of selected activities or tasks by specialized professionals from supplier firms, who, in time, become strategic partners.” The term

“offshore outsourcing” overlaps very often with “global sourcing,” which involves setting up of production operations in different countries to serve various markets, or buying and assembling components, parts, or finished products world-wide (Mol & Rob, 2005). Rodriguez and Robaina (2006) defined outsourcing as a strategic decision that entails the external contracting of selected activities or business processes necessary for the manufacture of goods or the provision of services by means of agreements or contracts with higher capability firms to undertake those activities or business processes, with the aim of improving competitive advantage.

Offshore outsourcing refers to acquiring selected activities from an external organization in a foreign country that possesses the capability to perform those outsourced activities more efficiently and competitively or has complementary competencies that can contribute to the overall competitive advantages of the firm. Offshore outsourcing encompasses the management of flow of components and finished products and know-how across the nations in serving local and international markets with a strong strategic and long-term focus.

Conceptually, offshore outsourcing definitions can be categorized into three:

- i. Those that consider that outsourcing entails a stable, long-term collaboration agreement in which the supplier becomes a strategic partner and where there is exchange of relations with independent firms (Mol, et al. 2005; Quelin & Duhamel, 2003);
- ii. Those definitions that indicate the type of activity or service that can be outsourced, that is, activities and services that are non-strategic for the firm (Quinn & Hilmer, 1994); and,
- iii. Those definitions that consider outsourcing as an action that transfers planning, responsibility, knowledge, and administration of activities, all through contracts (Greaver, 1999; Rothery & Roberson, 1996).

The common objective of offshore outsourcing is the improvement of firms’ “competitiveness,” which refers to the ability of firms to compete for markets, resources, and revenues, as measured by indicators such as relative market share, growth, profitability, or innovation (Kotabe, et al., 2012; Roberts, 2004; Greenwald & Kahn, 2005). In the long run, competitiveness derives from an ability to build at lower cost and more speedily than competitors. The real sources of advantages

are to be found in management's ability to consolidate corporate-wide technologies and production skills into competencies that empower individual businesses to adapt quickly to changing opportunities (Prahalad & Hamel, 1990). In this thesis, sustainable offshore outsourcing refers to long-term economic viability of offshoring manufacturing SMEs.

### 1.1.2. Offshore Outsourcing and Canadian Manufacturing SMEs

Research on offshore outsourcing is dominated by the practices of large multinational companies (MNCs) that offshore parts of their production activities internationally as a means of reducing costs and achieving greater efficiency, flexibility, and access to tangible as well as intangible resources (Doh, 2005; Farrell, 2005; Ramamurti, 2004). Most of the researchers, policy makers, and practitioners focus their attentions on MNCs' offshore outsourcing (Doh, 2005; Levy, 2005; Lewin, Peacock, Peeters, Russell, & Sutton, 2005). On the other hand, offshore outsourcing of SMEs has received far less attention from academics and policy makers (Scully & Fawcett, 1994; Gregorio, et al., 2009; Sinha, Akoorie, Ding, & Wu, 2011). A few researchers, such as Scully and Fawcett (1994), studied offshore outsourcing of SMEs and concluded that the motivations, challenges, and performance outcomes associated with offshore outsourcing of SMEs may differ from those of MNCs in several respects. SMEs may act in a more entrepreneurial fashion, focus on niche market, and are likely to be more ready to react and adopt innovations that arise from offshoring partnerships (Gregorio, et al., 2009). Researchers typically consider SMEs to serve the local market with locally available resources. However, scholars from the entrepreneurship and international business research streams acknowledge that small and medium size enterprises (SMEs) also play important roles in international business (Fujita, 1995; Oviatt & McDougall, 1994; Reynolds, 1997). This stream of research is focused on the internationalization of SMEs to reap entrepreneurial opportunities in international product markets. The other value chain activities, such as offshore outsourcing of these firms, are lacking in academic research. The existing research from different research streams, such as economics (Gorg & Hanley, 2005; Grossman & Helpman, 2005; Grossman, Helpman & Szeidl, 2005), international business (IB) (Parkhe, 2007), strategic management (Butler, 2001; Hoskisson, et al., 1999; Morstead & Blount, 2003; Porter, 1980), and supply chain management (Jahns, Hartmann, & Bals, 2006) are mostly theoretical (Bunyaratavej, Hahn, & Doh, 2007; Kedia & Lahiri, 2007). There are very few

empirical researches with limited findings and sometimes, different from conventional wisdom and theory. For example, early researchers have found that offshore outsourcing will take place in low-cost countries (LCC) (Grote & Taube, 2007). However, the study of Bunyaratavej, et al. (2007, p. 22) found that “a country is more likely to be a destination of higher value offshore outsourcing as the average wage of the country increases.” Research exploring why SME managers decide to outsource various business processes to foreign firms is practically non-existent (Gregorio, Musteen, & Thomas, 2008).

In practice, SMEs dominate the business world in Canada and Quebec with 96% of all types of (for profit) enterprises, 35% of export value, and employing half of the workforce in the province (Statistics Canada, 2007). The importance of SMEs in the Canadian economy and society is enormous. That is why it is very important to explore the venue of offshore outsourcing of Canadian/Quebec SMEs and especially the effect of this strategy on competitiveness in local and international markets. Offshore outsourcing of non-core activities could allow them to focus on the activities they are best at, which in turn can improve their competitiveness. SMEs become more efficient as a result of the information flow that helps them improve technology and learn from the experience of other partnering (supplier) firms and develop a network in order to reap the synergetic or complementary benefits of partnerships. The efficiency and flexibility enhancing benefits of offshore outsourcing can allow SMEs operating under resource constraints to tap into valuable resources from the supplier firms. SMEs very often have size and resource constraints that inhibit their ability to internalize international activities (Buckley, 1988; Dunning, 1980). Offshore outsourcing can allow them to overcome size disadvantages and resource constraints and tap resources owned by others (McGrath & MacMillan, 2000). In fact, through offshore outsourcing, SMEs can obtain benefits of foreign-location-specific advantages, such as access to world-class capabilities and innovation, without building internal multinational operation capabilities. This allows the SMEs to gain both cost savings and access to innovative capabilities. Offshore outsourcing can be even more beneficial for SMEs than MNCs and this strategy can allow them to overcome some of the resource and expertise constraints inherent in their relatively small size. Improved transport, accelerated exchanges, and technological developments enable SMEs to explore outsourcing opportunities internationally. In the past, such international opportunities may have been beyond their reach and were only within the reach of larger MNCs.



Integration of the literature on offshore outsourcing (Gorg & Aoife, 2003; Gorg, Aoife, & Strobl, 2004) with that of “role of networks and learning” in the internationalization process (Chetty & Agndal, 2007; Coviello & Munro, 1997; Johanson & Vahne, 2003, 2006) is needed in order to study the phenomenon of offshore outsourcing of the SME. It appears from this literature that offshore outsourcing is an important mechanism for improving international competitiveness (Gregorio, Musteen, & Thomas, 2008).

Globalization and accelerated competition, as well as increasing consumer demand for value, have pushed firms to look for more efficient and least-cost ways of production with limited resources. The economic and financial crises of the last few years (2008–2013) have further accelerated the need for low-cost strategy for manufacturing firms to survive in the marketplace. At the same time, the financial market’s influence and shareholder pressures have pushed firms to increase their share values, bringing firms to engage in various strategies to satisfy shareholders and to deliver expected market returns. Offshore outsourcing can be a relatively less expensive strategic tool for SMEs to diversify, or to specialize or restructure their business models to survive in this competitive business environment. However, many companies are unable to achieve the supposed advantages from offshore outsourcing. In addition, this operational cost-cutting strategy can easily be replicated by competitors and may not allow long-term competitive advantage for the offshoring firm. A fundamental question thus arises, whether offshore outsourcing is a value enhancing viable strategy. There are no significant studies looking at this issue (Gorg & Hanley, 2004). Large firms have generally more financial, managerial, or technical resources and capabilities to watch their competitors and suppliers and might have less transaction cost than SMEs. Though market openness, technological innovations, and increased exchanges of goods and services have exposed SMEs to foreign competition as well as offering them the opportunity to reap advantage from this open space. Van Gorp, et al. (2007) showed that offshore outsourcing is likely to increase. However, there is insignificant research on this topic in spite of the fact that offshoring of manufacturing SMEs can be an important business strategy that can allow them to compete in the global marketplace. To this researcher’s knowledge, insignificant rigorous study was done on the Canadian manufacturing offshoring SMEs even though the manufacturing SMEs play an important role in the Canadian economy. The relative importance of the manufacturing sector in the Canadian economy compared to the average G7 countries, as well as the particularity of export-oriented

Canadian manufacturing firms, calls for in-depth study on durable advantages from offshore outsourcing of manufacturing SMEs. Offshoring can enable the Canadian manufacturing SMEs to overcome the size-induced resource constraints, develop a virtuous circle of best performers, and integrate inter-firm resources for competitive advantage.

It is believed that manufacturing SMEs enter into offshore outsourcing not only to offshore part of their production activities to the suppliers as a defensive strategy, but also to have access to resources from the suppliers and improve their overall competitiveness, blurring the organizational boundary. Offshoring some activities of these firms not only reduces the operational cost but also allows them to concentrate on higher value adding activities which create long-term advantages. Large firms have benefited from offshore outsourcing initiatives, including cost savings, access to skilled and flexible workforces, and focus on core competencies (CC), for sustainable competitive advantages (SCAs). This thesis aims to shed light on effects of offshore outsourcing on competitiveness of manufacturing SMEs and explore how offshoring allows them to develop their organizational dynamic capabilities that lead to SCA. However, one of the particular challenges is the unavailability of reliable data sources on SME manufacturing firms that are engaged in offshore outsourcing or “*Trade in tasks.*” Conventional trade data register offshore outsourcing activities as imports and exports, overlooking the real contribution of each partner and may count more than once the same components when these are integrated into another product. Thus the conventional trade measures do not reflect the extent of vertical trade, and those measurement problems can confound interpretations of where and how production and value are created (Conference Board of Canada, December 2011).

There are many reasons that influenced the selection of Canadian offshoring manufacturing SMEs as the topic of this study. The share of manufacturing in Canadian GDP is comparatively high and more than 98% of Canadian manufacturing firms are SMEs that increasingly face competition from both emerging and developed country firms in terms of cost, quality, and productivity. An alternative business strategy is the *ordre-du-jour* for the Canadian manufacturing SMEs and offshore outsourcing can play that role with innovative managerial process and practices. Canadian and global manufacturers have different approaches to sourcing locations. Currently, Canadian manufacturers source primarily from the US (79%), with China, less than half as popular (31%)

(KPMG, 2011). Globally, China is the top sourcing location (35%) (KPMG, 2011). Volatility, economic crises, and rising competition in the American market in one hand, and the rising capabilities and market opportunities in the emerging countries on the other hand, are slowly changing the focus of Canadian manufacturing SMEs toward the new markets and destinations. From an evolution perspective, a greater understanding is required about the choices between internally vertical integration and strategic offshoring. This research project is likely to contribute to enhancing our understanding of effects of offshoring on manufacturing SMEs, contribute to the SME offshoring theory development process, and highlight the managerial strategy on how SCAs are created by developing dynamic capabilities of offshoring SMEs in collaboration with their supplier firms.

### 1.1.3. Research Problematics

The previous research on offshore outsourcing was dominated by the cost advantages of offshore outsourcing through arm's-length offshoring. In arm's-length offshore outsourcing, the relation between the outsourcer and the offshoring supplier is "single project based" for short-term cost advantages. However, offshore outsourcing has the possibility of offering access to low-cost/high-value innovations and emergent expertise in manufacturing from the supplier firms. In the last 30 years, advanced emerging countries like China, India, and Brazil have invested heavily in R&D as well as gained experience through working with many multinationals and other firms from developed countries and could make their own technological upgrading. The continuous efforts enabled these countries to offer not only cost-advantageous labor intensive manufacturing service but can also contribute to the ongoing efforts of focused specialization, product and process innovations, and market diversification of Canadian manufacturing firms. The current research sheds light on this issue to explore how the offshoring supplier firms allow Canadian manufacturing offshore outsourcing SMEs to improve their competitiveness and whether the offshoring contribute to integrated firm level performances (IFLP). Moreover, this research explores whether the offshoring contributes to more focus on CC, developing product and process innovation capabilities, opening up new markets, and developing organizational flexibility. These enhanced capabilities can enable offshoring SMEs to develop their dynamic capabilities and likely enable them to be competitive in the volatile market and create SCA.

This research project has multiple objectives. First of all, the project looks forward to exploring the possibility of manufacturing offshore outsourcing SMEs developing their marketplace competitiveness by leveraging resources and competences with offshoring supplier firms. Whereas the dominant view on offshore outsourcing is to send the low-cost labor intensive activities to foreign firms and save some resources, my project rather looks to the organizational capability development process through building, integrating, and reconfiguring inter-firm resources and competences from the offshoring SMEs and their offshoring suppliers. This strategy enables the offshoring SMEs to have more focus on CC, more continuous innovation process, rapid product development, and developing organizational flexibilities. All these may form the organizational dynamic capabilities and lead the firms toward SCAs.

Organizational capability, process, market, and product innovation are critical for Canadian manufacturers to compete and participate in global value chains. With rapid changes in organizational environment, firms have to integrate, build, and reconfigure their resources, competences, and capabilities in a way that can regenerate dynamic capabilities continuously and follow the rhythms of changing business environment. To my knowledge, there are no significant empirical researches that address offshore outsourcing as a growth strategy by considering it as a driver of developing organizational dynamic capabilities for SCA.

Thus, the principal research question is whether and how offshore outsourcing leads manufacturing SMEs toward SCA.

And three sub-questions are:

Sub-question 1: How does offshore outsourcing contribute to improving the competitiveness of manufacturing SMEs?

Sub-question 2: What are the relationships between offshore outsourcing of core and non-core activities and integrated firm level performance (competitive, financial, strategic, and stakeholders' performance)?

Sub-question 3: How does offshore outsourcing contribute to developing organizational dynamic capabilities for SCAs?

To address the above-mentioned issues, we propose the following four *Articles* in this thesis:

*Article 1 (Chapter 2):* The first article on “Global value chain and competitiveness of Canadian manufacturing SMEs” is an introductory article that addresses the broader picture of the Canadian manufacturing sector in the GVC era and discusses the emergent issues for competitiveness of manufacturing SMEs. The article shows that openness of international markets, accelerated exchanges of goods and services, technological development, rise of multipolar production capabilities, and opportunities in international markets for intermediate and final goods have contributed to the “*fine slicing*” of almost any product and dispersing them across the globe for competitive production sites. That is to say, the competitiveness of manufacturing production and marketing of both intermediate and final goods are dependent on both internal and external competitiveness factors of any given firm. Offshore outsourcing is one of the strategies that can help Canadian manufacturing SMEs to integrate into the GVC and sustain in the dynamic marketplace. This paper offers the context of offshore outsourcing in the GVC framework.

*Article 2 (Chapter 3):* The second article on “Manufacturing small and medium size enterprises’ offshore outsourcing and competitive advantage: an exploratory study of Canadian offshore manufacturing SMEs” explores whether and how the offshore outsourcing strategy creates competitive advantage for manufacturing SMEs. This study shows that offshore outsourcing contributes to increased profits, market share, boosts investment in R&D, and improves focus on CC. These changes contribute to the overall competitiveness of offshoring firms. The study implies that the SMEs could improve their sustainability by focusing on more strategic and core activities at both ends, upstream and downstream, of smiling curve and offshoring non-core activities. This could be one of the ways of surviving for Canadian manufacturing sectors where Canada does not enjoy comparative advantage. This is the case, very often, for the low-tech, low- to mid-tech, and mid-tech manufacturing SMEs.

*Article 3 (Chapter 4):* The third article on “Offshore outsourcing of core and non-core activities and integrated firm level performance: an empirical analysis of Quebec manufacturing SMEs” is the natural follow-up and complementary to the second article. This article shows that outsourcing of non-core activities and insourcing of core activities have a positive impact on a firm’s integrated performance. The novelty of this article is the introduction of integrated firm level performance (IFLP) encompassing competitive, financial, strategic, and stakeholders’ performance indicators.

*Article 4 (Chapter 5):* The fourth article on “Offshore outsourcing of manufacturing SMEs and developing dynamic capabilities” explores how offshore outsourcing contributes to the development of dynamic capabilities of offshoring firms in collaboration with the supplier firms. While the previous two articles discuss the relationship between offshore outsourcing and organizational performance in terms of competitiveness of offshoring firms, the fourth article discusses how the offshoring contributes to the development of organizational dynamic capabilities that lead to SCA. This article explores how offshoring allows firms to concentrate more on core activities, contribute to further specialization and development of CC, develop product and process innovation capabilities, improve organizational flexibility, and develop new markets. These enhanced capabilities render offshoring firms more agile in the volatile marketplace and incorporate a dynamicity of competences that could renew and reconfigure inter-firm resources for superior capabilities and compete in the volatile market.

## **1.2. RESEARCH METHODOLOGY FRAMEWORK**

### **1.2.1. Research approach and strategy**

Following Abbott (2001), there is a need for a close alignment between theories, explanations, methods, and research programs in ways that make them resonate with and support each other. The methodological choices cannot be divorced from theoretical positions, nor can theories be regarded as method-neutral. Though no theory is being tested for the case study of *articles 2 and 4* in this thesis, these two articles are inspired by transaction cost economics (TCE), the resource-based view (RBV), and the dynamic capability view (DCV). The theoretical lens adopted in this thesis fits well with the case study methods in exploring the role of offshore outsourcing in

competitiveness of manufacturing SMEs and how offshoring contributes to developing the organizational capability of manufacturing SMEs for SCAs. The DCV is sometimes considered as the extension of the RBV. For both theories, firm-idiosyncratic resources are at the very heart (Gibbert, 2006) and it would be inconsistent to strive toward generalizable research findings. He elaborates on this apparent paradox (Gilbert, 2006, p. 131): "...the acid test for resource idiosyncrasy would be the lack of generalizability of research findings irrespective of a research methodology's propensity to produce generalizable findings." The resource idiosyncrasy of the manufacturing offshoring firms further requires the case study method that enables the researcher to dig deep into the topic for better understanding and reasoning of the phenomenon. In case of the RBV and DCV, mixing theoretical assumptions of heterogeneous and idiosyncratic combinations of resources as conferring uniqueness and competitive advantage to individual firms does not fit with methodologies that rely on homogeneity, decomposition of wholes into discrete parts, additive effects of individual variables, and generalizability as an epistemological logical test.

An assumption of resource heterogeneity would make suggestions of generalizing research findings inconsistent with this basic assumption. As far as case studies in offshore outsourcing management are concerned, Stuart, et al. (2002, pp. 421–422) argue that: "Case studies should not be seen as a methodology appropriate only for understanding and the preliminary stages of theory development. Because of their observational richness they also provide a means of refutation of, or extensions to, existing concepts." Furthermore, they suggest that a powerful way to consider the value of cases is by taking a "customer focused approach" to the issue (Stuart, et al., 2002, p. 431).

Multiple case studies on offshore outsourcing research are currently the dominant approach (Howard, et al., 2006). Among the most popular references are general social science and management sources, namely, Eisenhardt (1989), Glaser and Strauss (1967), Miles and Huberman (1994), and Yin (2003), as well as sources cited in the cognate discipline of operations management, such as Meredith (1988) and Voss, et al. (2002). Among them, Eisenhardt's (1989) often-quoted approach to building theory from multiple case studies has, in recent years, become extensively used in the field. Eisenhardt can also be taken to task on how and why multiple case studies should be carried out. The nub of Eisenhardt's (1991, p. 627) argument is that "*Good theory*

*is fundamental for the result of rigorous methodology and comparative, multiple-case logic.”* However, there are still debates on generalization from case studies. Easton (1998) states that even enthusiastic case researchers fail to appreciate the differences between the logics of statistical and analytical generalizations. In qualitative research, it is common for researchers to define the scope of their theories narrowly and propose generalizations that rely not on the typicality or representativeness of the case, but upon the cogency of the theoretical reasoning” (Michell, 1983, p. 207). In the case research logic, there is a focus on explaining the intricacies of each case and reliance on finding causal relationships within each case rather than by selecting, measuring, and comparing a number of attributes in each case. That is to say, comparison across multiple cases cannot rely on a “statistical” logic and hence the set of cases should not be confused with a sample. Multiple case studies should not be confused with observations drawn from a pre-specified population according to randomness or representativeness criteria (Ragin, 2000, p. 31). We applied non-probabilistic sampling modes, meaning that the global population constituents did not have an equal probability of being included in our sample. Sample selection is less random and this sample does not allow generalization, as it does not guarantee representativeness of the total population (Trochim, 2002).

According to Thietart (2003), there are three kinds of explorative research: i) *theoretical exploration* that develops new linkages among the existing streams of theories where the researcher keeps the elements pertaining to each background in order to formulate the conceptual framework—the second article of this thesis falls into this category; ii) *empirical exploration* intends to explore unknown phenomena and the researcher needs to be immersed in study settings; and iii) *hybrid exploration* that brings together both the theories and observations. In this context, the researcher depends on the existing literature to make sense of data that can lead to the development of new concepts and understanding. The hybrid exploration enables the researcher to define new theoretical backgrounds that can be tested at a later stage. The fourth article of this thesis falls into this category. There are also two kinds of paradigm in exploratory research: interpretativist and constructivist paradigms. The former captures the reality as the participants perceive it (Thietart, 2003) and the researcher tries to understand and report on the significance derived by those participants from their experiences and behaviors (Spiggle, 1994). The latter lets the researcher derive reality by himself, as the reality is not delivered by the participants. Thus,



constructivism implies that the researcher contributes to the construction of social reality (Thietart, 2003). In this research, the second article falls into the interpretativist paradigm and the fourth article falls into the constructivist paradigm. Both approaches view reality as relative and context bound and non-deterministic. That means these two paradigms acknowledge the existence of multiple realities.

On the other hand, the third article is based on the combination of TCE and the RBV. These two theories explain the governance structure of manufacturing activities, when and why firms concentrate on their core activities, and when and why they do offshore outsourcing, and what are the effects of offshore outsourcing or insourcing on the integrated firm level performance (IFLP).

### 1.2.2. Research Design

The absence of offshore outsourcing theory and the use of multiple theories drawn from different fields shows that research in this field is scattered in multiple directions and the field is still in a pre-paradigm phase. The comparative newness of offshore outsourcing of SMEs requires an in-depth exploratory approach to get into the heart of the topic in order to understand what exactly happens to offshore outsourcing SMEs. We adopt the interpretative and exploratory approaches of multiple case studies to get practical insights of offshore outsourcing of SMEs on an operational as well as strategic level and to build a theory of strategic offshoring that gives firms not only short-term competitive advantages but also SCA through developing organizational dynamic capabilities. Qualitative case research brings novel and accurate insights when the extant theory seems inadequate. A multiple case study is attractive, because it allows detections of patterns across classes or clusters to understand complex phenomena and their dynamics and produces compelling evidence in a robust manner (Stake, 1995; Yin, 2004). Such a design also facilitates examination of how a phenomenon performs in different settings and environment (Stake, 2006). The case approach is viable for such purposes, as rich anecdotal description adds depth, comprehensiveness, and knowledge to the understanding of a specific phenomenon (Mintzberg, 1979; Shah & Corley, 2006). Case study and grounded theory are employed to explore processes, activities, and events (Creswell, 2003). According to Yin (1994), the use of case studies is typical in the early theory development stages, when investigating events or phenomena that have little or

no precise theoretical background and no a priori theory can be identified to select case studies and the constructs to be examined. The case study is an interesting method, especially when the study question is asked in the form of “what is going on” (Bouma & Ling, 2004, p. 17). In fact, “multiple case studies” is an approach that allows the exploitation of advantages of deductive approach and those of the inductive approach for knowledge production. Research is inductive when reflection is emergent and iterative with respect to the data collection problem statement and analysis processes. The inductive analysis offers results when the theoretical saturation is attained in terms of identified data categories. On the other hand, qualitative deductive approach refers to the case when it is based on a conceptual framework integrating propositions stemming from related backgrounds. This study (Article 2 and Article 4) encompasses both these approaches. According to Creswell (2003), inductive and deductive approaches go together in qualitative research. The qualitative study provides a thorough understanding of the phenomenon of interest in its real context, emergent and it takes place within the participant’s natural environment. The researcher moves to the participants’ sites and observes the activities, thus ensuring greater involvement in the research context (Creswell, 2003). Case study enables researchers more deeply to explore programs, events, activities, processes, and individuals (Creswell, 2003). Therefore, the application of multiple case studies as the method is useful when confronted with insufficient theoretical backgrounds. Moreover, Jiang and Qureshi (2006) assert that more than 57.5% of research on offshore outsourcing is qualitative.

There is little or no debate on benefits of offshore outsourcing to the supplier firms and to their respective economies. But research on benefits from the SME offshoring strategy to developing capability of firms, competitive advantages, and growth strategy is insignificant. We choose 13 manufacturing SMEs for the second article and 10 SMEs for the fourth article. Usually, four to ten cases are considered effective for deriving full benefit from a multiple case study research (Eisenhardt, 1989; Stake, 1995). For the purpose of this study, I used the number of employees, which appeared straightforward and sufficient. From 10 to 49 employees forms the small and from 50 to 500 forms the medium size manufacturing enterprises. For this study, we took samples from medium size firms.

There is no government or private organization that maintains a database of offshoring firms. The current international trade database does not take into consideration the input-output model of international trade and we do not have exactly the share of contribution of each country or firm to a product made in the world (WTO, 2013). In order to find offshore outsourcing manufacturing SMEs, I contacted the *Banque d'information industrielle of the Centre de recherche industrielle du Québec* (CRIQ). This organization provided a list of manufacturing SMEs who are engaged in importing intermediate products and components from abroad. This is to note that firms usually register as import when they bring back the offshored activities/tasks in order to re-integrate into their production system. I have also attended the “Association of Supply Chain” professional conferences and other activities of the association, where I met people who are directly involved with offshore outsourcing activities. Contacting by telephone and meeting in the specialized conferences and discussing my research project with prospective mid- to senior managers (vice president of supply chain), we have selected those firms that satisfy the criteria for data collection. Before actual data collection, we have also done a pilot study on four manufacturing SMEs to test the interview guide and to see how it works and whether the prospective interviewees respond to my questions. We interviewed mid- to senior level managers in order to collect strategically oriented data for analysis for this research project.

We made in-depth semi-structured interviews in order to collect the data from the mid-to-higher level managers of the selected firms. An interview protocol was designed, with a set of semi-structured questions related to the research questions before the interview, to guide our data collection process. The interview method is an effective way of soliciting and documenting, in their own words, an individual's or group's perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, in addition to factual information (Saldana, 2011, p. 32). We follow Kvale's (1996) recommendations during the interview process of the case studies. Kvale (1996) describes seven steps of an interview investigation: i) Thematizing is about answering the questions what, why, and how. What is about defining the topic and preparing by reading and making a literature study of the topic. Why is the purpose of the study, and thereby also the purpose of the interviews? The how question is related to the next step, designing. ii) Designing is the planning of the interviews, including all the following steps. It includes interview types, number of interviews, and the resources available for conducting the

study. iii) Interviewing is the actual interviewing with the help of an interview guide. iv) Transcribing means writing down what was said during the interview and preparing the interview material to be analyzed. v) Analyzing, where it is decided which methods for analyzing the material are appropriate. vi) Verifying is about how valid and reliable the findings from the interviews are, and also if it is possible to generalize the results. vii) Reporting is writing the results of the study down in a readable and scientific way, considering the ethical aspects of the investigation. These seven steps briefly describe how an interview is to be conducted and how the results would be handled.

The choice of mid- to high-level managers, considered as “strategic managers,” was based on the type of strategic questions we are investigating and only these strategic managers can have the answers to these policy-oriented questions. We established an interview protocol containing broad semi-structured questions/interview guide (Annex: 01, Annex: 2) on the SME’s offshoring before starting the interview. The questions are drawn from a literature review in this field. Based on the interviews, more in-depth questions were developed in order to gather more insightful data that reflects the interviewee’s own perspectives and experiences. We collected general information on offshoring of the sample firms as well as specific information, such as effects of offshoring on performance (McIvor, et al., 2009) and overall competitiveness, in order to observe whether the offshoring contributes to higher performance and competitiveness of these firms. Further, for the fourth article, we have investigated how the offshoring manufacturing SMEs can develop organizational dynamic capabilities through interacting with their suppliers. All the interviews were recorded and analyzed using the “content analysis method,” which is “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2003, p. 18). Researchers highlighted the importance of recording interviews and keeping a logbook during site visits and conversations, and more importantly, describing features such as surrounding physical environments and interviewee perceptions (Creswell, 2003; Miles & Huberman, 1994). They also emphasized the importance of properly leveraging firm documentation before and after interviews (Miles & Huberman, 1994). The following table highlights the benefits and the drawbacks of individual semi-structured interviews:

**Table 1: Advantages and Limitations of Semi-structured Individual Interviews**

| Advantages  | Limitations   |
|---|---|
| <ul style="list-style-type: none"> <li>• Useful when participants cannot be observed directly.</li> <li>• Convey historical data provided by participants.</li> <li>• Increase the control exerted by the interviewer over collected data.</li> </ul> | <ul style="list-style-type: none"> <li>• Provide information that is filtered according to the interviewee’s subjective perception.</li> <li>• Presence of the interviewer can influence responses.</li> <li>• Individuals are not equally perceptive, articulate, and analytical, which can impair the relevance of gathered information.</li> </ul> |

We also studied the annual reports, news, and and/or published articles in the daily or weekly magazines (i.e., *Les Affaires/Canadian Business*) on our “sample firms,” and other documents regarding these firms. Some of these documents are available publicly and others privately procured through signing of confidentiality letters. We use an inductive approach for “content analysis method” by Nvivo to study these documents. The coding process was undertaken by Nvivo 10.0 and that facilitates the archiving and handling of data stemming from individual interviews. This software provides tools and features, along with various functionalities supporting note taking, transcription, editing, coding, and archiving. The various functionalities enable the researcher to highlight salient information, making linkages between related categories, analyzing and representing them in order to formulate a new theory. Efforts were deployed to triangulate or corroborate our hunches about particular constructs and patterns; we paid particular attention to counter evidence in order to investigate the multiple possible effects in offshore outsourcing strategy.

This study will use a mix of an explanatory and an exploratory case study. It is an explanatory case study where we will be looking to observe the influences and effects instead of the positivist constructs of simple “cause and effects” (Saldana, 2011, p. 70) of offshoring of manufacturing SMEs on their long-term competitive advantage. This research is also an exploratory case study,

as we are investigating or exploring how an offshore outsourcing strategy allows offshoring firms to develop organizational capability in terms of focusing on CC, co-developing process innovation, and developing new products and markets, as well as developing organizational flexibility. These capability development processes enable firms to have dynamic capabilities and that leads to SCA. The choice of the dynamic capabilities view (DCV) matches well the research topic (article 4) of this research project.

We used face-to-face interviews with at least one senior manager or strategic manager in charge of offshoring activities in each of the 13 companies. The interview questions were around the research questions of this research project. Our interview was for a period ranging from 90 to 120 minutes. This method is very effective and executives spoke freely supported by data and their experiences in quest of competitive advantage through outsourcing. We put emphasis on listening to other information that the respective executives thought important regarding offshore outsourcing. Knowing that “qualitative research does not always lead to clear conclusion” (Bouma & Ling, 2004, p. 18), we kept the sequence of events and created a database for each firm and notes on description and interpretation of the data collected. We recorded the conversation and kept the transcript after each interview. An analysis of sample cases enabled us to make a better data summarization. We then coded the interview notes and transcripts. We used an iterative process of comparing, coding, and analyzing the data that enhanced the rigor of data analysis. The criteria of validity and reliability of the findings were ensured in every step of research, such as constructs building, interviews, database creation, data analysis, and triangulation of data, data patterns, and replication logic in similar firms. Finally, transcripts of the interviews were validated by the interviewees. We employed various tactics in order to minimize observer bias and data-access limitations (cf. McKinnon, 1988).

### 1.2.3. Data Collection

Case study was undertaken by means of common data collection methods, such as individual interviews, participative and non-participative observation, and secondary data from publicly available documentation (Thietart, 2003). We triangulated the different sources of data: individual semi-structured interviews, non-participative and unsystematic observations, and secondary data

on manufacturing SMEs of the sample firms. An interview guide was also prepared for the semi-structured interview process. Triangulation of data sources conveys diversified information. A qualitative approach allows the usage of multiple interactive methods that are based on human contact (Creswell, 2003). Thus, triangulation provides an effective means of reinforcing internal validity (Langford, et al., 2002; Verville & Halington, 2002; Kan & Parry, 2002). Semi-structured interviews are based on broader questions and do not require the researcher to stick to any predetermined protocol. The interview was conducted based on the progression of discussions and respondent idiosyncrasies and the questions of the interview guide were adjusted along with the advancement of the discussions with the managers.

#### 1.2.4. Data Analysis

Data analysis follows a process in qualitative research that starts with data breakdown and ends with the generation of concluding remarks based on the findings. In the data analysis process, the researcher needs to look for analytical questions and reflect on the data for eventual meanings that lead to a theoretical saturation (Creswell, 2003). The same author proposed the data analysis process of qualitative research that we followed in this research: i) Data combination by transcribing interviews and notes taken during the interview and site visits and documenting and sorting data by source. According to Miles and Huberman (1994), a pre-analysis stage is mandatory to check collected data and decide whether there is a need for additional information. The data collection, transcription, and analysis took several stages and we went back to the transcription of data that assured the completeness of data. We ensured transcription of the interview content in order to ensure correctness of data analysis. Listening several times to the interviews, taking notes about possible interpretations, identifying emerging patterns, re-reading materials, and reviewing organizational documents and published reports were undertaken in this stage. ii) The second stage is making sense of the data by highlighting the broader threads of the data and assessing the overall quality of collected data. iii) The third level of data analysis was the coding process. Coding refers to “operations in which data are broken down, conceptualized, and put back together in new ways” (Walker & Myrick, 2006) and involves the generation of concepts through the process of coding. We have derived categories from the data and labeled them using common titles. Miles and Huberman (1994) mentioned that the coding process consists of

simplifying, extracting, and transforming written information. There are two kinds of coding: a priori and posteriori (Thietart, 2003). The a priori coding is inspired from previous studies. The posteriori coding refers to the generation of concepts from the data as an outcome of the coding process. This process enables the researcher to see the emergent meanings of the data. iv) The fourth stage is data representation, where the author depicts the chronological progression of key parameters, and questions specific categories and variables more thoroughly in order to present arguments on potential interdependencies. Data representation is done by developing charts, figures, graphs, and matrices (Miles & Huberman, 1994). v) The fifth stage concerns the construction of a comprehensive framework where the researcher develops the overall findings and proposes a framework in qualitative research.

In data analysis and converting to useful meanings, the coding process is considered the most important. According to Glaser (2002), there are four coding processes, which we used in this study: initial coding, axial coding, selective coding, and theoretical coding. In the initial coding stage, data is thoroughly examined, compared, conceptualized, and categorized. It describes the overall features of the phenomenon. Data are broken down by asking simple questions like: what, where, when, how, and how much. Through multiple examinations of the data, the most appropriate meaning of the data is explored. Axial coding is the next stage, where categories derived from data are sorted and linked together to form hierarchical interrelations, and puts data back in new ways. By making explicit connections between categories, a system of coding was created by identifying causal relationships. The next level coding refers to selective coding that employs constant comparison and memoing that leads to dense, saturated core categories. The core categories are then sorted, written, theorized, and cross-referenced with literature, during theoretical coding (Jones & Alony, 2011), which leads to a theoretical model. In brief, the research process is summarized here:



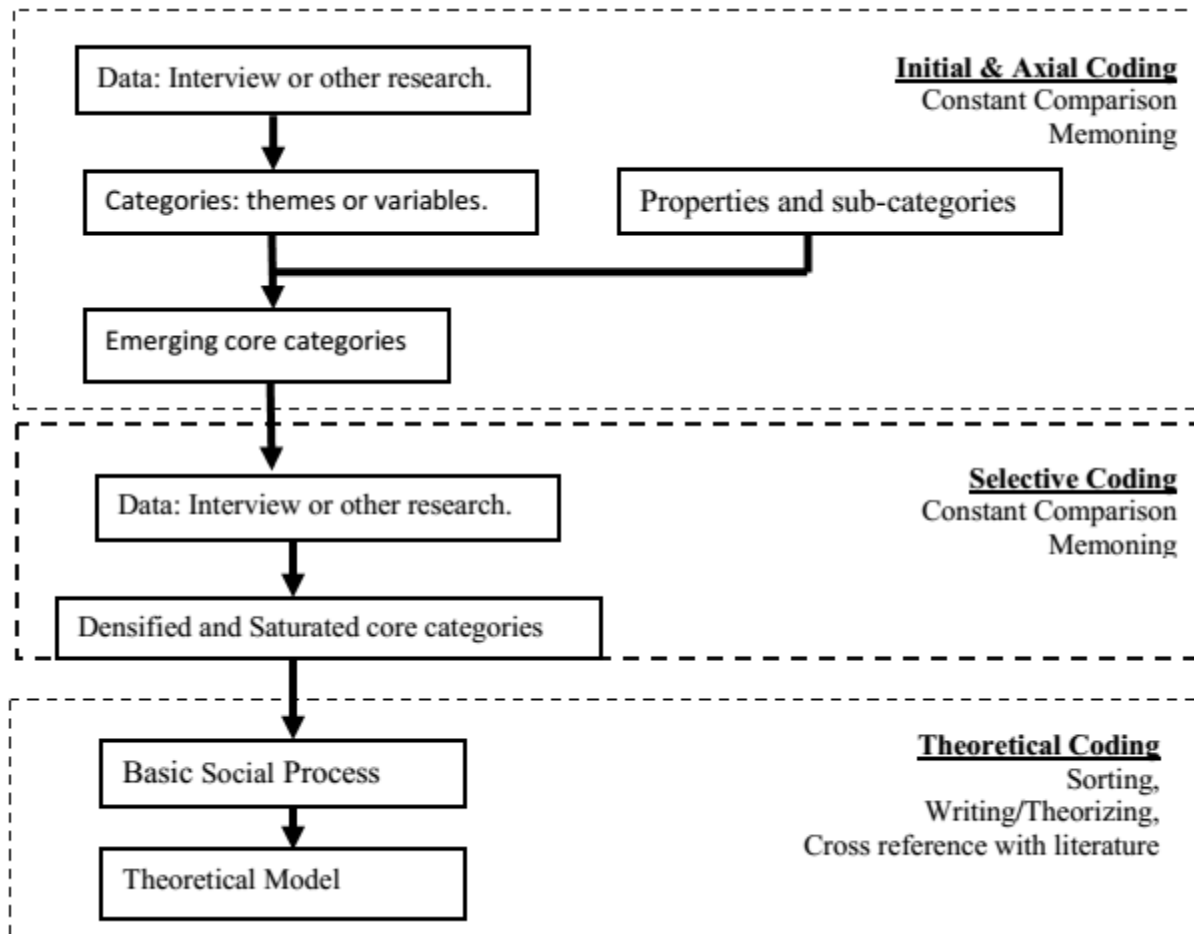


Figure 1: Data analysis and research process [Adapted from Jones and Alony, 2011).

The theoretical coding led us to developing the propositions for theoretical development.

### 1.2.5. Validity and Reliability in Qualitative Study

Validity in qualitative research differs from quantitative research. Some even reject the basic assumption that there is a reality beyond our perception of it. That means it does not make sense to be concerned with the “truth” or “falsity” of an observation with respect to an external reality (which is a primary concern of validity). While it is commonly accepted that certainty in scientific inquiry is futile (Maxwell, 1990), validity standards in qualitative research are even more challenging, because of the necessity to incorporate rigor and subjectivity as well as creativity into the scientific process (Johnson, 1999). In addition, disparate qualitative methods espouse different evaluative criteria.

We have adopted three types of indicators, internal validity, external validity, and reliability, as the validation strategies. According to Creswell (2003), reliability and external validity are not crucial in qualitative research, contrary to quantitative empirical research. Reliability in qualitative research depends on constancy in responses (Creswell, 2003) and the same indicator in quantitative research depends on the measuring instrument. This instrument should capture the same thing when used several times. On the other hand, reliability in qualitative research lies in veraciously reporting the dynamism and the evolution of a given phenomenon. The qualitative research paradigm dictates that it is unlikely that an emerging phenomenon remains static and unchanging (Trochim, 2002). Keeping in mind the philosophical particularity of qualitative research, we formulated our interview questions in a way that captures the dynamism of offshore outsourcing of manufacturing SMEs and how they develop dynamic capabilities in collaboration with their supplier firms.

There is broad consensus among researchers on external validity, that the generalizability in the sense of producing definite rules that can be applied universally is not a useful standard or goal for qualitative research. Generalizability in qualitative research is best thought of as a matter of the “fit” between the situation studied and others to which one might be interested in applying the concepts and conclusions of that study. In our study, we explored the way offshore outsourcing creates value by enhancing competitiveness and these advantages can be sustained through developing organizational dynamic capabilities, and these findings fit the theoretical understanding that when firms cooperate they can create synergetic advantages and create value for all the partners. According to Creswell (2003), external validity consists of truthfully and thoroughly specifying the detailed mechanisms in which the results were generated, so that future researchers can judge to what extent they can use the mechanisms in a different setting. Broad descriptions of qualitative research are crucial. Detailed descriptions of both the site in which the studies are conducted and the site where the studies may generalize are critical, and these detailed descriptions can highlight the similarities and differences between the situations. Analysis of these similarities and differences makes it possible to make a reasoned judgment about the extent to which we can use the findings from one study as a working hypothesis about what might occur in another situation. Multi-site studies can also enhance the generalizability of findings. In our study,

we have sample firms from different industrial sectors, geographical locations, and clusters. Different sources of data, such as semi-structured interviews, document analysis, and other publicly available sources of data, enhance further the breadth of the database and triangulation is likely to reinforce external validity (Kan & Parry, 2002). However, we need to be careful “when evaluating conclusions drawn from small samples of qualitative studies and the difficulties inherent to any attempt to make generalizations about populations from small samples” (Bock & Sergent, 2002, p. 240). Miles and Huberman (1994) even mentioned that the results generated from qualitative research cannot be generalized.

Reliability concerns the ability of different researchers to make the same observations of a given phenomenon if and when the observation is carried out using the same method(s) and procedures. Reliability of qualitative study can be enhanced by standardization of data collection techniques and protocols and documenting in detail all the steps, time, place, instruments, and procedures and to reveal that categories have been used consistently. It can also be improved with proper tabulated data of findings that are open to supplementary examination by both the researcher and readers to enable them to articulate their views about the position of the researched, in relation to the research and the researcher. That is to say, that more the data fit with the conclusion, the better the validity is. In this study, we have used several strategies that assured the validity and reliability of the study. We ensured triangulation in our data collection and triangulation between data sources represents a refutation strategy. Creswell (2003) mentioned that the researcher should play the devil’s advocate by gathering counter evidence useful to assess the robustness of the research outcomes and determine their scope. Theoretical and methodological research coherence (Morse, et al., 2002) was achieved through submitting method statements and interview guide/questionnaire for this study to two methodology experts, and obtaining valuable feedback and helpful recommendations. Achieving multiple data analysis iterations is favorable to internal validity (Morse, et al., 2002). In this regard, it is useful to spend more time on the research site and participants for in-depth comprehension of underlying dimensions and reality of the studied phenomenon. In this study, we have spent much time discussing with the participants not only at the firm sites but also informally in their professional meetings, seminars, and workshops and have enhanced our understanding on underlying research issues. Submitting the case reports to the participants has also further enhanced the validity of the study. Furthermore, the credibility of the

study was ensured by understanding the phenomena of this study of interest through the participants' eyes; the participants are the only ones who can legitimately judge the credibility of the results. Transferability was ensured by describing thoroughly the research context and the assumptions that were central to the research. In fact, the person who may transfer the result of the study to a different context is to judge the extent to which the study is transferable. Guba and Lincoln (1994) proposed four criteria for judging the soundness of qualitative research and explicitly offered these as an alternative to more traditional quantitatively oriented criteria. The four criteria are credibility, transferability, dependability, and confirmability. Dependability of the study was ensured by describing the ever-changing context within which research occurs. The researcher is responsible for describing the changes that occur in the setting and how these changes affected the way the research approached the study. Confirmability refers to the degree to which the results could be confirmed or corroborated by others. Confirmability was ensured by documenting the procedures for checking and rechecking the data throughout the study. The researcher paid particular attention to the cases and instances where the data contradict prior observations.

#### 1.2.6. Quantitative Approach

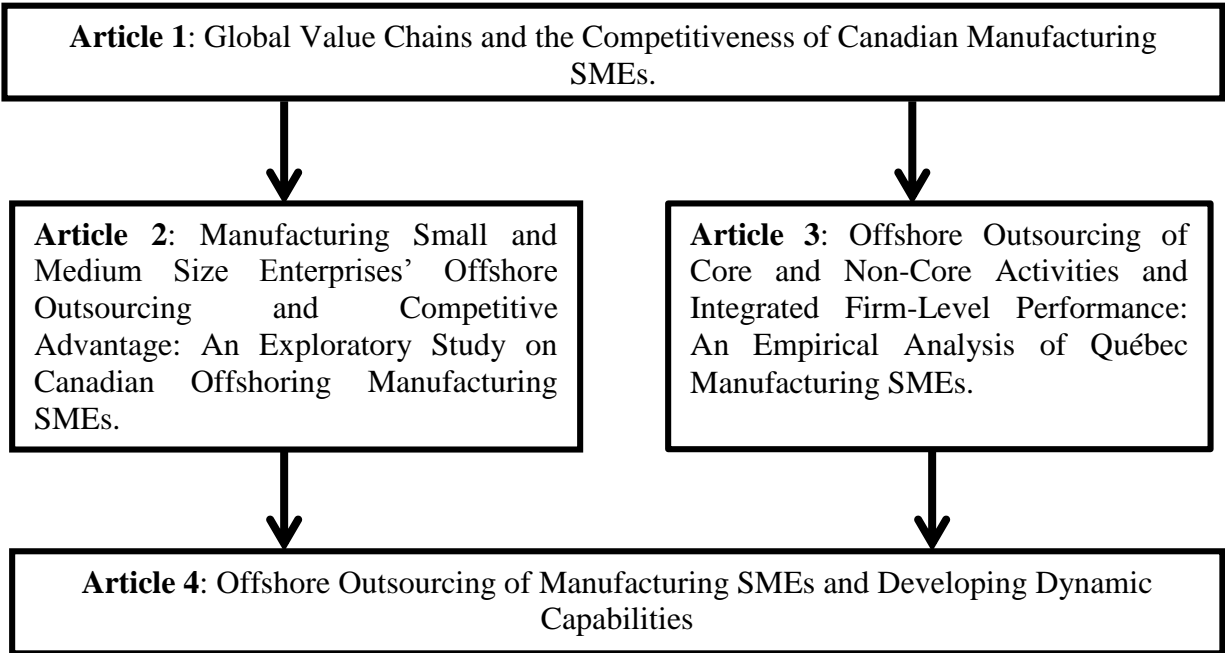
The *third Article (chapter 4)* of this thesis is based on a Web survey with a quantitative approach. This article shows the relationship between core and non-core activities offshore outsourcing and their impacts on IFLP. This article reinforces the relationship between offshore outsourcing and firm level performance of offshoring manufacturing SMEs. The Web survey is a relatively new practice in social science research called electronic interviews (Denzin & Lincoln, 2000). This is the emerging mode of survey and grew phenomenally in the last few years (Fan & Yan, 2010) and is advantageous for both the researcher and participants (Fleming & Bowden, 2009). It is less expensive and rapid and the participants can reply by just a click and data can easily be transferred to different supports. On the flip side, the response rate of this mode of data collection is relatively low (Fan & Yan, 2010). Sanchez-Fernandez, et al. (2012) recommend two strategies to increase the response rate by personalization of questionnaire and calling the participants by phone. The list of the manufacturing SMEs was collected from CRIQ and refined through checking the Web description of each firm to check whether the firm did offshore outsourcing or not. Once we

determined the list of probable firms that corresponded to our criteria, we then sent them the questionnaire. A linear regression was conducted to establish the relationship between the offshore outsourcing of core and non-core activities and IFLP.

### 1.3. THESIS STRUCTURE

This thesis is organized around four articles. The first article is based on the secondary data from the Industry Canada, Statistics Canada, WTO, and OECD databases. This paper presents the state of the art of the Canadian manufacturing sector in the era of global value chain (GVC). This paper shows that the competitiveness of Canadian manufacturing, including the manufacturing SMEs, depends on not only their own competitiveness but also the competitiveness of intermediate components imported from foreign markets. This paper also shows the importance of the dispersion of manufacturing across the globe based on the availability of competitive expertise and resources. The import of intermediate components and goods comes from principally two sources. First, direct imports of those components and products from foreign markets; second, through alliances with foreign companies including the offshore outsourcing framework. One of the important business strategies used in the collaborative manufacturing system is offshore outsourcing. The second article shows the effects of offshore outsourcing on focal manufacturing SMEs. Contrary to the general negative perception of offshore outsourcing, the second article shows that offshore outsourcing allows focal firms to invest more in CC and improve customer satisfaction and overall competitiveness. The third article demonstrates the relationship between outsourcing of core and non-core activities and integrated firm level performance (IFLP) consisting of competitive, financial, strategic, and stakeholders' performance. This article is complementary to the second article and shows that offshore outsourcing is beneficial for both financial and non-financial performances. The positive effects of offshore outsourcing found in the second and third article can be for the short term. The fourth article addresses developing dynamic capabilities through collaboration with offshoring supplier firms. The dynamic capabilities can contribute to developing organizational capabilities to develop focus on core activities, develop innovation capability, accelerate the new product development and market development, and increase organizational flexibility. These capabilities lead the manufacturing

offshore outsourcing SMEs to SCAs. The following figure shows the sequential advancement of the thesis:



**Figure 2: Thesis Structure**

#### 1.4. CONCLUSION

The thesis consists of *four Articles* and adopted principally a qualitative approach, except the third Article. The combination of two methodologies for studying the same phenomenon reinforces the study (Patton, 1990). This is also a kind of methodological triangulation (Patton, 1990). The thesis demonstrates that the offshore outsourcing of manufacturing SMEs contributes not only to the competitive advantages of the offshoring firms but also how this competitiveness might be sustained by developing dynamic capabilities that build, recombine, and reconfigure inter-firm resources to enable them to have superior capability in the face of marketplace volatility.

## 1.5. REFERENCES

1. Abbott, A. (2001). *Time Matters. On Theory and Method*. The University of Chicago Press, Chicago.
2. Bock, T., & Sergeant, J. (2002). Small sample market research. *International Journal of Market Research*, 44(2), 235-244.
3. Bouma, G. D., & Ling, R. (2004). *The research process 5th edition*. Victoria, Australia: Oxford University Press.
4. Buckley, P. J. (1988). The limits of explanation: Testing the internalization theory of the multinational enterprise. *Journal of International Business Studies*, 19: 181-194.
5. Chetty, S. & Agndal, H. (2007). Social capital and its influence on changes in internationalization mode among small and medium-sized enterprises, *Journal of Inter-national Marketing*, 15(1): 1-29.
6. Conference board of Canada, December. (2011). *Adding Value to Trade Measures: An Introduction to value-added trade*. CBC Briefing.
7. Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage publications.
8. Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
9. Dunning, J. H. (1980). Towards an eclectic theory of international production: some empirical tests. *Journal of International Business Studies*, 11: 9–31.
10. Bunyaratavej, K., Hahn, E.D., & Doh, J.P. (2007). International offshoring of services: A parity study. *Journal of International Management*, 13(1): 7-21.
11. Denzin, N.K. & Lincoln, Y.S. (2000). *Handbook of qualitative research*, 2nd edition, Sage publications, Inc.
12. Di Gregorio, D., Musteen, M., & Thomas, D. E. (2009). Offshore outsourcing as a source of international competitiveness for SMEs. *Journal of International Business Studies*, 40(6), 969-988.
13. Doh, J.P. (2005). Offshore outsourcing: implications for international business and strategic management theory and practice, *Journal of Management Studies*, 42(3): 695-704
14. Casani, F., Luque, M.A., Luque, J. & Soria, P. (1996). La problemática del outsourcing. *Economistas*, 72: 86-98.

15. Easton, G. (1998). Case research as a methodology for industrial networks: a realist apologia. In: Naude', P., Turnbull, P. (Eds.), *Network Dynamics in International Marketing*. Pergamon, Oxford. 73–87.
16. Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4): 532-550.
17. Eisenhardt, K. M. (1991). Better stories and better constructs: The case for rigor and comparative logic. *Academy of Management review*, 16(3), 620-627.
18. Espino-Rodríguez, T. F., & Padrón-Robaina, V. (2006). A review of outsourcing from the resource-based view of the firm. *International Journal of Management Reviews*, 8(1), 49-70.
19. Fan, W. & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review, *Computers in Human Behavior*, 26(2): 132-139
20. Fleming, C.M. & Bowden, M. (2009). Web-based surveys as an alternative to traditional mail methods. *Journal of Environmental Management*, 90(1): 284-292
21. Gibbert, M. (2006). Generalizing about uniqueness: An essay on an apparent paradox in the Resource-Based View. *Journal of management Inquiry*, 15(2): 124-134.
22. Glaser, B.G. & Strauss, A. (1967). *The discovery of Grounded Theory*. Chicago: Aldine.
23. Glaser, B. G. (2002, September). Constructivist grounded theory?. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 3(3).
24. Görg, H., & Hanley, A. (2005). International outsourcing and productivity: evidence from the Irish electronics industry. *The North American Journal of Economics and Finance*, 16(2), 255-269.
25. Görg, H., Hanley, A., & Strobl, E. (2008). Productivity effects of international outsourcing: evidence from plant-level data. *Canadian Journal of Economics/Revue canadienne d'économique*, 41(2), 670-688.
26. Greaver, M. F. (1999). Strategic outsourcing: a structured approach to outsourcing decisions and initiatives, *American management association*.
27. Grossman, G. M., & Helpman, E. (2005). Outsourcing in a global economy. *The Review of Economic Studies*, 72(1), 135-159.
28. Grossman, G. M., Helpman, E., & Szeidl, A. (2006). Optimal integration strategies for the multinational firm. *Journal of International Economics*, 70(1), 216-238.



29. Grote, M.H, & Täube, F.A. (2007). When outsourcing is not an option: International relocation of investment bank research-or isn't it? *Journal of International Management*, 13(1): 57-77.
30. Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2, 163-194.
31. Harland, C.M. (1996). Supply Chain Management: Relationships, Chains and Networks, *British Journal of Management*, 7 (special issue): 63-80.
32. Howard M., Miemczyk J. & Graves A. (2006). Automotive supplier parks: an imperative for build-to-order?, *Journal of Purchasing & Supply Management*, 12 (2): 91-104.
33. Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Strategic Management Journal*, 25(3): 417-456.
34. Jahns, C., Hartman, E., & Bals, L. (2006). Offshoring: Dimensions and diffusion of a new business concept. *Journal of Purchasing & Supply Management*, 12(4): 218–231.
35. Jansen, G., & Peshkin, A. (1992). Subjectivity in qualitative research. *The Handbook of qualitative research in education*, 681, 725.
36. Johnson, R. B. (1997). Examining the validity structure of qualitative research. *Education*, 118(2), 282-292.
37. Jiang, B., & Qureshi, A. (2006). Research on outsourcing results: current literature and future opportunities. *Management Decision*, 44(1), 44-55.
38. Johanson & Vahne, J. -E. (2003). Business Relationship Learning and commitment in the Internationalization Process. *Journal of International Entrepreneurship*, 1: 83-101
39. Johanson & Vahne, J. -E. (2006). Commitment and Opportunity Development in the Internationalization Process: A Note on the Uppsala Internationalization Process Model, *Management International Review*, 46(2): 165-178.
40. Jones, M., & Alony, I. (2011). Guiding the Use of Grounded Theory in Doctoral Studies-- An Example from the Australian Film Industry. *International Journal of Doctoral Studies*, 6.
41. Kan, M. M., & Parry, K. W. (2004). Identifying paradox: A grounded theory of leadership in overcoming resistance to change. *The Leadership Quarterly*, 15(4), 467-491.

42. McKinnon, J. (1988). Reliability and validity in field research: some strategies and tactics. *Accounting, Auditing & Accountability Journal*, 1(1), 34-54.
43. Meredith, J. (1988). Building Operations Management Theory through Case and Field Research, *Journal of Operations Management*, 16: 441-454.
44. Miles, M.B. & Huberman, A.M. (1994). Early steps in analysis. In *Qualitative Data Analysis: An Expanded Sourcebook (2nd Edition)*. Thousand Oaks: Sage
45. Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2008). Verification strategies for establishing reliability and validity in qualitative research. *International journal of qualitative methods*, 1(2), 13-22.
46. KPMG. (2011). Reshaping the Supply Chain: New Opportunities for Canadian Manufacturers:  
<http://www.kpmg.com/ca/en/issuesandinsights/articlespublications/pages/reshapingthesupplychainnewopportunitiesforcanadianmanufacturers.aspx>
47. Kedia, B. L., & Lahiri, S. (2007). International outsourcing of services: A partnership model. *Journal of International Management*, 13: 22–37.
48. Kotabe, M., & Omura, G. S. (1989). Sourcing strategies of European and Japanese multinationals: a comparison. *Journal of International Business Studies*, 113-130.
49. Kotabe, M., & Sewan, KS. (1994). Offshore sourcing: Reaction, maturation and consolidation of US multinationals. *Journal of International Business studies*, 25(1): 115-140.
50. Kotabe, M., Mol, M.J., Murray, J. & Parente, R. (2012). Outsourcing and Its implications for market success: negative curvilinearity, firm resources, and competition. *Journal of the Academy of Marketing Science*, 40:329-346.
51. Krippendorff, K. (2003). *Content Analysis: An Introduction to Its Methodology*, 2nd ed., Sage, Thousand Oaks, CA.
52. Kvale, S. (1996). *Interviews – an Introduction to Qualitative Research Interviewing*, Thousand Oaks, CA: Sage Publications, Inc.
53. Langford, B. E., Schoenfeld, G., & Izzo, G. (2002). Nominal grouping sessions vs. focus groups. *Qualitative Market Research: An International Journal*, 5(1), 58-70.
54. Levy, D. (2005). Offshoring in the new global political economy. *Journal of Management Studies*, 42(3): 685–93.

55. Lewin, A.Y., Peacock, M., Peeters, C., Russell, J., & Sutton, G. (2005). Duke University CIBER/Archstone Consulting, 2nd bi-annual offshore survey results. (Retrieved on June 11, 2012) <https://offshoring.fuqua.duke.edu>
56. McIvor, R., Humphreys, P., Wall, A. & McKittrick, A. (2009). A Study of Performance Measurement in the Outsourcing Decision, CIMA publishing, UK.
57. McGrath, R. G., & MacMillan, I. C. (2000). The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty. Boston: Harvard Business School Press.
58. Mitchell, J.C. (1983). Case and situation analysis. *The Sociological Review*, 31 (2): 187–211.
59. Mol, M. J., Van Tulder, R. J., & Beije, P. R. (2005). Antecedents and performance consequences of international outsourcing. *International Business Review*, 14(5), 599-617.
60. Morstead, S., & Blount, G. (2003). Offshore Ready: Strategies to Plan and Profit from Offshore IT-Enabled Services. United States of America: ISANI press.
61. Maxwell, J. A. (2012). Qualitative Research Design: An Interactive Approach: An Interactive Approach. Sage publications.
62. Oviatt, B.M., & McDougall, P.P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1): 45-61.
63. Parkhe, A. (2007). International outsourcing of services: Introduction to the special issue. *Journal of International Management*, 13: 3-6.
64. Patton, M. Q. (1990). Qualitative evaluation and research methods. SAGE Publications, inc.
65. Prahalad, C. K. & Hamel, G. (1990). The Core competence of the corporation, MA: *Harvard Business Review*, May-June.
66. Quelin, B. & Duhamel, F. (2003). Bringing Together Strategic Outsourcing and Corporate Strategy: Outsourcing Motives and Risks. *European Management Journal*, 21(5): 647-661
67. Quinn, J., & Hilmer, F. (1994). Strategic outsourcing. *Sloan Management Review*, 35 (3): 43–55.
68. Ragin, C.C. (2000). Fuzzy Set Social Science. The University of Chicago Press, Chicago.
69. Ramamurti, R. (2004). Developing countries and MNEs: extending and enriching the research agenda. *Journal of International Business Studies*, 35(4): 277–83.

70. Reynolds, P. D. (1997). New and small firms in expanding markets. *Small business economics*, 9(1), 79-84.
71. Rothery, B. & Robertson, I. (1996). Outsourcing México. Editorial Limusa.
72. Saldana, J. (2011). Fundamentals of Qualitative Research. Oxford University Press.
73. Scully, J.I. & Fawcett, S.E. (1994). International procurement strategies: challenges and opportunities for small firm. *Production & Inventory Management Journal*, 35(2): 39-46.
74. Sánchez-Fernández, J., Muñoz-Leiva, F., & Montoro-Ríos, F.J. (2012). Improving retention rate and response quality in Web-based surveys. *Computers in Human Behavior*, 28(2): 507-514
75. Sinha, P., Akoorie, M. E., Ding, Q., & Wu, Q. (2011). What motivates manufacturing SMEs to outsource offshore in China? Comparing the perspectives of SME manufacturers and their suppliers. *Strategic Outsourcing: An International Journal*, 4(1), 67-88.
76. Shah, S.K., & Corley, K.G. (2006). Building better theory by bridging the quantitative–qualitative divide. *Journal of Management Studies*, 43 (8): 1821–1835.
77. Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research*, 21(3), 491-503.
78. Stake, R.E. (2006). Multiple Case Study Analysis. New York: Guilford Press.
79. Stake, R.E. (1995). The art of case study research, Thousand Oaks: Sage.
80. Statistics Canada. 2007.
81. Stuart, I., McCutcheon, D., Handfield, R., McLachlin, R., & Samson, D. (2002). Effective case research in operations management: a process perspective. *Journal of Operation Management*, 20(5): 419–433
82. Thietart, R. A. (2003). Méthodes de recherche en management (Dunod, Paris).
83. Trochim, W. M. (2006). Qualitative measures. Research Measures Knowledge Base, 361-943.
84. van der Zee, F., & Brandes, F. (2007). Manufacturing Futures for Europe-A Survey of the Literature. TNO Background Report for the EU Competitiveness Report.
85. van Gorp, D., Jagersma, P. K., & Livshits, A. (2007). Offshore Behavior of Service Firms: Policy Implications for Firms and Nations. *Journal of Information Technology Case & Application Research*, 9(1).
86. Voss, C. et al. (2002). Case research in Operation Management. *International Journal of Operations & Production Management*, 22: 195-219.

87. Walker, D., & Myrick, F. (2006). Grounded theory: an exploration of process and procedure. *Qualitative Health Research*, 16(4), 547-559.
88. Yin, R.K. (2003). *Case Study Research-Design and Methods*, 3th ed. SAGE Publications, London.
89. Yin, R. K. (2009) *Case Study Research: Design and Methods*. 4th Edition. Sage Publications, California.
90. Yin, R. K. (2014). *Case study research: Design and methods*. Sage publications.



## **Chapter 2: Article 1-Global Value Chains and the Competitiveness of Canadian Manufacturing SMEs**

### **Resumé:**

La chaîne de valeur globale (CVG) a changé le paradigme de la production manufacturière de biens finis vers des activités intermédiaires de production, organisées le long de la chaîne de valeur transfrontalière, également appelée le réseau de production globale (RPG). L'objectif de cette recherche est de montrer l'état de l'art et de l'orientation stratégique pour la compétitivité de la production canadienne des PME manufacturières dans le cadre du RPG. L'analyse des données de l'industrie Canada, de l'OMC et de l'OCDE montre que la compétitivité des secteurs manufacturiers canadiens, où le Canada ne possède pas ses propres matières premières, dépend largement de la participation dans la chaîne de valeur mondiale. C'est-à-dire que la compétitivité globale des industries manufacturières canadiennes dépend de la collaboration des réseaux d'activités de production locales avec celles des activités de production à l'étranger par l'incorporation des produits intermédiaires approvisionner des sources étrangères. Les petites et moyennes entreprises (PME) manufacturières doivent se concentrer sur des activités ou des tâches où ils ont des avantages comparatifs. De même, il leur serait intéressant de se procurer les composants intermédiaires en fonction des dispositions des sources étrangères sur une base concurrentielle. Les politiques de réindustrialisation doivent être développées dans le cadre de co-industrialisation entre les entreprises complémentaires dans l'espace géographique plutôt que la politique d'industrialisation local vs. Étrangère. Les politiques publiques devraient chercher à faciliter les échanges entre les acteurs qui produisent des activités complémentaires et de collaborer avec le secteur privé dans la formulation des politiques industrielles.

Mots clés: Avantage comparatif, Chaîne de valeur mondiale, Secteur manufacturier canadien, PME, Composants intermédiaires.

## **ABSTRACT**

Global value chain (GVC) has changed the manufacturing paradigm from producing complete goods towards manufacturing activities or tasks, organized along the trans-border value chain called global production network (GPN). The objective of this paper is to demonstrate the state of the art and strategic orientation for competitiveness of Canadian manufacturing SMEs production in context of the GVC framework. Analysis of the data from industry Canada, WTO and OECD shows that the competitiveness of Canadian manufacturing sectors, where Canada does not possess natural resources as raw materials, are highly depended on participation into the GVC. Through exploration of the Canadian participation into the GVC, the strategic importance of the GVC for Canadian manufacturing sector is highlighted. The study concludes that the competitiveness of Canadian manufacturing depends on integrating into the fragmented production under the GVC. That is to say that the overall manufacturing competitiveness depends on collaborative production network of both local production activities with those from foreign activities. Manufacturing small and medium size enterprises (SMEs) need to focus on activities or tasks where they have comparative advantages and procure intermediate components through market based arrangements from foreign sources on competitive basis. The re-industrialization policies need to be developed in the co-industrialization framework among the complementary firms in the geographic space rather than local vs. foreign mindset of the past. Public policy should focus on facilitating exchanges among the actors producing complementary activities and collaborate with the private sectors while formulating policies.

Key words: Comparative advantage, Global Value Chain, Canadian manufacturing, SMEs, Intermediate components.



## 2.1. INTRODUCTION

Global value chain (GVC) becomes a dominant feature in world trade arena and creating the interdependency among the developing, emerging and developed countries. A global value chain describes the framework of organizing the full range of activities that cover a product or service from its conception to its end users. This includes activities such as research and design, production, marketing, distribution, business processes and support to the final consumer (FAITC, 2010). The GVC addresses the way these activities are distributed over geographic space and across international borders with the objective of locating each activity (or sub-activity) in the most optimal manner (Su, Regnière, & Su, 2013). The value chain of any product from raw materials to the finished products is increasingly carried out by a Global production network (GPN) on the basis of availability of skills and materials at competitive cost and quality (Ernst, & Kim, 2002). The value chain model has been widely used by many researchers in the last decade to demonstrate the linkages and networks across the firm and industry level and to analyze where value resides and creates at these two levels. The major share of the value is created in activities such as design, marketing, and distribution which are not necessarily performed by the same enterprises or at the same physical location. The liberalization of world trade under the auspices of the World Trade Organization (WTO) as well as the bilateral and multilateral trade liberalization agreements such as FTAs (Free trade agreement) accelerated this process and opened-up new horizon of opportunities and challenges for local manufacturers. A firm can create competitive advantage through managing strategically the activities in the value chain,. Firms can reap benefits from the growing fragmentation of production across borders by introducing open, predictable and transparent trade and investment regimes. Dominated by the Multinational corporations (MNC), however, more and more small and medium size enterprises (SMEs) are also becoming part and parcel of the GVC. The manufacturing SMEs contributing either inputs for MNCs or producing/assembling finished products by integrating inputs from others are increasingly participating in the Global value chain. The Objectives of this paper is to shed light on the context and strategic orientation of competitiveness for the Canadian manufacturing SMEs in the GVC framework. The paper highlights the strategies and public policies that enable manufacturing firms to be competitive in the rising hierarchies of GVC. The section two of this paper discusses the context of the Canadian manufacturing industry in the GVC framework and the section three is devoted to the discussions on revealed comparative advantage (RCA) and Canadian manufacturing

and the forth section discuss the strategic orientation of the manufacturing SMEs in the new context.

## **2.2.GLOBAL VALUE CHAIN AND CANADIAN MANUFACTURING SMES**

Globalizations, opening up of national borders, technological advancement have accelerated increasing exchanges of goods and services and mobility of other factor of productions all over the world. The final product is composed of several intermediate activities in a value chain and firms can achieve their competitiveness by focusing on any segment of the value chain where it performs the best. The world has changed from “trade in goods” to “trade in tasks/activities” (Bems & Johnson, 2012). The activities are increasingly separable and mobile and can be performed each activity at the most efficient location and, thus, the GVC are being disaggregated across geographic space (Mudambi & Swift, 2012). SMEs are confronted by the diverse opportunities and challenges that arise from the new production context in the new global division of labor (Mohiuddin, Z. Su, & A. Su, 2010). This transformation of the world business environment affected both the large multinationals and the SMEs and created the networked information economy that encourages disaggregation. Large Corporation is continuously replacing by the Nikefication of the economy where Nike focuses on designing and marketing while offshoring production activities to emerging country suppliers in Asia and elsewhere.

### **2.2.2. Growth of GVCs and Global linkages**

SMEs participate increasingly into the global production network through offshore outsourcing. Upstream and downstream Cooperation with the partner firms improves the SMEs’ efficiency and scope (Mohiuddin & Su, 2013a). Access to information flow, technology transfer and learning opportunities; generate knowledge spillovers and stimulate human and technological capital upgrading (Lunati, 2008). Trade liberalisation and technological improvement have contributed to the fragmentation of production activities across the globe. The NGDL bring opportunities to firms to source their inputs from anywhere they find them competitively. The growth of sourcing has given rise of the relocation of activities abroad. Trade in manufacturing intermediates is rising in most of the countries and products are increasingly composed of inputs/activities from foreign sources. International trade in “final goods” is being replaced by intermediate goods. The share of

intermediate goods in world imports is more than 54% (OECD, 2007; Miroudot et al. 2009) and three-fourths of the imports of large emerging countries, such as China and Brazil (Ali & Dadush, 2011). The intermediate products include parts, components, and semi-finished products. This transformation over the years is changing the production pattern of Canadian manufacturing by increasing the global linkages and decreasing the share of domestic production. The globalisation of value chains is enabling SMEs to avail the new opportunities by offering them the chance to expand their business opportunities across the globe and exploit the comparative as well as economies of scale advantages. The imported inputs from competitive market allow the SMEs to increase product variety and quality in both domestic and export markets. Opening up to the globally competitive markets force them to become more innovative and gives access to flow of foreign technologies which embody significant innovations (OECD, 2007). The accelerated integration of many emerging countries into the GVC and inclined economic gravity towards the “East” are challenging the existing comparative advantages and the competitiveness of Canadian manufacturing. This new economic context is forcing companies to search for new ways or activities in which they can excel and beat the competition. The new context is forcing manufacturing firms to specialize in knowledge-intensive, high-value-added activities. The cost based strategy is no longer viable for the longer period and many developed countries are undergoing **de-industrialization**, occurred due to the rapid changes in capabilities in the emerging countries. Several studies (Van Assche, 2012; OECD, 2013a) show indirectly the increasing importance of the globalisation of value chains. In most OECD countries, the “production depth” is declining due to increased use of intermediary components as the share of local manufacturing value added in production decreases. Growing vertical integration and international production sharing mean that manufacturing of few stages in one country of a product is then exported to other countries as inputs in the following stages of production. Vertical specialisation of production across countries is driven by the comparative advantages. Openness allows for more specialization and specialization drives productivity gains because of economies of scale and scope while it allows the development of specialised knowledge and experience. Finally, the growing value chain have resulted in greater complexity in global trade flows, owing to the growing integration of countries’ production systems and the growing importance of inter-firm and inter-industry trade. The value chain highlights the economic linkage of value addition in the full range of activities that are required to bring a product from its conception to its consumption. It has changed the way

production is organised and has provoked important modification among the partners of value chain. This way of production was initiated mainly by the search for efficiency, which includes outsourcing inputs from low cost or more efficient producers, the entry in new and growing markets, and the search for complementary and strategic assets. Integration of the SMEs into the global production network through tying up with the MNC allows them to contribute at various stages of added value and reap potential benefits from global trade. Canada's composition of trade with countries such as the USA, EU, Mexico and China shows that a significant share of Canadian exports and imports, from these countries are intermediate goods. The 58% of Canadian exports to the USA are intermediate goods and 77% of exports to China are also the intermediate goods (Assche, 2012). The share of foreign content in national gross exports is higher in 2009 than 1995 for most of the countries with few exceptions like Canada. This exception for Canada emanated from the rapid rise of mineral resources share in Canadian export baskets where role of intermediate components is relatively less than the manufacturing goods. The mining share of overall value added exports rose from 10% in 1995 to 25% in 2009. Canada's domestic value added content of its exports in 2009 was 80%, about 5 percentage points (pp) higher than other OECD countries. The following figure shows the share of local contents in gross exports between 1995 and 2009.

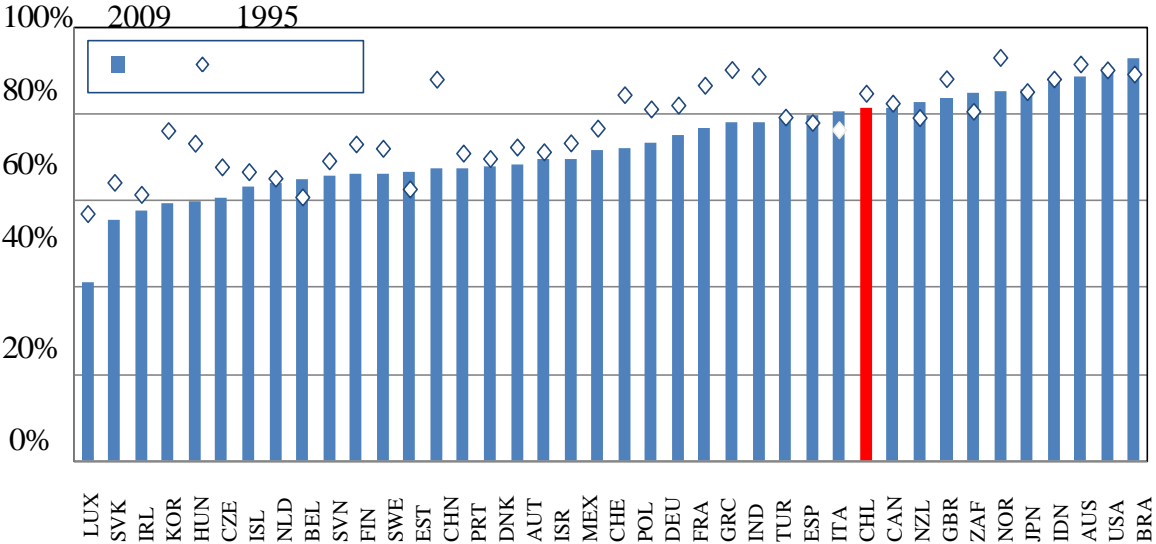


Figure 3: Domestic value added content of gross exports, %  
 Source: OECD (2013c): Trade in Value Added (TiVA) database.

The twenty percent of Canadian exports value come from foreign value added contents. The

foreign value added content intensity into the gross exports varies from sector to sector. The foreign content of Canada's exports was 36% and 30% in 2009 for *Transport and Electric equipment* industry respectively. The share of foreign contents into these two sectors is higher than others. The following table shows the sectoral variation of foreign contents in gross exports. Further analysis shows that Canada's involvement in vertical trade is largely through importing inputs to produce its exports (CBC, 2012a). Thus, competitiveness of Canadian manufacturing exports increasingly depends on access to efficient imports of foreign intermediate goods.

### 2.2.3. Canadian Manufacturing SMEs in the GVC

The fragmentation of production together with the development of ICT is creating new entrepreneurial possibilities for SMEs. The re-organization of production at the international level by various means including offshore outsourcing and development of global value chains are opening new window of opportunities for small and medium-sized firms (Mohiuddin & Su, 2013b). The fragmentation of production creates new niches which the small firms can quickly address and thanks to their relative flexibility and ability to act fast. The growing international sourcing of intermediate products and components has resulted increasing manufacturing exports and imports simultaneously; faster than the actual economic growth in countries like Canada, an open economy. This has also accelerated intra-industry trade, but, has lowered the 'production depth' (value-added share over production) of Canada. The flexibility and ability to move quickly enable SMEs to response to the niches and become specialised in respective core activities (OECD, 2006). Offshore outsourcing enables SMEs to have access to competitive inputs and production factors and play role as large firms in the marketplace and gain from rationalisation of production and optimisation of resources (OECD, 2007). However, SMEs face huge challenges of managing, coordinating and investing required resources in order to reap advantages available in the global market place. Sharing production value chain and coordinating with up-stream and down-stream partners increases the small firm's chances of success as part of the GVC. It helps the SMEs to acquire new knowledge, more autonomy from the larger counterparts and increase opportunities to grow further by leveraging their access to an extended network of partners and to superior technology and improvement of their staff's skills. In spite of geographical locations, globalisation of production is increasingly economically feasible and thanks to the rise of capabilities in the

emerging countries, improved transport facilities and connectivity. The significant developments of standardized products have also facilitated the globalisation of production, opening the doors of opportunities for the competitive SMEs including the ones from Canada. Shareholders pressures have also accelerated the restructuring operations and re-engineering the supply chain management in order to meet the financial performance requirements by venturing in the competitive production sites globally. The GVC enhances also the dynamic gains of the SMEs; thanks to operating the globally competitive market and force them to engage in innovative activities for long term sustainability. The benefits of the GVC also depend on the speed and extent to which the companies re-allocate resources where they have comparative advantages. Investing more into the higher value added activities and outsourcing the lower value added activities lead firms towards higher productivity growth that translates to the improved wealth creation and income and, in consequence, creation of more jobs and other opportunities. Offshore outsourcing is a specific form of global engagement and is found to have positive impacts on firm productivity (OECD, 2007). Despite the importance of GVC for competitiveness of manufacturing SMEs, relatively few Canadian SMEs are integrated into these trans-border activities. However, those SMEs which are involved into the GVC are deeply integrated. Data from the BDC (2013) shows that 62% of all imports of manufacturing SMEs are re-integrated into the goods and services produced by them and the 28% of their imports are incorporated into SMEs' export. This statistics implicitly means that the export of these SMEs is highly dependent on imports of intermediate components. US remain the top destination for exports and source of imports of goods and services. However, the share of Asian markets is increasing very fast, specifically as the source of intermediate inputs (BDC, 2013).

### **2.3. REVEALED COMPARATIVE ADVANTAGE (RCA) AND CANADIAN MANUFACTURING SMES IN THE GVC**

Openness of trade and emergence of the GVC have transformed the manufacturing arena in Canada. The role of intermediate components in manufacturing is gaining prominence in Canadian manufacturing exports. Imported inputs also account for an important portion of exports, blurring

the line between exports and imports as well as between domestic products and imports (Draper, 2013).

### 2.3.1. Canadian RCA and GVC in a post-crisis world

Canada is one of the OECD countries which have an important export oriented manufacturing sector with 50% of manufacturing output is exported (Naim & Tombe, 2013; Mohiuddin & Su, 2013a). Canadian manufacturing sector can be classified into two; first, manufacturing sector based on the Canadian huge reserve of natural resources such as wood and paper industry and the manufacturing sector based on purely policy oriented strategies. “Revealed comparative advantage (RCA)” index is used to study the real comparative advantages of manufacturing sector. The RCA was developed by the economist Balassa (1965) to identify industries (or sectors) in which a country has a comparative advantage. This measurement is calculated by computing the share of a country’s total exports in a given industry relative to the share of world exports in the same industry. According to conference board of Canada (2012), Canadian manufacturing strength remains principally in the sectors that process local raw materials such as food products, metals and wood and paper. These industries rely heavily on Canada’s natural resource wealth such as land, water, forests, and mineral products. Canada can remain competitive in these sectors for long time. There are few remaining sectors where Canadian manufacturing have revealed comparative advantages. Among them are autos and parts, other transportation and communication equipments. The comparative advantages of these sectors depend on more tenuous sources such as government policies or production cost advantages as well as the higher inputs share from foreign sources (38% inputs for Canadian exports originate from abroad) (UNCTAD, 2013; OECD, 2013a). That means, changes in competitive environment impacts the comparative advantage of these manufacturing sectors. This is happening in the auto and parts industry and activities from the auto industry are relocating to the low cost places in the US or Mexico. Despite the policy supports for non-natural resource based manufacturing in Canada, the long term competitiveness is in question. if Canada has outsized exports in a product, it should have the RCA more than 100 for that product. The RCA value more than 100 ‘reveals’ the presence of comparative advantage in that industry. For the overall manufacturing sector in Canada, the RCA index is close to 100 signifying that Canada’s role in global manufacturing trade is on par with the global average. However, there are differences

of RCA in many sub-sectors in manufacturing (figure 2). RCA Indexes for Industries in the Manufacturing Sector (a value above 100=a comparative advantage; below 100, no comparative advantage). The following figure shows the level of RCA of Canadian manufacturing sectors.

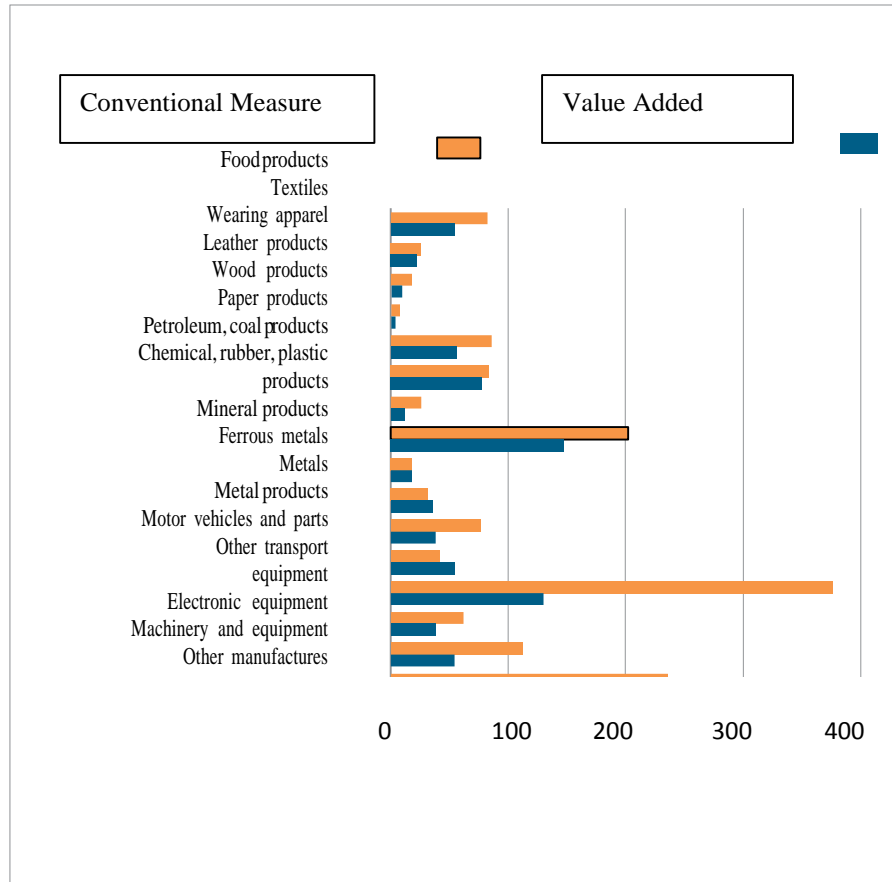


Figure 4: RCA of few manufacturing sectors in Canada  
Source: CBC (Conference Board of Canada) (2012b).

The non-natural resource based Canadian manufacturing sectors such as textile & apparel, rubber & plastic products, electronic equipment, machinery and equipment and other manufacturing do not enjoy revealed comparative advantage (RCA). The survival of these manufacturing sectors requires adequate public policies and firm level strategies on integrating into GVC.



### 2.3.2. Canadian Manufacturing SMEs and Moving-up the value chain in the GVC

Globalisation of production by focusing on core activities and outsourcing of the non-core activities have taken place due to the competition pressures, market volatilities and availability of competitive sources of Intermediate goods. Participation into the GVC allows the manufacturing SMEs to have access to niche markets, to develop new business, to improve products and services themselves or the delivery processes, and to develop better marketing strategies that need to make strategic and operational changes to operate as an internationalized company in a competitive and volatile business environment. Based on a survey by the BDC (2013), The SMEs moved some of their business operations mainly to focus on core business, introduce a new product, improve quality, reduce labour costs or gain access to new markets and above all helping SMEs to adapt to increasing international competitive pressures.

Value creation in the higher value-added activities requires Canadian firms to move up the value chain in order to stay competitive. Thus, the development of knowledge economy is a crucial factor for sustained economic development and improved living standard in Canada. Canadian competitiveness remains in higher-value-added activities, for which knowledge and technology including design are more important. In order to keep and/or develop the higher value added knowledge intensive activities, Canada needs to invest in the R&D but ranked fifth among the G7 countries for investment in R&D (Statistics Canada, 2012). The lower investment in R&D is not favoring the Canadian manufacturing sector to up-grade their value chain and be more competitive in the GVC. One of the ways this shortcoming of relative investment in R&D can be overcome by internationalization of R&D and innovation through non-equity partnership including offshore outsourcing that allows access to innovation and knowledge from partner firms. Due to the world wide intense competition, firms need to innovate more quickly and develop market oriented products more rapidly. Relevant knowledge has become more multi-disciplinary and global in scope, making innovation more expensive and risky. Innovation strategies require increasingly more global sourcing and require developing network of distributed R&D globally in order to have access to local knowledge and to provide further sources of new technology. Some emerging countries such as China and India offer combination of low wages and a good education system with a large mass of well-trained researchers in sectors such as Nano-tech and bio-tech. The strong presence of new economic actors into the GVC is challenging the existing comparative and

competitive advantages and forcing Canada to search for new activities in which it can excel and confront the competition. That implies that manufacturing firms need to move-up the value chain and become more specialised in knowledge-intensive, high value-added activities. It's evident that certain low-tech sectors will be more vulnerable to the global competition and will be relocated to the emerging countries. Well-functioning markets are keys to the up-grading process, as this will help move resources from firms and industries that are no longer competitive to the firms and industry that are competitive such as high-tech innovative sectors. Moving up the value chain needs a continuous process of change, innovation and productivity growth. Canada can keep their leadership in world manufacturing markets by inventing new technology, innovating products and processes and by designing new manufacturing policies integrating GVC principles. The survival and growth of industries and firms in high cost countries depends directly on their capacity to innovate and move into new areas of activity. A pragmatic industrial policy involving private and public partnership is required for moving-up the value chain (Millar, Choi, & Carty, 2007).

## **2.4. TOWARDS STRATEGIC INTEGRATION OF CANADIAN MANUFACTURING INTO THE GVC**

Global value chain brings both opportunities and challenges for Canadian SMEs manufacturing to remain competitive in the global market. Rapid rise of the emerging countries and their increased manufacturing capabilities affect the location of production as well as shaping the environment of global competition. The fragmentation of production poses challenges in the areas of supply chain management (SCM), Technology transfer, and company culture. The new contexts have changed the manufacturing scenario from mass production towards the mass customization and mass personalization. Demands for personalized products increase on a mass scale along with the fluctuations of the market. Furthermore, the size of batch will exponentially decrease; creating immense challenges in SCM and challenging manufacturing capability and flexibility (Kumar, 2007). Fulfilling the increased consumer demands would require adjusting the manufacturing facilities, technologies and strategies (Van Assche, 2012). This will further increase the uncertainties and manufacturer of the future will need to progress from handling operational uncertainties and fluctuation of demand, to tactical and strategic levels as oscillations through the supply chain amplify – a result of vast changes in demand (Grossmann & Furman, 2009;

Rodriguez, & Vecchietti, 2010). Competitive advantages of Canadian manufacturing can't stand on the low-cost strategy but on agility and flexibility of their manufacturing (Arteta, & Giachetti, 2004; Schuh, et al., 2009). Instead of producing the “whole product”, the ability to coordinate the production process activities through all stages of development, design, production, and distribution- quickly, flexibly, and effectively, is the competitive driver of the current and future manufacturer in new global division of labor (NGDL) era (Browne, Sackett, & Wortmann, 1995; Flanagan, et al., 2003; Mohiuddin & Su, 2010; 2013a).

Mass-customization was enabled by several important concepts, technologies and strategies, including product family architecture (PFA), reconfigurable manufacturing systems (RMS), delaying differentiation (DD) and offshoring modular productions (OMP). The PFA refer to the development of product family strategy where certain functional modules are shared while others are provided with several variants each so that the assembly combination will provide high variety in the final products (figure 3) where total number of variants is  $3 \times 2 \times \dots \times 3$ ).

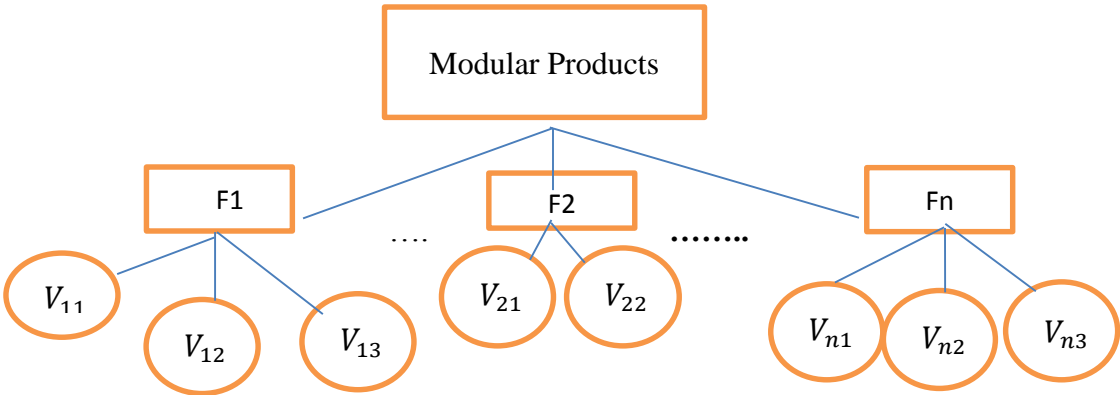


Figure 5: Product Family Architecture (PFA) to represent assembly variety.

Client has the opportunity to choose the combination of the different module variants for the manufacturer to assemble for him/her. Such an approach can fulfill the most of the clients' demand (Hu, 2013). The delayed differentiation (DD) refers to the “delaying” the point of differentiation of each product where the different products take on their unique characteristics. The processes and assemblies are common up to the point of differentiation. Such delay reduces cost and

improves responsiveness of the assembly systems (Ko, & Hu, 2008; Hu, Zhu, Wang, & Koren, 2008). The following figure gives a visual example of delaying differentiation (DD):

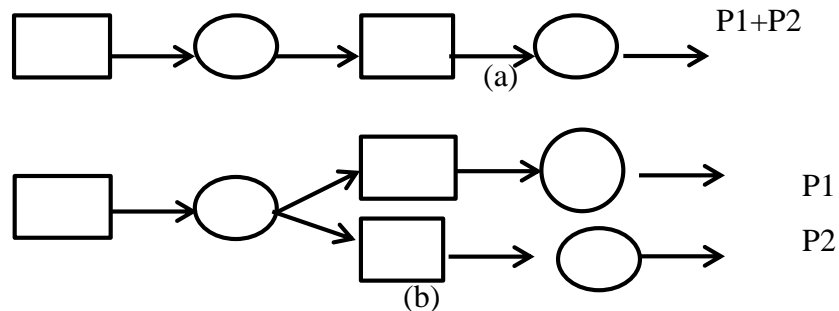


Figure 6: Manufacturing System Configuration (a) Mixed Model Assembly (b) Configuration with Differentiation.

Mass-personalization (MP) refers to manufacturers' ability to *tailor* a specific product to a specific customer on a mass scale. Product personalization relies on an open product platform that allows various modules, including user designed modules to be integrated together. Product architecting is to determine the modules that will be common, customizable and personalizable depending on cost and manufacturability (Berry, Wang & Hu, 2012).

The dispersed production of manufacturing activities and market pressures require the firms to adopt flexible, modular, and collaborative production strategies. The flexible manufacturing system refers to a machining system configuration with fixed hardware and fixed, but programmable software to handle changes in work orders, production schedules, part-programs, and tooling for several types of parts (Mehrabi et al., 2000). The modular production system develops its own distinctive model of networked production for adapting to the pressures of market volatility and fierce competition in the international market place. In collaborative production system, firms pool and share know-how with both equity and non-equity based production partner firms, learn to perfect their products, and lower the costs to produce it by constantly monitoring their procedure. Dispersions of manufacturing activities further amplified by the rise of increased capabilities in the emerging countries. Increasingly, manufacturing firms locate their activities near to the regional production network (RPN) and rapidly rising markets in the emerging countries. All these factors contribute to the dispersion of the production of activities as well as the

competitiveness of the production system. The following figure presents the manufacturing framework in the GVC context.

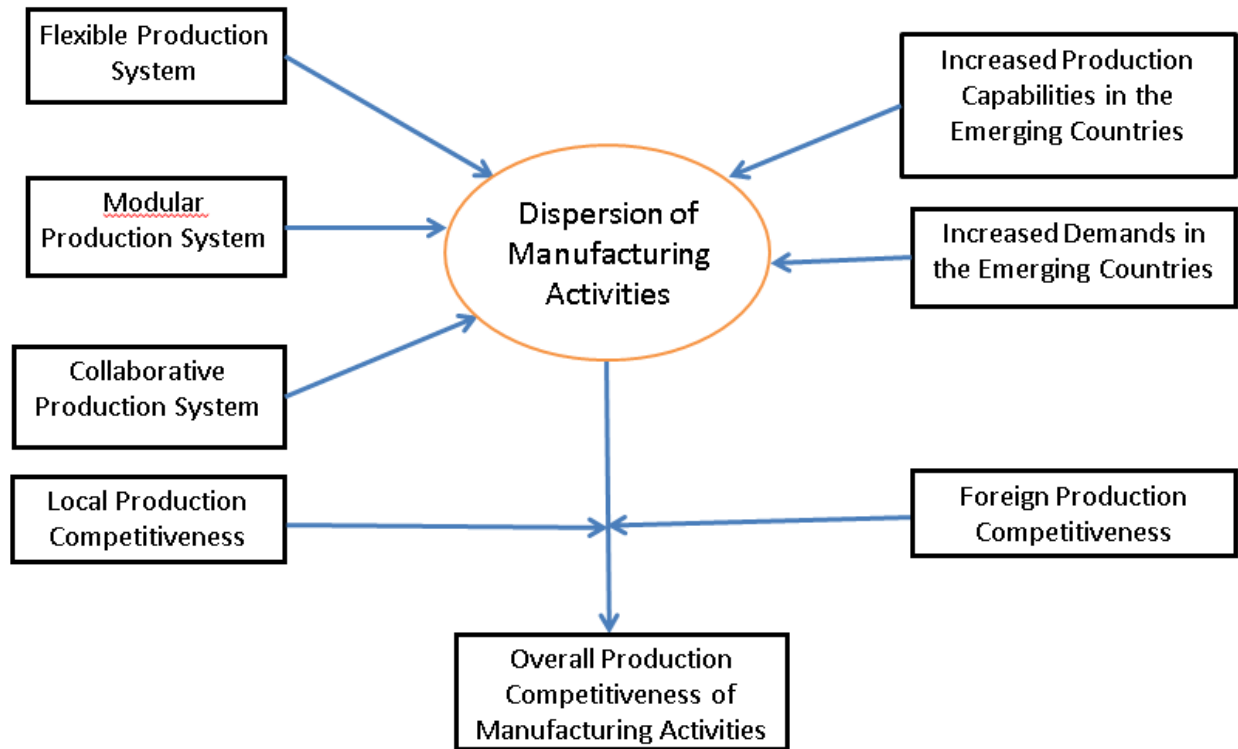


Figure 7: Manufacturing Production Framework in the GVC

The competitiveness of 21<sup>st</sup> century manufacturing SMEs depends both on internal organization as well as external organization and strategies of performing the activities/tasks at optimum location. Competing successfully in this new era needs to satisfy the demands of both low-growth (developed) markets and high-growth (emerging) markets while differentiating themselves from foreign as well as domestic competitors. The re-industrialization in Canada along with other high cost countries require adequate public and private policies focused on activities or tasks where it has comparative advantages rather than on any particular industry or sectors.

The mass-customization, mass-personalization, intelligent production systems show how far the products can be sub-divided into modules, sub-processes and/or activities and can be distributed to the respective work-shops based on the availability of required expertise with a competitive

market price in the global manufacturing value chain. However, both mass-personalization and mass-customization require manufacturing SMEs to adopt intelligent manufacturing systems (IMS) that enhance and increase a production system's flexibility, adaptability, autonomy, general functionality and modularity. Re-emergence of Canadian manufacturing will depend on how Canada re-organizes its manufacturing landscape incorporating simultaneous competitive factors. Building a low-cost global production network that taps into the strengths of each geographical region is critical. Access to centre of innovation, talent, reliable infrastructure, labor flexibility, access to necessary materials and building up comparative advantages or acquiring new ones from strategic partnerships are determining factors in the GVC era. Future competitiveness will depend on both internal competitiveness policies as well as participating into the GVC for overall competitiveness in the international marketplace. Offshore outsourcing is one of those business strategies in the GVC context.

## **2.5. CONCLUSION**

The ever increasing shift of the demand for goods and services from the West to the East as well as the fragmentation of production has transformed the manufacturing paradigm. The competitive environment has shifted from price competition to quality and product development competition (Lapointe & Cimon, 2009). Canadian manufacturing firms can create level playing field in today's international market by participating into the GVC both for shared production process and markets for its products. The participation into the GVC can help firms to expand their scale and scope by distributing different tasks of firms in other countries where these tasks can be performed competitively. The increased competition and market volatility require manufacturing SMEs to organize in a way that can more seamlessly collaborate around the world to design, build, and sell products and services to increasingly diverse customer bases. Firms should build integrated ecosystems of suppliers, researchers, and partners. They need to be intelligent and agile for collaborating with the ecosystems of partners along the value chain, to drive decision making, enhance performance, and manage complexity. Firms must develop a detailed markets and clients segments to identify and tailor products and supply chain strategies to these specific sub-segments of markets. The competitiveness of manufacturing SMEs depends on focusing on the value chain where they can be most competitive by leveraging their knowledge and capabilities. Proximity to customers and/or to global production network (GPN), and skilled workforce to provide value-

added services are also important factor of competitiveness in an open economic environment. The SMEs should identify the opportunities for growth within the supply chain and up-grade to the higher value creating segment/s in the value chain. Global value chain approach has changed the national manufacturing environment and defensive policies are increasingly ineffective in this new era of manufacturing. National exports increasingly embody the technology, labor and capitals of countries from where the intermediate goods are imported. Exports increasingly include value added imported inputs from abroad (OECD, 2013b). Competitiveness of the SMEs no longer depends only on domestic competitiveness but also the competitiveness of the intermediate inputs from abroad. In consequence, designing and implementing effective industrial or competitiveness policies is an important factor for competitiveness though it's a great challenge in a GVC framework of fragmented and dispersed activities. Promoting competitiveness of the domestic economy is no longer equivalent to promoting competitiveness of domestic firms or industries. Public policies should consider manufacturing as a critical driver of innovation, productivity, and competitiveness and focus on factors that “Stick” to the domestic economy (Baldwin, 2012); human capital and skills, high-quality infrastructure, well-developed industry-university linkages, sound institutions, etc. (OECD, 2013b). Public policies should target developing local capabilities and creating and enabling an environment for competitive and innovative firms to flourish. They need to remove regulatory barriers to growth and strengthen underlying enablers by supporting R&D and investing in infrastructure and coordinate seamlessly with the private sectors and excel in delivering a competitive ecosystem (Manyika et al., 2012). Relocating non-core activities in other countries leads to important productivity and competitiveness increases that can support job creation throughout the economy (Mohiuddin & Su, 2013b; OECD, 2013b). In the world of GVCs, comparative advantages increasingly reflects at the level of activities, tasks and production stages instead of whole products or industry (What you do matters more than what you sell”, The conference Board of Canada, 2012). Companies as well as the public policies rather need to focus on the point where advantages can be reaped from global manufacturing value chain. The international sourcing of intermediates in GVC assist firms to lower costs, acquire higher-quality inputs, and improve productivity and export competitiveness (Bertrand, 2010; Bas and Strauss-Kahn, 2011; Bas, 2012; Feng et al., 2012; Aristei et al., 2013). GVC enlarges the possibilities for firms in sourcing the intermediate goods that leads to more specialization. An intelligent use of intermediates allows firms and countries to specialise in industries and activities according to

their comparative advantages. The possibility of procuring cheaper, more differentiated, and better-quality inputs boosts productivity and allows firms to compete successfully in world markets. Canadian Policy makers should establish a policy environment that will attract and retain the highest-valued activities to Canada for higher level of value creation and allowing other tasks to move where that could be performed most efficiently. Policy makers as well as business managers need to focus on “tasks and occupations” instead of industries or firms. Competition in the GVC framework is between “tasks” not between *We vs. They or Domestic vs. Foreign*. Despite the negative connotations of offshore outsourcing due to job losses and factory lay-offs, importing intermediate components actually increases countries’ ability to export. The trade in value added (TiVA) measures provide better insights in the competitive strength of a country when production is organized within the GVC (Timmer et al., 2013). This measure gives a more accurate picture of competitiveness when economies specialize both in different products and activities. Competitiveness is increasingly depends on both exports and imports; offshore outsourcing thus reinforces the competitiveness of manufacturing SMEs in the GVC era.



## 2.6. REFERENCES

1. Ali, S., & Dadush, U. (2011). The rise of trade in intermediates: policy implications. *Carnegie: International Economic Bulletin*. <http://www.voxeu.org/article/rise-trade-intermediates-policy-implications>
2. Arteta, B. M. & Giachetti, R. E. (2004). A Measure of Agility as the Complexity of the Enterprise System. *Robotics and Computer-Integrated Manufacturing*, 20 (XX), 495-503.
3. Balassa, B. (1965). Trade liberalisation and “revealed” comparative advantage. *The Manchester School*, 33(2), 99-123.
4. Baldwin, R. (2012). Global Supply Chains: Why They Emerged, Why They Matter, and Where They Are Going. *CEPR Discussion Paper No. 9103*, August.
5. Bas, M. (2012). Input-Trade Liberalisation and Firm Export Decisions: Evidence from Argentina. *Journal of Development Economics*, 97(2), 481-493.
6. Bas, M. & Strauss-Kahn, V. (2011). Does Importing More Inputs Raise Exports? *CEPII Working Paper*, No. 2011-15.
7. BDC. (2013). Business Development Bank of Canada (BDC): What Happened to Canada’s Mid-Sized Firms? BDC Study. Available online at: [http://www.bdc.ca/EN/Documents/other/BDC\\_study\\_mid\\_sized\\_firms.pdf](http://www.bdc.ca/EN/Documents/other/BDC_study_mid_sized_firms.pdf).
8. Berry, C., Wang, H., & Hu, S.J, (2012). Assembly Technologies and Systems for Quality, Productivity and Customization, *Proceedings of CIRP Conference on Assembly Technologies and Systems*, May, Ann Arbor.
9. Bertrand, O. (2010). What goes around comes around: Effects of offshore outsourcing on the export performance of firms. *Journal of International Business Studies*, 42(2), 334-344.
10. Bems, R., & Johnson, R.C. (2012). Value-Added Exchange Rates. *NBER Working Paper 18498* (Cambridge, MA: National Bureau of Economic Research).
11. Conference board of Canada (CBC). (2012a). Adding Value to trade Measures: Understanding Canada’s role in Global Value Chains. <http://www.conferenceboard.ca/e-library/abstract.aspx?did=4814>
12. Conference board of Canada (CBC). (2012b). Adding Value to Trade: Moving Beyond Being Hewers of Wood. [http://www.conferenceboard.ca/temp/97ada4fc-7447-49c9-995f-687308fde9b0/13-006\\_addingvalue\\_wood.pdf](http://www.conferenceboard.ca/temp/97ada4fc-7447-49c9-995f-687308fde9b0/13-006_addingvalue_wood.pdf)

13. Draper, P. (2013). The Shifting Geography of Global Value Chains: Implications for developing countries, trade policy, and the G20. *Global Summitry Journal*. 1(1), 1-11.
14. Ernst, D., & Kim, L. (2002). Global production networks, knowledge diffusion, and local capability formation. *Research policy*, 31(8), 1417-1429.
15. Foreign Affairs and International Trade Canada (FAITC). (2010). Linking to Global Value Chains: guide for Small and medium-size Enterprises. <http://www.tradecommissioner.gc.ca/eng/gvc-guide.jsp>
16. Flanagan, K., et al. (2003). The Future of Manufacturing in Europe 2015-2020 - The Challenge for Sustainability. *European Commission-Joint Research Centre: Institute for Prospective Technological Studies*.
17. Goldfarb, D., & Doris, C. (2008). Stuck in Neutral: Canada's Engagement in Regional Global Supply Chains. Ottawa: *The Conference Board of Canada*.
18. Grossmann, I. E & Furman, K. C. (2009). Challenges in Enterprise-wide Optimization for the Process Industries. Springer. *Optimization and Its Applications*, 30 (XX), 3-59.
19. Hu, S. J. (2013). Evolving Paradigms of Manufacturing: From Mass Production to Mass Customization and Personalization. *Procedia CIRP*, 7, 3-8.
20. Hu, S.J., Zhu X, Wang H, & Koren, Y. (2008), Product Variety and Manufacturing Complexity in Assembly Systems and Supply Chains. *CIRP Annals-Manufacturing Technology*, 57(1): 45-48.
21. KPMG. (2012). Competitive Alternatives: KPMG's Guide to International Business Location Costs. [www.competitivealternatives.com/reports/2012\\_compalt\\_report\\_vol1\\_en.pdf](http://www.competitivealternatives.com/reports/2012_compalt_report_vol1_en.pdf)
22. Ko, J. & Hu, S.J. (2008). Balancing of manufacturing systems with complex configurations for delayed product differentiation. *International Journal of Production Research*, 46: 15, 4285-4308.
23. Kumar, A. (2007). From Mass Customization to Mass Personalization - A Strategic Transformation. *International Journal of Flexible Manufacturing Systems*, 19(XX), 533-547.
24. Lapointe, A., & Cimon, Y. (2009). Leveraging intangibles: how firms can create lasting value. *Journal of Business Strategy*, 30(5), 40-48.

25. Lunati, M. (2008). Enhancing the role of SMEs in global value chains'. Staying competitive in the global economy, 65-101  
<http://browse.oecdbookshop.org/oecd/pdfs/product/9208061e.pdf#page=67>
26. Manyika, J., Sinclair, J., Dobbs, R., Strube, G., Rassey, L., Mischke, J., Remes, J., Roxburgh, C., George, K., O'Halloran, D., & Ramaswamy, S. (2012). *Manufacturing the future: The next era of global growth and innovation*. McKinsey Global Institute.
27. Mehrabi, M. G., Ulsoy, A. G. & Koren, Y. (2000). Reconfigurable Manufacturing Systems: Key to Future Manufacturing. *Journal of Intelligent Manufacturing*, 11(XX), 403-419.
28. Millar, C., Choi, C., & Carty, R. (2007). Free Markets or State Intervention—How Can Entrepreneurship be Encouraged? *Academy of Taiwan Business Management Review*, 3(1), 1-6.
29. Miroudot, S., Lanz, R., & Ragoussis, A. (2009). Trade in intermediate goods and services (No. 93). *OECD Publishing*. <http://dx.doi.org/10.1787/5kmlcxtldk8r-en>
30. Mohiuddin, M., & Su, Z. (2013a). Manufacturing small and medium size enterprise's offshore outsourcing and competitive advantage: An exploratory study on Canadian offshoring manufacturing SMEs. *Journal of Applied Business Research*, 29(4), 1111-1130.
31. Mohiuddin, M., & Su, Z. (2013b). Offshore Outsourcing of Core & Non-Core Activities and Integrated Firm Level Performance (IFLP): An Empirical Analysis on Quebec Manufacturing SMEs. *M@n@gement*, 16 (4), 454-478.
32. Mohiuddin, M., Su, Z., & Su, A. (2010). Towards sustainable offshore outsourcing: a case study of Quebec manufacturing firms outsourcing to China. *Journal of CENTRUM Cathedra*, 3(1), 84-94. <http://dx.doi.org/10.7835/jcc-berj-2010-0040>
33. Mohiuddin, M., & Su, Z. (2010). Firm level performance of offshore outsourcing strategy of manufacturing enterprises: A research agenda. *Competition Forum*, 8(1), 13-27.
34. Mudambi, R., & Swift, T. (2012). Multinational enterprises and the geographical clustering of innovation. *Industry and Innovation*, 19(1), 1-21.
35. Naim, W. & Tombe, T. (2013). Appreciate the appreciation: imported inputs and concern over Dutch disease, *School of Public Policy (SPP) Research papers*, 6(13), 1-25.
36. OECD. (2013b). *Interconnected Economies: Benefiting From Global Value Chains*. [http://www.ecb.europa.eu/home/pdf/research/compnet/OECD\\_2013.pdf?617f259721991b916cb55da66ae7333b](http://www.ecb.europa.eu/home/pdf/research/compnet/OECD_2013.pdf?617f259721991b916cb55da66ae7333b) <http://dx.doi.org/10.1787/9789264189560-en>

37. OECD. (2013a). Global Value Chains (GVCs): Canada. <http://www.oecd.org/sti/ind/GVCs%20-%20CANADA.pdf>
38. OECD (2013c): Trade in Value Added (TiVA) database. [www.oecd.org/trade/valueadded](http://www.oecd.org/trade/valueadded)
39. OECD (2007). Moving up the value Chain: Staying Competitive in the Global Economy. <http://www.oecd.org/sti/ind/38558080.pdf>
40. OECD/WTO. (2013). Statistics on Trade in Value Added (TiVA), (database), <http://dx.doi.org/10.1787/data-00648-en> , (accessed April 2013).
41. Rodriguez, M. A., & Vecchietti, A. (2010). Inventory and delivery optimization under seasonal demand in the supply chain. *Computers & Chemical Engineering*, 34(10), 1705-1718.
42. Schuh, G., et al. (2009). Design for Changeability. [ed.] Hoda A. ElMaraghy. *Changeable and Reconfigurable Manufacturing Systems*. s.l.: Springer, pp. 251-266.
43. Su, A., Regnière, M. H., & Su, Z. (2013). "Made for the World" vs "Made with the World": What would be the Future of "Made in China"? *Transnational Corporations Review*, 5(2), 1-15. <http://dx.doi.org/10.5148/tncr.2013.5201>
44. Statistics Canada. (2012). Gross Domestic Expenditures on Research and Development in Canada. <http://www.statcan.gc.ca/pub/88-221-x/2012001/ct001-eng.htm>
45. The Conference Board. (2012). How Will Mature Economies Remain Competitive Globally? Straight talk from the *Conference Board* Chief Economist, [www.conferenceboard.org](http://www.conferenceboard.org)
46. Timmer, M.P., Erumban, A. A., Los, B., Stehrer, R., & de Vries, G. (2013). Slicing Up Global Value Chains. University of Groningen, Groninger Growth and Development. ([http://www.conferenceboard.ca/temp/f0706f16-508f-4b94-bad4-75c9f306c8a4/12-222\\_quebecsmes\\_products.pdf](http://www.conferenceboard.ca/temp/f0706f16-508f-4b94-bad4-75c9f306c8a4/12-222_quebecsmes_products.pdf))
47. UNCTAD. (2013). OECD/WTO TiVA database, May 2013 release. [http://unctad.org/en/PublicationsLibrary/unctad\\_oecd\\_wto\\_2013d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/unctad_oecd_wto_2013d1_en.pdf)
48. Van Assche, A. (2012). Global Value Chains and Canada's Trade Policy. IRPP Study, (32). [www.irpp.org](http://www.irpp.org)
49. Wortmann, J. C. (1995). Future Manufacturing Systems -Towards the Extended Enterprise. *Computers in Industry*, 25 (XX), 235-2

## **Chapter 3: Article 2 - Manufacturing Small and Medium Size Enterprise's Offshore Outsourcing and Competitive Advantage: An Exploratory Study on Canadian Offshoring Manufacturing SMEs**

### **Resumé:**

Cette recherche examine les possibilités et les conditions dans lesquelles la sous-traitance internationale (STI) des PME manufacturières crée des avantages concurrentiels pour ces entreprises. La stratégie de STI est largement critiquée dans les pays développés en raison de ses effets pervers sur la réduction des possibilités d'emploi, l'absence de l'économie d'échelle, la baisse des potentialités d'innovation et de création de divers problèmes sociaux. Le présent article avec les données empiriques de treize PME manufacturières canadiennes qui sont engagé dans la STI tente de vérifier si le réseau de co-production des chaînes de valeurs mondiales pourrait plutôt augmenter les profits et les parts de marché ou non, stimuler l'investissement dans la R & D ou non, mettre l'accent sur le développement des compétences clé et améliorer la compétitivité des PME délocalisées ou non. Cette stratégie permet aux entreprises d'améliorer leur compétitivité en leur permettant d'avoir accès aux facteurs de production compétitifs et de nouveaux marchés pour leurs produits. Cette étude contribue à l'enrichissement de l'ensemble des connaissances existantes en montrant que les multinationales ainsi que les PME peuvent obtenir des avantages concurrentiels par la STI d'une partie de leurs activités à des entreprises étrangères où ces «tâches» peuvent être effectuées d'une manière plus compétitive.

**Mots-clés:** Petites et moyennes entreprises (PME); Sous-traitance internationale; Avantage concurrentiel; Étude de cas.

## **ABSTRACT**

This paper explores whether and how the offshore outsourcing of the manufacturing SMEs creates competitive advantages for these firms. The offshore outsourcing strategy is widely criticized in the developed countries for allegedly reducing job opportunities, missing scale economy, diminishing innovation potentialities and creating various social problems. The present article with empirical data from thirteen Canadian offshoring manufacturing SMEs attempted to address that the world-wide distributed co-production network could instead increase profit and market share, boost investment in R&D, raise focus on core competency and enhance competitiveness of offshoring SMEs. This strategy enables companies to enhance their competitiveness by allowing them to have access to the competitive production factors and new markets for their products. This paper contributes to the existing body of knowledge by showing that not only the large multinationals but also the SMEs can achieve competitive advantages from offshoring part of their activities to foreign firms where those ‘tasks’ can be performed more competitively.

**Keywords:** Small and Medium Size Enterprises (SME’s); Offshore Outsourcing; Competitive Advantage; Case study

### 3.1. INTRODUCTION

Globalization, emergence of new technologies and rise of smart manufacturing techniques allowed firms to fragmenting their production processes, slicing up the value chain, and distributing them in the Global production network (GPN). In modularization of the manufacturing process, components made in one country are shipped to another country for further transformation and/or assembling in another country. The existing laws, policies and management practices, are particularly often inconsistent with this changing reality (Ferdows, 1997). The ‘slicing up’ of the aggregate value chain represents a substantial change in the new post-Fordist production paradigm and is largely discussed by researchers specializing in international business studies (Mudambi, 2007; 2008; Globerman, 2011). The fragmented value chain in various industries and service sectors shows that the division of labor can proceed outside the boundaries of the firm. Offshore outsourcing strategy arose from this new production paradigm, became an essential business strategy, gradually increased in terms of scale, scope and pace over the last two decades, (Zee & Brandes, 2007; Mohiuddin, Z. Su & A. Su, 2010). What changed in strategic management thinking is that the dominant view of analyzing ‘competitive advantage’ of firms no longer remained inside the organization (Porter, 1985; Mintzberg, 1983) but extended to the supply network of the firm. Today’s competition is among the different supply chains rather than the individual firms (Harland, 1996).

There are several terms such as outsourcing, offshoring, purchasing, contract manufacturing, international sourcing to name a few, are used to mean “offshore outsourcing” in the literature. In this study, we adopted “offshore outsourcing” as the “management of follow of components and finished products and know-how across the nations in serving local and international markets”. According to Huws & Dahlmann (2004: 3), offshore outsourcing brings two concepts together; geographical and legal. Offshoring is the geographical dimension that refers to the relocation of any part of a firm’s value chain beyond national borders. In its legal sense, outsourcing refers to procuring components or services from an external source rather than producing internally. Globalization, financial market and shareholder’s pressures and accelerated competition as well as ‘increasing consumer demand for value’ have pushed firms to look for more efficient and cost effective way of production with limited resources. One of these strategies comprises relocating and outsourcing to low cost suppliers from emerging countries in order to lower overall production

costs by reaping advantages from competitive production factors and gaining higher profits. There is evidence that outsourcing contributes positively to market value (Alexander & Young, 1996) of large firms. However, many companies are unable to achieve the supposed advantages from this strategy. Offshore outsourcing by the manufacturing SMEs is relatively new, and there are a terribly limited number of rigorous studies looking at the outcome of SMEs offshoring (Gorg & Hanley, 2005; St-Pierre, 2011; Mohiuddin & Su, 2010) with significant differences of outcome among those researches. The SME size constraints along with relatively weaker managerial and financial capabilities might hold back them to exploit the opportunities fully from the offshore outsourcing. On the top of that, the operational cost-cutting strategy can easily be replicated by competitors and may not provide long term competitive advantage for the offshoring SMEs. A fundamental question, therefore, arises whether offshore outsourcing is a value enhancing strategy or not for the manufacturing SMEs. Kimura (2002) does not find any evidence that sub-contracting leads to higher profits in Japanese manufacturing firms. Gorzig and Stephan (2002) find that outsourcing of materials is positively correlated with profits for a sample of German manufacturing firms. Gorg & Hanley (2011) show that offshore outsourcing of production allows firms to access cheaper inputs abroad, foster gains from international specialization and lead to the restructuring of production in the industrialized countries toward more 'skill-intensive' or innovative activities. Leahy and Montagna (2008) show that firms outsourcing may lead to higher cost, and lower profits as a result. Jabbour (2008), Tomiura (2004), and Daveri and Lasinio (2007) have studied the impact of offshore outsourcing on firms productivity. They did their studies on French, Japanese and Italian manufacturing firms respectively and found conflicting results. Gorg and Hanley (2005) found from their study on Irish electronics industry that large enterprises (LE) benefit from outsourcing but not the SMEs. Large firms may have better market power, knowledge on competitors and suppliers and less transaction cost than the SMEs. Previous studies show offshore outsourcing strategy is widely used by Multinational corporations (MNC) (Doh, 2005; Kotabe, 1992). Through offshore outsourcing, the SMEs can reduce costs and increase efficiency in their business processes. Offshoring can provide the SMEs with an excellent way to overcome size and capacity related shortcomings, save money and become more profitable. The efficiency enabled by outsourcing also makes these companies more attractive to investors, thus helping them grow even more. The benefits from outsourcing can be enormous, but for many SMEs outsourcing is simply a matter of survival. Gorp, Jagersma, & Livshits (2007) showed that increasing numbers



of small and medium-sized enterprises are engaged in offshore outsourcing. Van Gorp's research shows that offshore outsourcing is likely to increase. St-Pierre (2011) shows that 17% Quebec manufacturing SMEs are engaged in offshore outsourcing. However, Very little research was conducted on effects of strategies and processes of offshore outsourcing activities of small and medium-sized manufacturing enterprises (SMEs) (Mohiuddin & Su, 2010). Further from a recent database search in EBSCOhost and ABI/Proquest with the key word "Offshore outsourcing of SME", we found only 12 and 14 articles respectively where only 3 and 2 articles respectively falls in the SME offshoring topic. This clearly shows the paucity of research on this topic in spite of the fact that offshoring of manufacturing SMEs can be a valuable business strategy which can provide them to compete in the global marketplace. In our knowledge, no rigorous study was done on the Canadian manufacturing offshoring SMEs even though the manufacturing SMEs plays a pivotal role in Canadian economy. This paper argues that the offshoring SMEs can overcome the size-induced resource constraint and develop networked structure and can behave in the marketplace as a single larger firm, thereby achieving market penetration through synchronized competency building (Liesch et al., 2012; Manring & Moore, 2006). However, the SMEs offshoring motivation, benefits and experiences can differ significantly from those offered to MNCs (Scully & Fawcett, 1994). SMEs may act in a more entrepreneurial fashion, focus on a niche market and are likely to be more ready to react and adopt innovations that arise from offshoring partnerships (Di Gregorio et al., 2009). This paper thus will explore the research question; whether and how the Canadian offshore outsourced manufacturing SMEs create value and enable them to grow and be more competitive in the market place? This paper sheds light on the offshoring manufacturing SMEs if the offshoring strategy enables them to realize the competitive advantages and prosper in the marketplace. We believe manufacturing SMEs enter into offshore outsourcing not only to offshore part of their production activities to the suppliers as a defensive strategy, rather, they try to get access to the resources from the market and improve their overall competitiveness, blurring the organizational boundary.

We investigate our research question through a multiple case study of 13 Canadian manufacturing offshoring SMEs. The choice of case study method was first, due to the paucity of empirical evidence and theoretical reflection on the topic of new business opportunity recognition within

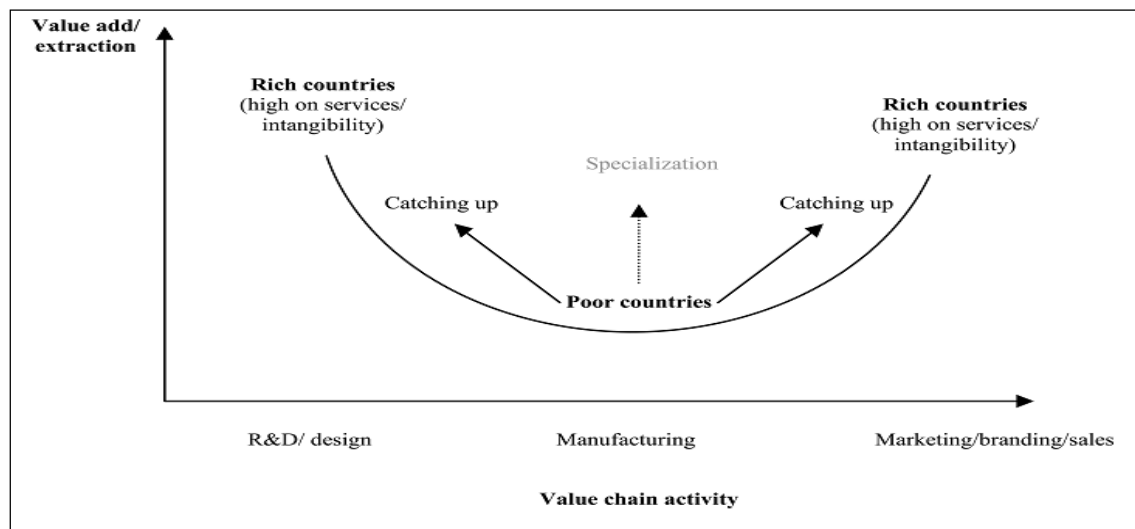
ongoing internationalization initiatives such as SME offshoring (Eisenhardt, 1989; Yin, 1994). Second, the unavailability of reliable data sources on manufacturing SMEs engaged in offshore outsourcing or 'Trade in task' i.e. vertical trade. Conventional trade measures of imports and exports have problems measuring the extent of vertical trade, and those measurement problems can confound interpretations of where and how production and value are created (Conference board of Canada, 2011). The case study method can help us to study this "contemporary phenomenon in its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 1981, p. 98). There are many reasons that motivated us to choose Canadian offshoring manufacturing SMEs as our study subject. The share of manufacturing in Canadian GDP is comparatively high among the G7 countries and more than 98% of Canadian manufacturing firms are the SMEs. The per capita export of Canada is next only to Germany and highly dependent (approximately 75%) on the USA market. Moreover, Canadian manufacturing is being integrated increasingly into the Global Value Chain (GVC). Canadian manufacturers are facing the challenges of combining efficiently & simultaneously low cost competition, global sourcing, supply chain agility, and increasingly new opportunities from the emerging markets. The rising competition and volatility in the USA market and concurrently increased quality and reliability among the suppliers from advanced emerging countries such as China have created the Low cost country sourcing (LCCS) more appealing (Kusaba et al., 2011) for Canadian manufacturers. The 13 cases we have selected for our study do their offshoring in the emerging countries. Small local market and Export oriented manufacturing in Canada deserve a particular attention for exploring whether offshoring can allow SMEs to remain competitive facing competitors from the emerging countries. We believe an in-depth case study method can fulfill this requirement.

This paper is organized as follows. In the next section, theoretical framework is presented, with a review of the literature on offshore outsourcing in the context of new global division of labor (NGDL) (Su, 2009; Gorg & Hanley, 2011) and modularization of the production process. The description of the methodology follows with the research design used in this study. The last section deals with the findings and discussion along with a conclusion at the end.

## 3.2. NEW GLOBAL DIVISION OF LABOR (NGDL) AND OFFSHORE OUTSOURCING

### 3.2.1. Global Value Chain (GVC) and 'Smile Curve'

Global Value Chains (GVCs) are international supply chains characterized by fragmentation of production activities across sites and borders (Lunati, 2007). In fact, the whole process of production, from acquiring raw materials to producing and delivering a finished product, has increasingly been “sliced”, so that each activity that adds value to the production process can be carried out wherever the necessary skills and materials are available at a competitive cost (OECD, 2007; Feenstra, 1998). The GVC, in turn, correlates positively with the offshore outsourcing (Globerman, 2011; Jara, J. & Escaith, H., 2012). Standardization, mechanization and modularization have permitted co-production of manufacturing goods across the globe depending on the cost-effective availability of various inputs for any typical products. Empirical research (Belussi & Sedita, 2010 & Mudambi, 2008) shows that offshoring to emerging countries very often creates low-to-medium-value-added labour intensive activities and more higher-valued and high-value-added jobs are mostly kept in the developed countries. The smile curve (Dedrick, Kraemer & Tsai, 1999; p.156) shows (Figure 01) this phenomenon clearly.



**Figure 8: Smile curve and positioning of the emerging countries**

Higher value added activities are concentrated at the both end of this curve where the developed

countries with their superior capabilities can compete. Activities at both ends of the ‘Smile curve’ are intensive in their application of knowledge and creativity. Activities at the left end or ‘inputs’ are supported by R&D knowledge, while activities at the right or ‘output’ end are supported by marketing knowledge (Su, 2009; Mudambi, 2007, 2008). On the other hand, emerging countries such as China or India can contribute to the bottom of the curve that is labor intensive and comparatively low-value-added activities. Firms combine the comparative advantages of geographic locations with their own resources and competencies to maximize their competitive advantage (McCann & Mudambi, 2005). The interplay of comparative and competitive advantage determines both the boundaries of the firm and the optimal location of the value chain components (Mudambi, 2008). Pyndt and Pedersen (2006) have also found a similar pattern in their study on large Danish companies. The distribution of ‘tasks’ according to the respective capabilities enables firms from the developed and emerging countries to participate into the Global Value Chain (GVC), (Torsilieri & Lucier, 2000; UNCTAD, 2011; Jara, J. & Escaith, H., 2012). Trade across national borders is increasingly consisting of intermediate products rather than complete goods or services (Pyndt & Pedersen, 2006). A key factor in the internationalization of business is the international fragmentation of production (Curran & Zignago, 2011) which represents 50% of international trade exchanges (WTO, 2011). Increasing modularization allows firms, specially the SMEs, to amplify its focus on niche activities within the value chain, associated with the highest value-addition, an approach that may be called ‘fine slicing’ (Mudambi, 2008). It allows the SMEs to outsource other activities associated with lower value-addition more cheaply and efficiently (Ernst & Lim, 2002) and allows having access to the resources it lacks. This analysis shows the rationale for the SMEs to slice their value chain into separable self-contained components or modules (Kotabe, Parente & Murray, 2007). This ‘task distribution’ across the borders can enables developed country firms (DCF) to have a ‘cost effective and competitive production web’ and simultaneously creates economic opportunities in the emerging countries. Offshore outsourcing allows the SMEs to increase their participation in the global value chains (Gereffi, 2005).

The globalization of ‘Tasks’ also creates strong interdependence among countries and firms, characterized by increased trade in intermediate goods, services and know-how, as well as by multi-localization of fragmented production web. This paradigm shift in distributed production system has given rise to public debates and policy concerns about the possible impact of this

increasingly new global division of labour (NGDL) (Gorg & Hanley, 2011; Su, 2009). The NGDL enables SMEs to reap benefits from the comparative advantages in terms of low-cost-high-value production factors and business networks (Su, 2009; Arndt & Kierzkowski, 2001) and increasingly enables them to enter to the new markets in the emerging countries. According to Berger (2006), "in the world of fragmented production system", business goals can be achieved by positioning at any point in the value network where the firm has the best-in-the-class capability. The offshore outsourcing is part of this changing networked production system. Low-value-added activities, or routinized production, are under more pressure to be externalized and relocated to low-cost countries (Belussi & Sedita (2010) than the capital-intensive manufacturing. In general, four motivations such as market-seeking, resource-seeking, efficiency-seeking as well as competition-seeking, drive companies to enter into the offshoring boat (Dunning, 2000; Abidi, Su & Mohiuddin, 2011).

### 3.2.2. Theoretical framework of Offshore Outsourcing

Offshore outsourcing is a multi-dimensional and multi-faceted business strategy explained by theoretical perspectives imported from other fields such as economics, strategy, sociology, and system science. The main assumption across economic theories is that agents enter into outsourcing and engage in contracts to minimize total costs and to mitigate risks. In strategic management theories, Agents build or acquire resources to execute strategies that lead to 'winning'. The varieties of theoretical approaches used in offshore outsourcing research mean the pre-paradigmatic state of this field. Embryonic state of theoretical development on offshore outsourcing research also corroborate in Treffler's (2008) research who asserts that many Canadian firms have yet to recognize the sea change in their sourcing possibilities. Nor do they adequately understand that offshoring will enable them to concentrate on core activities that will improve their efficiency and competitiveness. Offshore outsourcing enhances firm performance because it helps firms operate more efficiently through cost reduction and managerial focus on core competencies (Javalgi et al., 2009, Gulbrandsen, Sandvik, & Haughland, 2009; McNally & Griffin, 2004). Through focusing on the core competencies, firms can improve organizational skills, invest more resources to enable them to adapt quickly with the competitive environment, overcome the challenges, and finally prosper in the long run. Grossman and Rossi-Hansberg (2006;

2008) discuss the offshoring phenomenon in terms of “trading tasks’ whereby the production process is modeled as a continuum of discrete tasks. Within this framework, offshoring of specific tasks can lead to productivity improvements in the importing sector which, in turn, can lead to an expansion of output in that sector. Even though, a country enjoys comparative advantage in an industry, there can have one or more specific tasks where this country has comparative disadvantage. Offshoring these tasks where other locations enjoy a comparative advantage could increase productivity in the tasks retained by the outsourcing firms. Jones (2006) and Bhagwati, Panagariya and Srinivasan (2004) argue that offshore outsourcing is fundamentally a trade phenomenon, and results in gains from trade. Baldwin (2009) and Baldwin and Robert-Nicoud (2010) argue that a fundamental difference between the trading tasks models of trade and older models of trade is that, since offshoring can affect all sectors, it is unclear which groups in society will gain or lose from increased trade intensity. Scully and Fawcett (1994) found in their study that SMEs experiences few benefits from international sourcing and views international sourcing as less helpful in competing with low-cost manufacturers. On the other hand, Sinha, Akoorie, Ding, Wu (2011) found that manufacturing offshore outsourcing enables SMEs to gain the benefits of flexibility, lower production costs and customized delivery without incurring the costs of administrative fiat--as would be the case if they used foreign direct investment as an entry mode. Manufacturing offshore outsourcing enables the SME to operate within the constraints of its limited physical and managerial resources. Among the multiple theories, two influential theories in the study of offshore outsourcing have been transaction cost economics (TCE) and the resource-based-view (RBV) (Vivek et al., 2008; Jiang et al., 2007). These theories can equally guide research on offshoring of the SMEs as the motivations for offshoring are similar like large enterprises (Gregorio et al., 2009).

***In the TCE approach***, the properties of the transaction determine what constitute the most efficient governance structure-market, hierarchy or alliance (Williamson, 1975). A TCE approach helps conceptualize firm offshoring in terms of the specificity of assets, uncertainty around strategic options, and the infrequency of such arrangements (Williamson, 1985). When asset specificity and uncertainty are low, and transactions are relatively frequent, transactions will be governed by markets such as offshore outsourcing contracts. Hierarchical governance occurs when uncertainty and high asset specificity lead to transactional difficulties. Medium levels of asset specificity lead

to bilateral relations in the form of co-operative alliances between the organizations—intermediate governance (McIvor, 2009). ‘Transaction cost economics (TCE)’ implies that firms should produce goods in-house if the transaction cost of ‘market based contract’ is higher and arrange to produce through the ‘market based contract’ if this transaction cost is lower than producing in house (Mohiuddin & Su, 2010). According to the TCE, in-house operations that are more commoditized than others stand to benefit from the market aspects offshoring arrangements (McNally & Griffin, 2004). The main objective of offshoring is to reduce cost (Doh, 2005; Farrell, 2005; Bengtsson et al., 2009) especially labor and production and to increase revenues (Sanders et al., 2007). SMEs can utilize offshore manufacturing outsourcing to gain the advantages of foreign location-specific advantages without having to incur the cost of operating and managing full-scale multinational operations. SMEs with their entrepreneurial capability and flexibility could avail the advantage of emerging opportunities from offshore outsourcing that MNCs might overlook or lack the administrative flexibility to engage in (Sinha, Akoorie, Ding, & Wu, 2011). However, offshoring of the SMEs can also come with many risks and hidden cost (Ellram et al., 2008). Firms can over-emphasize the cost minimization and neglects the value creation aspects of a transaction (Tsang, 2000). It can drive firms to loss of Interfaces/economies of scope; fall in hollowing-out, victim of opportunistic behavior of the outsourcing supplier’s firms. Geographical, economic and cultural distance between the client and supplier firms can contribute to rising transaction and coordination costs, limited learning and innovation (Kotabe, et al. 2009; Moatti, 2008) scope.

***The RBV approach***, on the other hand, assumes that firms try to maximize long-term profits through exploiting and developing resources for competitive advantage (Javalgi, Dixit, & Scherer, 2009). Theory of resource-based view (RBV) of the firm has been employed over the last decade to explain the outsourcing strategy. The RBV can assist with analyzing organizational capabilities, which can link outsourcing with performance and the competitive priorities of the organization (McIvor, 2009). The research on offshore outsourcing is tilted towards the Resource Based view (RBV) approach which can be summarized as the following linear functions:

$$\text{Outsourcing} = f(\text{shortcomings in competitive capabilities} + \text{access to new markets}) \quad (1)$$

$$\text{Shortcomings} = f(\text{resource attributes, allocation, resources \& capabilities} + \text{Size of the local market}) \quad (2)$$

Firms determine their outsourcing strategy based on those shortcomings. This is more relevant with the case of the SMEs. Grant (1991, 1996; Mohiuddin & Su, 2010) points out that the organization's competence depends on its capability to combine resources and organizational processes to meet the desired objectives. Grant (1991) also states that the conventional approach to the creation of resources has focused on company's lack of resources and capabilities. In other words, in order to exploit certain of its resources, the company may need to acquire external complementary resources that it does not possess. Thus, the firm is not limited to exploiting its own stock of resources and capabilities (Das & Teng, 2000), but can cover its shortcomings by purchasing or developing strategic alliances through offshoring. Therefore, suppliers can also be considered as the source of resources that consolidate the organization's internal competencies. According to Belussi & Sedita (2010), initially MNC have engaged in exploitative offshoring to new emerging economies for standardized & low-value manufacturing activities and gradually they entered to the explorative offshoring through outsourcing of knowledge intensive activities. Within the RBV perspective, the core competency approach provides one of the most powerful frameworks for explaining why firms outsource their resources through market agreements (Gilley & Rasheed, 2000). This approach suggests that a firm should invest in those activities that constitute its core competences and outsource the rest (Prahalad & Hamel, 1990; Quinn & Hilmer, 1994). SMEs offshoring also creates advantages of interrelationships between two or more organizations. Offshoring creates associative advantages for their internal and relational capabilities. This synergetic approach suggests that critical resources can be expanded or built up beyond the confine of the organizational boundary and be integrated into inter-firm routines and processes. The use of offshoring is considered a strategy in which essential process activities could be outsourced in a framework of long-term cooperation where the suppliers are considered to be partners (Pfohl & Buse, 2000). Strategic relational value is generated by the development of capabilities across organizational boundaries and can be achieved by the creation of complementary resources that jointly generate synergetic rents (Dyer & Singh, 1998). The development of relational capabilities with customers and suppliers through process integration (Hammer, 2001); relational competitiveness and simplification of activities (Hammer & Champy, 1994; Davenport, 1996) can all be influential when process activities are offshored. Thus, offshoring expands the capacity of the firms (Callahan, Smith, & Spencer, 2013) even it does not possess all the resources and competencies and encourage them to build cooperation even in core



competence fields. More and more recent research on offshore outsourcing is focusing on knowledge and innovation acquisition (Abidi, Su, & Mohiuddin, 2011; Al-Azad et. al. 2010) from the offshore partner firms. Thus, the offshore outsourcing is changing the boundary of firms in the current post-industrial era. The offshore outsourcing strategy, hence, allows combining the best practices in the market place and creating a virtuous cycle. Instead of depending either on absolute, comparative, or competitive advantages, firms are combining their respective advantages with complementary advantages of their partner firm's from abroad and creating a higher level of transnational competitive advantages. Joining to this transformation of world trade and modular production web by Canadian manufacturing firms are likely to achieve its goal of creating enhanced competitiveness and job creation.

Outsourcing standardized activities allow a SME to focus on core activities and/ or expand output or specialize in certain segments of the value chain, or engage in higher profitable business activities that contribute to long term competitiveness (Gilley & Rasheed, 2000). Outsourcing improves the organization's responsiveness and "leads to the availability of higher quality goods and services by creating competition among suppliers" (Rasheed & Gilley, 2005, p. 523). Offshore outsourcing helps a firm to improve the quality of its products and services, thus opening new opportunities in the long term (Ellram et al., 2008). Offshoring can also free managers and resources in order to focus on higher value added activities, new product development and innovation. Outsourcing leads firms to be more flexible in terms of production and adjusting with the market demand and other unprecedented changes (Contractor, et al., 2011). Through investing part of the savings from the offshore outsourcing in R&D, offshoring firms can increase (i) productivity level and (ii) profitability level (Johansson & Lööf, 2008). Furthermore, outsourcing can accelerate the product/ process design cycle time if the client uses multiple best-in-class suppliers, who work simultaneously on individual components of the system as each supplier can contribute greater depth and sophisticated knowledge in specialized areas and thus offer higher quality inputs than any individual supplier or client (Quinn & Hilmer, 1994). Bertrand (2011) with data from French offshore outsourcing firms found the positive link between offshore outsourcing and export. Through Offshoring, client firms become more familiar with supplier firm's markets in terms of cultural differences and business practices. The enhanced understanding of supplier's markets help to reduce various transaction cost and can increase their exports to those markets.

The multiple sourcing partners in different time zone can allow round-the-clock production advantages. However, these advantages need to be traded-off with the higher transaction and coordination costs with foreign partners. Many empirical studies have provided support for positive impacts of offshore outsourcing on productivity (Bartelsman et al., 2003). Other relevant theories have examined the potential of productivity enhancing effects due to knowledge spillover as well as firms' abilities to focus on core competencies by outsourcing relatively inefficient activities. According to Kotabe et al. (2009), offshore outsourcing helps firms to improve their strategic focus or to reduce less economic assets, strategic flexibility, avoid bureaucratic costs and relational rent. In the SME context, the core competence approach can assist firms to increase efficiency, free up or borrow resources and retain flexibility, gain access to unique resources and capabilities from abroad, expand relations with strategic partners and serve customers more efficiently (Gregorio et al., 2009). While the TCE approach is primarily about cost minimization, the RBV emphasize on value creation by the offshoring SME through tapping into external sources of innovation and dynamic capabilities that diminishing transportation and communication costs have made possible.

Offshore outsourcing is a multi-dimensional phenomenon that cannot be explained either by the TCE or the RBV approach alone but can enhance our understanding while approaching them as complementary (Ellram et al., 2008; Vivek et al., 2008) to each other. TCE is focusing primarily on governance skills, whilst the RBV focuses primarily on production skills. In addition, outsourcing in practice is being influenced by both capability considerations and TCE variables such as asset specificity and a small number of suppliers (McNally & Griffin, 2004). The lack of research on offshoring of manufacturing SMEs prompted this paper to develop an offshore outsourcing framework of SMEs integrating the logic of TCE and the RBV.

### **3.3. RESEARCH DESIGN**

The lack of offshore outsourcing theory and the use of multiple theories imported from different fields shows that research in this field is scattered in several directions, and the field is still in a pre-paradigm phase. The comparatively newness of offshore outsourcing of the SMEs require an in-depth exploratory approach to get into the heart of the topic in order to understand what exactly

happening to the offshore outsourcing SMEs. This fact led us to choose the interpretative approach such as multiple case studies to gain practical insights of offshore outsourcing of the SMEs on operational as well as strategic level and to build theory on strategic outsourcing. Qualitative case studies can generate novel and accurate insights when the extant theory seems inadequate. A multiple case study is attractive because it permits detections of patterns across classes or clusters to understand complex phenomenon and its dynamics and produces compelling evidence in a robust manner (Stake, 1995; Yin, 2004). Such a design also facilitates assessment of how a phenomenon performs in different settings and environment (Stake, 2006). The case approach is viable for such purposes as rich anecdotal description adds depth, comprehensiveness and knowledge to the understanding of a specific phenomenon (Mintzberg, 1979; Shah & Corley, 2006). According to Yin (1994), the use of case studies is typical in theory development stages, when investigating events or phenomena that have little or no rigorous theoretical background and not a priori theory can be identified to select case studies and the constructs to be examined. The case study is an attractive method, especially when the study question asks in the form of "what is going on" (Bouma & Ling, 2004; p.17). In fact, 'multiple case studies' is an approach that allows the utilization of advantages of deductive approach and those of the inductive approach for knowledge production. It can provide a thorough understanding of the phenomenon of interest in its real context (Mohiuddin, Z. Su & A. Su, 2010).

Research on benefits from the SME offshoring strategy on the firm's competitive advantages and growth strategy are quite limited or absent. We chose 13 manufacturing SMEs based on three criteria such as; i) offshore outsourcing activities. Those activities that the SMEs send to the supplier firms for transformation and then imported back to integrate with their products in Canada. Or, these firms forward part of their activities, components or design and conception to the supplier firms in order to be integrated with their components for producing final products and import back to Canada or export to a third country as final goods or intermediate goods, ii) Business size. For the purpose of our study, we used the number of employees which appeared straight forward and sufficient. From 10 to 49 employees forms the small and from 50 to 499 forms the medium manufacturing enterprises, iii) Line of Business (manufacturing). Some other criteria for the selection of the firm and interviewees are as follows:

**Table 2: Case selection criteria**

|                                | <b>Measures</b>  | <b>Rationales</b>   |
|--------------------------------|--|---|
| <i>Criteria for firms</i>      |  |   |
| Offshoring experience          | Three years or more  | To confirm that the firms are familiar with Offshoring and had time to get adequate experience.   |
| Type of Offshoring             | Manufacturing Offshoring from seven different sectors: High tech (aero-nautics) as well as mid- and classic manufacturing sectors. | To cover a wide range of cases.   |
| Firm size                      | No less than 10 employees or more than 499. All of these are medium size firms.  | To indicate the activities of of a systematic management model in Offshoring. A typical firm whose results can be generalizable.            |
| <i>Criteria for interviews</i> |  |   |
| Status of the interviewees     | Mid-to-higher level manager/ decision makers in Offshoring activities.   | To be close or involved with the Offshoring so that the real pictured can be extracted from them.   |
| Experience of the interviewees | At least three years consecutive experience in Offshoring activities at the same firm.   | To make sure that the interviewees are familiar with the management process of Offshoring and the Offshoring issues in their current firms. |
| Knowledge towards offshoring   | Expected to have sufficient Offshoring knowledge   | To indicate that the interviewees can understand the questions be asked and can provide appropriate answers.                                |

There is no government or private organization which maintains the database of the offshoring firms. In order to find offshoring manufacturing SMEs respecting our criteria, we contacted the chambers of commerce, manufacturing & exporting association as well as the Data bank of Québec manufacturers ‘Centre de recherché industrielle du Québec (CRIQ)’. From a list of 453 manufacturing SMEs who are also exporters, we have contacted by telephone and spoke with a senior manager (vice-president or manager of international purchasing division) and requested for an interview if the firm fulfills our criteria. Usually, four to ten cases are considered effective for deriving maximum benefit from a multiple-case study research (Eisenhardt, 1989; Stake, 1995). We found 13 firms from 9 different sectors who agreed for the interview for our case studies. In order to keep the confidentiality of their data, we decided to keep only the name of the sector of

these firms. Their sectoral classifications are: i) Furniture industry; ii) Automobile parts industry; iii) Garments industry; iv) Electronics & Electrical industry; v) Industrial equipment; vi) Ceramics and vii) Aeronautics'; viii) Leather industry; ix) Machine & tools industry. There were three types of firms; i) Capital (high-tech) intensive; ii) Medium capital intensive; iii) Labor intensive. Product complexity is the highest for the capital intensive firms and lowest for labor intensive firms. As the unit of analysis, we have used the firm level effects from SME offshoring.

From this choice of firms, it can be assumed that it represents the leading manufacturing sectors and can triangulate data across the sectors. Another important aspect of this choice is the combination of the low-tech industry like garments, furniture, ceramics and electronic and high-tech manufacturing like industrial equipment, aeronautics and automobiles. This will allow us to observe the differences of outcome of SME offshoring according to their technological complexity of their products as well as to explore the avenue of short term versus long term advantages of the SMEs. Further distinction among them was the destination country of their outsourcing. Aeronautics outsourcing was to the firms from Mexico, Brazil and India while other firms collaborated with the Chinese supplier firms. There were also differences in degree of outsourcing. While low-tech and mid-tech firms outsource to China at least 20% or more of their activities, aeronautics firms outsource around 5% of their activities. Choice of multiple case study method suits perfectly with these varieties of cases.

**Table 3: Characteristics of the sample SMEs**

|              | <b>Industry</b>      | <b>Product complexity</b> | <b>Foreign office</b> | <b>Number of suppliers</b> | <b>Importance of negotiations</b> | <b>Motivations</b>                 | <b>Culture</b> | <b>% offshored</b> |
|--------------|----------------------|---------------------------|-----------------------|----------------------------|-----------------------------------|------------------------------------|----------------|--------------------|
| Furniture    | Furniture            | Low                       | Yes                   | Multiple                   | Low                               | Cost cut, Scale, Survive           | Yes            | >20%               |
| Shoe         | Leather              | Medium                    | Yes                   | Multiple                   | Low                               | Cost cut, Scale, Survive           | Yes            | >20%               |
| Auto         | Auto                 | Medium                    | Yes                   | Multiple                   | Medium                            | Cost cut                           | Yes            | >20%               |
| Garment      | Apparel              | Low                       | Yes                   | Single                     | Low                               | Cost cut, Scale, Survive           | Yes            | >20%               |
| Electronic   | Electronic           | Medium                    | Yes                   | Multiple                   | Low                               | Cost, Scale, Survive               | Yes            | >20%               |
| Ceramic      | Ceramic              | Medium                    | Yes                   | Single                     | Low                               | Cost                               | Yes            | >20%               |
| Electric (G) | Electric             | Medium                    | Yes                   | Multiple                   | Medium                            | Cost, Scale, New markets           | Yes            | >20%               |
| G-high tech  | High-tech Textile    | High                      | Yes                   | Multiple                   | Low                               | Cost, Scale, New market            | Yes            | >20%               |
| Tools        | Equipment            | High                      | Yes                   | Multiple                   | Medium                            | Cost, Scale, New product & markets | Yes            | >20%               |
| I.E          | Industrial equipment | High                      | Yes                   | Multiple                   | Medium                            | Cost, Scale, Market                | Yes            | >20%               |
| Aero 01      | Aerospace            | High                      | No                    | Single                     | No                                | Access to know-how & talent.       | No             | 5%                 |
| Aero 02      | Aerospace            | High                      | No                    | Single                     | No                                | Access to know-how & talent        | No             | 5%                 |
| Aero 03      | Aerospace            | High                      | No                    | Single                     | No                                | Access to know-how & talent        | No             | 5%                 |

In order to investigate on the effects of offshoring activities of the manufacturing SMEs on their competitive advantages as well as if this can be a growth strategy in addition to widely believed efficiency strategy, we took seven constructs drawn from various earlier works of academic scientific articles (Kakumanu & Portanova, 2006; Gokhale, 2007) as well as from professional research of leading consulting firms like Mc-Kensy, Accenture and Industry Canada. The Seven constructs are: i) Changes in annual turnover of the company following the offshore outsourcing; ii) Increase of profits; iii) Job creation ; iv) Higher level of investment in R&D activities; v) Enhanced focus on “core competences”; vi) Improvements in overall competitiveness of the firm; vii) Level of customer satisfaction.

The construct ‘competitiveness’ refers to the ability of firms to compete for markets, resources and revenues, as measured by indicators such as relative market share, growth, profitability or innovation (Kotabe et al., 2012; Roberts, 2004; Greenwald & Kahn, 2005). In the long run, competitiveness derives from an ability to build, at lower cost and more speedily than competitors. The real sources of advantages are to be found in management’s ability to consolidate corporate-wide technologies and production skills into competencies that empower individual business to adapt quickly to changing opportunities (Prahalad & Hamel, 1990). The R&D, according to the Organization for Economic Co-operation and Development (OECD, 2008), refers to "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". Higher investment in R&D has also included the higher spending in professional development training of the employees thus improving the productivity and capability of the personnel so that the enhanced human capital can contribute to innovation and create valuable, rare, inimitable and non-substitutable resources which can contribute to the long term growth. Core competencies are the company’s collective knowledge about how to coordinate diverse production skills and technologies. Focusing on core competencies creates unique, integrated systems that reinforce fit among the firm’s diverse production and technology skills- a systemic advantage that competitors cannot copy (Jacoby & Figueiredo, 2008; Prahalad & Hamel, 1990).

We have used in-depth semi-structured interviews in order to collect data from the mid-to-higher level managers of the selected firms. We designed an interview protocol with the set of semi-

structured questions related to our research question before the interview, to guide our data-collection process. Interview method is an effective way of soliciting and documenting, in their own words, an individual's or group's perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, in addition to factual information (Saldana, 2011; p. 32). The choice of mid-to-higher level managers, we call them 'strategic managers', was based on the kind of strategic questions we are investigating and only these strategic managers can have the answer to policy oriented questions. We had established an interview protocol containing broad structured questions/interview guide (*Annex: 01*) on SME's offshoring before starting the interview. The question was drawn from the literature review in this field. Based on the interviews, more in-depth questions were developed in order to gather more insightful data that reflect interviewee's own perspectives and experiences. We tried to gather the basic information on offshoring of the sample firms as well as specific information such as effects of offshoring on several performance indicators (McIvor et al., 2009) and overall competitiveness in order to observe if the offshoring is beneficial to these firms. All the interviews were recorded and analysed using the "content analysis method" which is "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2003, p.18). We have also studied the annual reports, news and published articles in the daily & weekly magazines(i.e. les Affaires) on our 'sample firms' and other documents regarding these firms. Some of these documents are available publicly, and others privately procured through signing of confidential letters. We used an inductive approach for 'content analysis method' by Nvivo to study these documents. Efforts were deployed to triangulate or corroborate out hunches about specific constructs and patterns. We have paid particular attention to challenge evidence in order to investigate the several possible effects of offshore outsourcing strategy. Our case study approach is mix of exploratory and explanatory. Explanatory approach assist to observe the influences and effects instead of the positivist constructs of pure 'cause and effects' (Saldana, 2011; p.70) of manufacturing SMEs offshoring on their long term competitive advantage. Exploratory approach explores the possibility of the growth strategy in addition to the efficiency strategy of the SME offshoring. These objectives fit also with our theoretical framework as the TCE approach predicts how the offshoring is organized or choice between 'make or buy' paradigm and the RBV approach predict the strategic orientation of the SME offshoring.



We used several means of interviews; face to face, telephone interview as well as through online questionnaires with at least one senior manager or strategic manager in charge of offshoring activities in each of the 13 companies. The interview questions were around the constructs we took into consideration for this paper. Our interviews were for a period ranging from 70 minutes to 90 minutes and took place from November 2009 to December 2012. This method was highly effective, and executives spoke freely supported by data and their experiences in quest of competitive advantage through outsourcing. We had interactive discussion during the interview and very often, crossed the boundary of our discussion and interview guide. We put emphasis on listening other information that the respective executives thought essential for outsourcing. Knowing "qualitative research does not always lead to the clear conclusion" (Bouma & Ling, 2004; p.18), we were careful to keep the sequence of events and created a database for each firms and notes on description and interpretation of the data collected. We have recorded the conversation and kept the transcript right after each interview. An analysis of 13 cases, instead of just one, has enabled us to make a better data summarisation. We have then coded the interview notes and transcripts. We have used an iterative process of comparing, coding and analyzing the data that have enhanced the rigor of data analysis. The criteria of validity and reliability of the findings were ensured in every steps of research such as constructs building, interviews, database creation, and data analysis, triangulation of data, data patterns and replication logics in similar firms. Finally, transcripts of the interviews were validated by the interviewees. We employed various tactics in order to minimize observer bias and data-access limitations (cf. McKinnon, 1988). For instance, it was agreed not to reveal the companies real names or to give rigorous descriptions of their fields of operation.

### **3.4. DISCUSSION AND ANALYSIS OF RESULTS**

The main objective of this research was to get an in-depth understanding on influences and effects of SMEs offshoring to these firms in terms of competitive advantages and whether the offshoring is a growth strategy for offshoring manufacturing SMEs, in addition to the efficiency related advantages. Characteristics of our offshoring sample firms such as Industry, product complexity (low-tech, medium-tech and high-tech), availability of foreign office, number of suppliers, Importance of negotiations, motivations, culture, and percentage offshored are given in table 2.

Effects of offshore outsourcing on firms are given in table 3.

*Within-case analysis* reveals that we have three categories of offshoring SMEs such as Low-tech, Medium-tech and high-tech firms. The prime motivations of offshoring for low-tech and medium-tech firms are cost cutting, economies of scale and surviving in the market place. On the other hand, prime motivation for the high-tech firms is to access to know-how, new product development and also for cost advantages (*Tools and I.E firm, Table 2*). The cost advantage comes not only from low-cost labour but also from the strategic, geographical and institutional comparative advantages that suppliers enjoy. ‘VP (procurement) garment’ asserts, “*Factors such as ‘cost reduction, maintaining global competitiveness, customer demand for value, access to market and reorganizing business process’ and host government pro-active policies influence many western firms to relocate to emerging countries*”. The VP of the medium-tech firm ‘Auto’ who source OEM (original equipment manufacturing) from China said, “*China has been a low-price market for foreign companies for a long time, and still is, due to a large amount of factories*”. That means the competition among the supplier firms keeps the price down to a considerable level. Combining the results from the table 2 with the finding from table 3, it shows that low and medium-tech firms could enhance their overall competitiveness, customer satisfaction, investment in R&D and focus on core competencies.

On the other hand, for the high-tech firms, their prime motivation of Offshoring activities was to get access to the production expertise of specific inputs such as cost effective talents pools (especially for aeronautics firms) as well as new product development and access to new markets (*the Tools and I.E firms, table 2*). As the VP sourcing of the ‘Electric (G)’ said, the offshoring “*accelerate our design cycle and at no cost*”, she said, “*You have to invest in equipment and the manufacturing process, but you need to go beyond that*” adding “*we have components from China that help us to reduce costs here, and 50% of our design work comes from India*”.

Despite the different motivations of offshoring depending on the level of product complexity, all the SMEs could focus on their core competencies and improve their overall competitiveness. The sustainable competitiveness depends largely on innovation in areas that fuel growth. Such innovation requires a relentless focus on the organization’s core competencies (Koulopoulos,

2006). The 13 companies that we have studied led us to identify fairly positive results of their outsourcing activities (see Table 3). Offshore outsourcing has contributed significantly to overall competitiveness for 10 out of 13 firms. The 'customer satisfaction' has improved significantly for nine out of thirteen firms. Comparatively lower competitiveness advantage for high-tech firms can be explained by the lower rate of their Offshoring. However, all of these firms could improve their competitiveness in various degrees. Customer satisfaction was lowered for one of the 13 firms (Ceramics) due to the poor image of their products 'made in China'. Despite the improvement of the quality of production in China during the last decades, 'Made in China' products still suffers from being synonymous with low quality. However, this is not the case for most of the studied firms. The VP sourcing of the 'Shoe' said in this regards "*Chinese companies, in varying degrees, are thoroughly talking about quality; they are discussing quality-tools and certifications. In five years or so one will look back and see a dramatic difference in the quality of products produced in China*".

We could not get a detailed breakdown of financial impacts (profit) from outsourcing of these companies. Overall, they all experienced increases of their revenues substantially. Five out of nine low and medium-tech firms could increase their investments significantly in their R&D activities and development of core competences. The three high-tech aeronautics firms could not, however, do the same. The rate of outsourcing for aeronautics firms was relatively low (5%) and dispersed geographically. There were no clear link between the offshoring and improvement of customer satisfaction. The same was concerning profit and investment in R&D. Exception to this was the case of two high tech firms 'Tools' and 'Electric (G)'; they have increased their focus on the core competencies, investment in R&D and improvement in sales and profits. The difference is that these two firms outsourced more than 20% of their production activities. VP sourcing of the '*Tools firm*' said "*We have a general rule, that is, we offshore an item, at least for the first time, when we can see a cost advantage of at least 15% to 25%*". He adds "*We do offshoring, sometimes, in order to have access to the technology what we do not have, and to focus on core activities as we have to be competitive*". The strategic positioning adopted by these companies is particularly relevant. By outsourcing to China, *Furniture and Automobile* companies seek to improve their global competitiveness especially in terms of price while for *Garments and Electronics* companies, outsourcing to China allowed them to specialize only in a few key processes in the production of

their products. According to the executive of the Garments Company, “*we must put away the activities in which we are no longer competitive against the Asian countries and create here in Canada more activities of higher value added*”. Another executive from the Electronic Company shared that view: “*trying to do everything here is not beneficial at all*”. The willingness to engage in a process of “New global division of labour (NGDL)” and the ability to keep and develop locally “*more strategic, sophisticated and higher value added activities which require a higher level of expertise and technology*” are the two determinants in the success of these companies.

Offshoring firms could not create more jobs in Canada except the two (*Automobile and Aeronautics 03 firms*). The two firms which have created jobs are themselves doing outsourcing work from American as well Canadian MNCs. Offshoring strategy allowed them to take advantage of ‘economies of scale’ and helped to create better quality jobs in Canada. It should be noted that offshoring has had a somewhat negative impact on the number of production related jobs at *Furniture, Garments and Electronics* companies in Canada. These firms have created some higher-valued managerial jobs in logistics, distribution and marketing in Canada replacing relatively low-paid but a higher number of manufacturing production jobs thus contributed to job losses in absolute term. While the “*Automobile company and Aeronautics 03* ” have succeeded in creating more jobs in Canada, the “Garments” and “Electronics” company cut jobs, because of re-engineering of their business processes and ‘Furniture company’ remains somewhat stable in terms of the number of jobs in pre- and post-outsourcing era. Among the high-tech firms, three out of six firms have created few jobs in Canada. Reducing job opportunities following the offshoring decision is a relatively hotly debated issue in public opinions. However, recent empirical research rarely could establish a direct link between these two issues. Development of the smart manufacturing and structural changes is at least partly reasons behind the diminishing the level of manufacturing jobs. The historic link between manufacturing and the employment opportunity is shrinking.

All these Offshoring firms improved their focus on their core competency. The overall competitiveness of ten out of 13 firms have enhanced significantly thanks to offshore outsourcing.

**Table 4: Effects of Offshore outsourcing on Firms**

|              | Competitiveness | Annual Turnover | Profit Increase | Investment in R&D | Focus in CC | Customer satisfaction | Job creation |
|--------------|-----------------|-----------------|-----------------|-------------------|-------------|-----------------------|--------------|
| Furniture    | AAA             | AAA             | AA              | AA                | AA          | AAA                   | B            |
| Auto         | AAA             | AA              | NA              | AAA               | AA          | AAA                   | BB           |
| Garment      | AAA             | AA              | BB              | AAA               | AAA         | AAA                   | C            |
| Shoe         | AAA             | AAA             | AAA             | AAA               | AAA         | AAA                   | BB           |
| Electronic   | AAA             | AA              | NA              | AA                | AAA         | AAA                   | C            |
| Electric (G) | AAA             | AA              | AA              | AAA               | AAA         | AAA                   | BB           |
| Ceramic      | AAA             | AA              | AA              | NA                | AAA         | B                     | C            |
| Tools        | AAA             | AAA             | AAA             | AAA               | AAA         | AAA                   | BB           |
| G-high tech  | AAA             | AA              | AAA             | NA                | AAA         | BB                    | AA           |
| I.E          | AA              | AA              | AA              | NA                | AAA         | AA                    | NA           |
| Aero 01      | AAA             | AA              | AA              | B                 | AAA         | AA                    | B            |
| Aero 02      | AA              | AA              | AA              | B                 | AAA         | BB                    | B            |
| Aero 03      | AA              | AA              | C               | B                 | AAA         | BB                    | AA           |

I.E=Industrial equipment, CC=Core competency. Note: 1.) Not at all important= C, 2.) Not important=B; 3.) Relatively important=BB; 4.) Important=AA; 5.) Very important=AAA, 6) NA: Not Available.

*Cross-case analysis* of the sample firms reveals particularly interesting understanding on the SMEs offshoring. While low and medium-tech firms do offshoring for lower cost advantages and surviving in the competitive market, high-tech firms look for access to the missing technology i.e resources and access to new markets and product development with the offshoring collaboration from foreign firms. The experience of sample firms in this study shows that Offshoring strategy was a success story for most of these firms in various degrees regardless of their sectoral differences. Among the seven constructs which we took into consideration for this study, these firms could improve significantly their overall competitiveness, annual turnover and focus on core competencies. These firms also have improved their conditions in other indicators with various degrees of success. These results from offshoring strategy let us conclude that these firms have succeeded in their quest for higher competitiveness. Cost advantage for the low and medium-tech SMEs from offshoring corresponds to the theoretical underpinnings of the “Transaction cost economics (TCE)”. The enhancement of the capability from having access to resources (regardless of cost consideration) from partner firms for the high-tech SMEs corresponds to the RBV perspectives. Focusing on and developing certain capabilities is central to the RBV and this paper shows that through investing in R&D and focusing on core competencies, manufacturing SMEs can enhance their dynamic capabilities enabling them to gain sustainable competitive advantage (SCA) and ensure long term growth without investing their own scarce resources. While TCE and RBV differ in their offshoring decision making process, they complement in focusing on core competencies and R&D regardless of the product complexities of the SMEs.

While low-tech firms mainly entered to this fragmented production system in order to gain from cost advantages and thus took the exploitative offshoring strategy, high-tech manufacturing firms adopted explorative offshoring strategy in order to gain access to and fulfill the shortages of resources and talents from the advanced emerging countries. This is increasingly a noteworthy trend in offshoring. Our case study shows this kind of offshoring improves the competitiveness of outsourcing SMEs and also creates new employment in the home country. However, this kind of offshoring requires organisational capabilities for developing sourcing relationships without losing competencies and resources that enable offshoring firm to compete in the future (Slepnirov and Waehrens, 2008). Our discussion with the strategic managers revealed that offshoring successes depend significantly on the rigorous and vigilant management policies specially establishing a

mutual trust and long term relationship (Lin, Piercy & Campbell, 2012) with the outsourcing supplier firms in the emerging markets like China. From the discussion with the managers, we have learnt that offshore outsourcing is an effective strategy for enhancing competitiveness of offshoring firms. However, offshoring client firms need to decide meticulously what and how to outsource in order to be successful in reaping the envisioned benefits. Dekkers (2011) said that firms need to take into consideration of 'core competency' while deciding on outsourcing. Most of the scholars hold opinions that the firm's core activities are not eligible to be outsourced. (Quinn & Hilmer, 1994; Arnold, 2000; Rashid and Al-Azad; 2013). Hence, the decision makers need to keep core activities inside the firm and outsource the "disposable and core-distinct activities" (Arnold, 2000) to the external providers. Moreover, each firm is different from others and thus managers need to be extremely careful to decide what and how to outsource and to adopt strategies aligned with the respective firm. One need to be very careful during the outsourcing process to take into consideration of those reasons that lead to outsourcing. Several executives of 13 companies asserted "*we must know how to use the comparative advantages of other countries for our interests (Furniture firm)*"; "*an effective and responsible offshore outsourcing is one of the major ways to prevent some manufacturing companies from bankruptcy, and even to avoid the closure of some manufacturing firms in Canada ('shoe' firm)*" and "*We must take advantage of offshore outsourcing to develop further higher-value-added activities such as research and development in Canada('Tools' firm)*".

Though outsourcing may reduce production costs and increase client firm's competitiveness in the short-term, it can also lead to grave negative side effects such as competitive dilemma and loss of initiatives in client firms (Dolgui, 2010). Managers need to adopt adequate relevant strategies in order to cope with these challenges for long-term viability of their firms. As the general manager of the '*electronic firm*' said "*Most companies that do offshoring for the first time have a challenging experience*". The business environment in the emerging countries is far from perfect for western companies. The cultural differences, the issue of product quality, the lack of certain resources, the problem of protecting intellectual property rights, etc. are some of the difficulties that these 13 companies have encountered in their offshoring ventures.

### 3.5. CONCLUSION

The main objective of this paper was to explore whether and how offshore outsourcing enable offshoring manufacturing SMEs competitive in the marketplace. The paper contributes to enhance our understanding of the SMEs offshoring and highlights managerial strategy on how competitive advantages are created from the manufacturing SME offshoring. The findings show that offshore outsourcing brings to formidable benefits and enables SMEs to be more competitive in the market place. Offshoring strategy is driven by the opportunity of reducing operating costs, accessing to an abundant and qualified pool of manpower, improving the global competitiveness of the firm and most importantly, specializing themselves in more strategic and core activities. Based on the experiences of SMEs observed, offshoring those manufacturing activities where Canada does not have comparative advantages is one of the few ways to preserve the competitiveness of these firms in international markets and particularly in the American market. As Canadian economy is highly dependent on export to the USA market where Canadian products face steep competition from emerging countries firms, offshore outsourcing creates '*a level playing field*' for the Canadian manufacturing firms. Many low-tech manufacturing firms that are no longer competitive in Canada, offshoring their production activities to the low cost countries and investing at the both end of the '*smiling curve*' can keep these firms competitive and save at least some jobs in Canada. Mid-tech and high-tech manufacturers can have access to competitive production factors and the low-cost-high-value innovation from the suppliers. The comparatively higher rate of per capita export of Canada is partly dependent on imported intermediary components coming from the offshore outsourcing. It is particularly crucial to understand that Canada's low-tech manufacturing firms can still be competitive in terms of revenue and profits earnings and can survive in the current competitive market through the offshoring strategy to the low cost countries (LCC).

This paper makes two principal contributions. First, it shows how manufacturing SMEs creates competitive advantage by adopting offshoring and developing core competencies that lead to the long term growth. Second, the integrative approach of the TCE and RBV allowed us to study SMEs offshoring in a new context, where SMEs focus on leveraging their limited internal resources to draw in collaboration and partnership with external resources not available internally. These finding echo that offshoring is not only about cost cutting but also about accessing to expertise and a growing number of highly skilled and qualified workers (Manning et al., 2008; Lewin et al.,



2009). This paper also implicitly establishes positive relation between scale of offshoring and better performance. For SMEs managers, this paper offers a tool for using offshoring as a means to compete effectively with large firms.

Despite the beneficial effects of offshore outsourcing that can be observed from the case study, we are also aware that the results of this study may not allow a generalization as our study is based on different types of cases. Locations of offshoring, type of activities and degree of outsourcing have varied from one firm to another. In general, within the interpretivist tradition, generalization is usually not considered to be the primary goal and, instead, particularization is emphasized (Lincoln and Guba, 1985; Stake, 1995). Some methodologists argue that we cannot claim generalization—that Qualitative inquiry is too local and too case specific for a researcher to assert any transferability (Saldana, 2011; p.112). However, a growing number of scholars consider the generalization as necessary, desirable and inevitable in interpretive research (e.g., Williams, 2001; Golden-Biddle and Locke, 1993; Mason, 2002). In fact, Qualitative studies rely on analytical generalizations while quantitative studies rely on statistical generalizations (Mitchell, 1983). Comparisons across multiple cases cannot rely on a ‘statistical’ logic and hence the set of cases should not be confused with a sample (Dubois & Araujo, 2007). However, the subjective evaluation for the objective of offshoring was another weakness of this study. Future research needs to take into consideration of perspectives of the supplier firms as well as the characteristics of the sourcing countries. Most importantly, the future research needs to address “How does offshore outsourcing of SMEs look beyond immediate economic challenges to develop long term strategic goals to compete and win in the global marketplace?” How offshoring SMEs can have access to expertise knowledge, accelerate their product and market development, improve organizational flexibility, faster innovation process and creating dynamic capabilities for long term competitive advantages ?

### 3.6. REFERENCES

1. Abidi, O., Su, Z. & Mohiuddin, M. (2011). Strategic and Organizational Evolutions of High-Tech SME on Global Market. *Chinese Business Review*. 10(5): 327-339. USA.
2. Al-Azad, M.S., Mohiuddin, M., Rashid, M.M. (2010). Knowledge Transfer in Offshore Outsourcing and International Joint Ventures (IJVs): A Critical Literature Review from Cross-Cultural Context. *Global Journal of Strategies and Governance*. 1(1): 41-67
3. Alexander, M. & Young. (1996). Strategic Outsourcing, *Long Range Planning*, 29(1): 116-119.
4. Arndt, S., & Kierzkowski, H. (2001). *Fragmentation. New production patterns in the world economy*. Oxford: Oxford University Press.
5. Arnold, U. (2000). New Dimensions of Outsourcing: A Combination of Transaction Cost Economics and the Core Competencies Concept, *European Journal of Purchasing & Supply Management*, 6 (2000): 23-29
6. Baldwin, R.E. & Robert-Nicoud, F. (2010). Trade-in-goods and Trade-in-tasks: An Integrating Framework. Centre for Economic Policy Research (Great Britain), Volume 15882 of NBER working paper series.
7. Baldwin, R. (2009). Integration of the North American Economy and New Paradigm Globalization. Ottawa: Government of Canada, Policy Research Initiative, WP Series 049.
8. Bartelsman, E., Haltiwanger, J. & Scarpetta, S. (2003). Microeconomic Evidence of Creative Destruction in Industrial and Developing Countries, Free University Amsterdam and Tinbergen Institute; University of Maryland, U.S. Census Bureau, NBER; and The World Bank.
9. Belussi, F. & Sedita, S.R. (2010). Managing the fragmented value chain of global business: exploitative and explorative offshoring toward emerging market economies., Devinney Timothy, Pedersen Torben, Tihanyi Laszlo, in (ed.) *The Past, Present and Future of International Business & Management (Advances in International Management, Volume 23)*, Emerald Group Publishing Limited, pp. 399 – 429
10. Berger, S. (2006). *Made in Monde*. Paris: Seuil.
11. Bertrand, O. (2011). What goes around, comes around: Effects of offshore outsourcing on the export performance of firms. *Journal of International Business Studies*, 42(2), 334-344.
12. Bhagwati, J., Panagariya, A. & Srinivasan, T.N. (2004). The muddles over outsourcing.

- Journal of Economic Perspectives*, 18 (4): 93– 114.
13. Bhanich Supapol, A. (1995). Linkage effects, technology transfer, and the development of small and medium enterprises in the electrical and electronics industries in Thailand, In *Bhanich Supapol, A., Transnational Corporations and Backward Linkages in Asian Electronics Industries* (United Nations).
  14. Bouma, D. & Ling, R. (2004). *The research process*, Oxford University Press, South Melbourne.
  15. Callahan, C.M., Smith, R.E., & Spencer, A.W., (2013). The Long-Term Performance Consequences of Strategic Partnerships in High Tech Industries, *Journal of Applied Business Research*, 29 (1):217-134.
  16. Conference board of Canada, December. (2011). Adding Value to Trade Measures: An Introduction to value-added trade. CBC Briefing.
  17. Contractor, F.J., Kumar, V., Kundu, S., & Pedersen, T. (2011). Global Outsourcing and offshoring: in search of the optimal configuration for a company, In (ed.), Contractor, F.J., Kumar, V., Kundu, S., & Pedersen, T., “*Global Outsourcing and Offshoring: An integrated Approach to Theory and Corporate Strategy*”, Cambridge University Press, UK.
  18. Curran, L. & Zignago, S. (2011). Intermediate products and the regionalization of trade, *The Multinational Business Review*, 19(1): 6-25.
  19. Das, T. & Ten, B. (2000). A Resource-Based Theory of Strategic Alliances, *Journal of Management*, 26 (1): 31–61.
  20. Davenport, T. (1996). The Future of knowledge management”, *CIO*, 1 January, 2012, available at: [http://www.cio.com/archive/010196\\_davenport\\_content.html](http://www.cio.com/archive/010196_davenport_content.html)
  21. Daveri, F. & Lasinio C.J. (2007). Offshoring and Productivity growth of in the Italian manufacturing industries, WP 08/2007, Universita degli Studi di Parma, Italy.
  22. Dedrick, J., Kraemer, KL. Tsai, T. (1999). Acer: An I.T. Company Learning to Use Information Technology to Compete’, I.T. in Business, Center for Research on Information Technology and Organizations, University of California, Irvine. USA
  23. Dekkers, R. (2011). Impact of strategic decision making for outsourcing on managing manufacturing, *International Journal of Operations & Production Management*, 31(9):935 - 965
  24. Di Gregorio, D., Musteen, M. & Thomas, D.E. (2009). Offshore outsourcing as a source of

- international competitiveness. *Journal of International Business Studies*, 40: 969-988.
25. Doh, J.P. (2005). Offshore outsourcing: implications for international business and strategic management theory and practice, *Journal of Management Studies*, 42(3): 695-704.
  26. Dolgui, A. (2010). Outsourcing, In Proth, Jean-Marie '*Supply Chain Engineering*, Springer, p. 77-88.
  27. Dunning, J.H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity, *International Business Review*, 9 (2): 163-190.
  28. Dyer, JH. & Singh, H. (1998). The relational view: Cooperative strategy and Sources of International Competitive Advantage, *Academy of Management Review*, 23(4): 660-679.
  29. Eisenhardt, K.M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4):532- 550.
  30. Ferdows, K. (1997). Made in the World: The Global Spread of Production, *Production and Operations Management*, 6(2): 102-109.
  31. Gilley, M. & Rasheed, A. (2000). Making More by Doing Less: An Analysis of Outsourcing and its Effects on Firm Performance, *Journal of Management*, 26(4): 763-790.
  32. Globerman, S. (2011). Global Value Chain: Economics and Policy Issues, [http://www.international.gc.ca/economist-economiste/assets/pdfs/research/TPR\\_2011\\_GVC/03\\_Globerman\\_e\\_FINAL.pdf](http://www.international.gc.ca/economist-economiste/assets/pdfs/research/TPR_2011_GVC/03_Globerman_e_FINAL.pdf)
  33. Gokhale, A. (2007). Offshore Outsourcing: A Delphi Study" *Journal of Information Technology Case and Application Research*, 9(3): 6-18.
  34. Gorg, H. & Hanley, A. (2004). Does Outsourcing increases Profitability? *The Economic and Social Review*, 35(3):267-288.
  35. Gorg, H. & Hanley, A. (2011). Services outsourcing and Innovation: An empirical investigation, *Economic Inquiry*, 49(2):321-333.
  36. Gorp, D.M. van, Jagersma, P.K., & Livshits, A. (2007). Offshore behavior of service firms: Policy implications for firms and nations. *Journal of IT Case and Application Research*, 9(1):7-19.
  37. Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3):114-135.

38. Grant, R. M. (1996). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7(4):375-387.
39. Greenwald, B. & Kahn, J. (2005). *Competition Demystified: A Radically Simplified Approach to Business Strategy* (New York).
40. Gereffi, G. (2005). The New Offshoring of Jobs and Global Development: An Overview of the Contemporary Global Labor Market, International Labor Organization (ILO), 7th Nobel Peace Prize Social Policy Lectures, Kingston, Jamaica, December 5, 6 & 7, 2005.
41. Grossman, G. & Rossi-Hansberg, E. (2006). The Rise of Offshoring: It's Not Wine for Cloth Anymore, Jackson Hole Conference Volume, Federal Reserve Bank of Kansas City.
42. Grossman, G. & Rossi-Hansberg, E. (2008). Trading Tasks: A Simple Theory of Offshoring. *American Economic Review*, 98(5):1978-97.
43. Gulbrandsen, B., Sandvik, K., & Haugland, S.A. (2009). Antecedents of vertical integration: Transaction cost economics and resource-based explanations. *Journal of Purchasing and Supply Management*, 15(2):89-102.
44. Hamel, G., & Prahalad, C.K. (1994). *Competing for the Future*, HBS Press, Boston, USA.
45. Hammer, M. (2001). The superefficient company. *Harvard Business Review*, September: 81-91.
46. Hammer, M. & Champy, J. (1993). *Reengineering the Corporation: A Manifesto for Business Revolution*, Harper Collins Publishers, Inc., New York.
47. Harland, C.M. (1996). Supply Chain Management: Relationships, Chains and Networks, *British Journal of Management*, 7 (special issue): S63-S80.
48. Huws, U. & Dahmann, S. (2004). Outsourcing of ICT and Related Services in the EC: A Status Report. Retrieved 6th August, 2012 :  
<http://www.eurofound.europa.eu/emcc/content/source/tn04048s.htm>
49. Jabbour, L. (2008). Outsourcing, offshoring and Firm's Performance :Evidence from the French Manufacturing Industry, Centre D'économie de la Sorbonne(CES), Université Paris 1 Panthéon-Sorbonne and CNRS, France .
50. Jacoby, D. & Figueiredo, B. (2008). The Art of High Cost Country Sourcing, *Supply Chain Management Review*, May/June, 2008.
51. Jara, J. & Escaith, H., (2012). Global Value Chains, International Trade Statistics and Policymaking in a Flattening World, *World Economics*, 13(4):19-38

52. Javalgi, R.G., Dixit A., & Scherer, R.F. (2009). Outsourcing to emerging markets: Theoretical perspectives and policy implications, *Journal of International Management*, 15 (2): 156-168.
53. Jiang, B. & Qureshi, A. (2006). Research on outsourcing results: current literature and future opportunities. *Management decisions*, 44(1): 44-55.
54. Johansson, B., & Lööf, H. (2008). The Impact of Firm's R&D Strategy on Profit and Productivity, CESIS Electronic Working Paper Series, Paper No. 156, Centre of Excellence for Science and Innovation Studies (CESIS), The Royal Institute of technology.
55. Jones, Ronald. (2006). Production Fragmentation and Outsourcing. General Concerns", Rochester: University of Rochester, mimeo.
56. Kakumanu, P. & Portanova, A. (2006). Outsourcing: Its Benefits, Drawbacks and other Related Issues" *Journal of American Academy of Business*, Cambridge. 9(2):1-7.
57. Koulopoulos, T. (2006). Value Creation Through Smart-Sourcing, InformationWeek, URL: <http://www.informationweek.com/news/180207019>
58. Kotabe, M., Mol, M.J., Murray, J. & Parente, R. (2012). Outsourcing and Its implications for market success: negative curvilinearity, firm resources, and competition. *Journal of the Academy of Marketing Science*, 40:329-346.
59. Kotabe, M., & Murray, J. (1990). Linking product and process innovations and models of international sourcing in global competition: a case of foreign multinational firms. *Journal of International Business Studies*, 21(3): 383-408.
60. Krippendorff, K. (2003). *Content Analysis: An Introduction to Its Methodology*, 2nd ed., Sage, Thousand Oaks, CA.
61. Kusaba, K., Moser, R. & Rodrigues, A.M. (2011). Low cost country sourcing competence: A conceptual framework and empirical analysis. *Journal of Supply Chain Management*, 47(4).
62. Leahy, D., & Montagna, C. (2008). Make or Buy in International Oligopoly and the Role of Competitive Pressure. GEP Research paper, University of Nottingham.
63. Liesch, P.W., Buckley, P.J., Simonin, B.L., & Knight, G. (2012). Organizing the Modern Firm in the Worldwide Market for Market Transactions. *Management International Review*, 52:3-21.
64. Lewin, A. Y., Massini, S., & Peeters, C. (2009). Why are companies offshoring

- innovation? The emerging global race for talent. *Journal of International Business Studies*, 40(6): 901–925.
65. Stephan, M., & Silvia, M. (2008). A dynamic perspective on next-generation offshoring: The global sourcing of science and engineering talent. *The Academy of Management Perspectives*, 22(3), 35-54.
  66. Lin, S., Piercy, N., & Campbell, C. (2013). Beyond the make-or-buy dichotomy: outsourcing creativity in the fashion sector. *Production Planning & Control*, 24(4-5), 294-307.
  67. Lunati, M. (2007). Enhancing the Role of SMEs in Global Value Chains. Global Value Chains SME and Entrepreneurship Division of the OECD Centre for Entrepreneurship, SMEs and Local Development (CFE).
  68. Manring, S. & Moore, S. (2006). Creating and managing a virtual inter-organizational learning network for greener production: a conceptual model and case study. *Journal of Cleaner Production*; 14:891–9.
  69. McCann, P., & Mudambi, R. (2004). The Location Behavior of the Multinational Enterprise: Some Analytical Issues, *Growth and Change*, 35(4): 491-524.
  70. McKinnon, J. (1988). Reliability and validity in field research: some strategies and tactics. *Accounting, Auditing and Accountability*, 1, 34-54.
  71. McNally, R.C. & Griffin, A. (2004). Firm and Individual Choice Drivers in Make-or-Buy Decisions: A Diminishing Role for Transaction Cost Economics? *Journal of Supply Chain Management*, 40(1), 4-17.
  72. McIvor, R. (2009). How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operations Management*, 27: 45-63.
  73. McIvor, R., Humphreys, P., Wall, A. & McKittrick, A. (2009). A Study of Performance Measurement in the Outsourcing Decision, CIMA publishing, UK.
  74. Mintzberg, M. (1983). Structure in fives: Designing effective organizations, Prentice-Hall (Englewood Cliffs, N.J.).
  75. Mintzberg, H. (1979). Pattern is strategy formation. *Management and Organisation* IX (3), 67–86.
  76. Moatti, V. (2008). Low cost sourcing... or high cost supplying?, Actes de la XVIIème conférence de l'Association Internationale de Management Stratégique, 28-31 May, Nice,

France.

77. Mohiuddin, M., Su, Z., & Su, A. (2010). Towards Sustainable Offshore Outsourcing: A case study of Quebec manufacturing Firms Outsourcing to China, *The Journal of CENTRUM cathedra*, 3(1), 84-95.
78. Mohiuddin, M., & Su, Z. (2010). Firm level Performance of offshore outsourcing strategy of manufacturing enterprises: A Research Agenda”, *Competition Forum*, 8(1): 13-27.
79. Mudambi, R. (2008). Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography*, Oxford University Press, 8(5): 699-725,
80. Mudambi, R. (2007). Offshoring: economic geography and the multinational firm. *Journal of International Business Studies*, 38: 206-10.
81. OECD. (2007). Staying competitive in the global economy: Compendium of studies on global value chains.
82. OECD Factbook (2008). Economic, Environmental and Social Statistics.
83. Pfohl, H.C & Buse, H.P. (2000). Inter-organizational logistics systems in flexible production networks: an organizational capabilities perspective”, *International Journal of Physical Distribution & Logistics Management*, 30(5): 388-408.
84. Pyndt, J. & Torben, P. (2006). *Managing Global Offshoring Strategies*, Copenhagen: CBS Press.
85. Quinn, H. (1994). Strategic outsourcing, *Sloan Management Review*, summer: 43-55.
86. Rashid, M.M. & Al-azad, M.S. (2013). Relocating Low-to-Medium Tech Manufacturing Activities to Developing Countries: Empirical Analysis of Taiwanese and South Korean Manufacturing Outsourcing to Bangladesh. *Transnational Corporation Review*, 5(2): 16-29.
87. Roberts, J. (2004). *The Modern Firm: Organizational Design for Performance and Growth*, Oxford University Press.
88. Saldana, J. (2011). *Fundamentals of Qualitative Research*. Oxford University Press.
89. Scully, J.I. & Fawcett, S.E. (1994). International procurement strategies: challenges and opportunities for small firm, *Production & Inventory Management Journal*, 35(2):39-46.
90. Sinha, P., Akoorie, M.E.M, Ding, Q. & Wu, Q. (2011). What motivates manufacturing SMEs to outsource offshore in China?: Comparing the perspectives of SME manufacturers and their suppliers, *Strategic Outsourcing: An International Journal*, 4(1):67-88



91. Slepniov, D. & Waehrens, B.V. (2008). Offshore outsourcing of production: An exploratory study of process and effects in Danish companies. *Strategic Outsourcing: An International Journal*, 1 (1):64-76.
92. Stake, R.E. (2006). *Multiple Case Study Analysis*. New York: Guilford Press.
93. Stake, R.E. (1995). *The art of case study research*, Thousand Oaks: Sage.
94. St-Pierre, J. (2011). Mondialisation et internationalisation des PME: Le comportement des PME manufacturières québécoises, Institute de Recherche sur les PME, UQTR. Canada.
95. Su, Z. (2009). Participation de la Chine à la Nouvelle Division Internationale du Travail: Défis et Perspectives, *Revue Économique et Sociale*, 67(1).
96. Treffler, D. (2008). Policy Responses to the New Offshoring: Think Globally, Invest Locally. Ottawa: Industry Canada Working Paper Series, 2008-11-25.
97. Tomiura, E. (2007). Foreign Outsourcing, Exporting and FDI: A productivity Comparison at the Firm Level. *Journal of International Economics*, 72: 113-127.
98. Torsilieri, J.D. & Lucier, C. (2000). Climbing Up the Value Ladder, strategy and business issue 21.
99. Tsang, E.W.K. (2000). Transaction cost and resource-based explanations of joint ventures: a comparison and synthesis, *Organizational Studies*, 21 (2000): 215–242
100. UNCTAD (2011): World Investment Report, 2011.
101. WTO. (2011). Made in World Initiative,  
[http://wto.org/english/res\\_e/statis\\_e/miwi\\_e/miwi\\_e.htm](http://wto.org/english/res_e/statis_e/miwi_e/miwi_e.htm)
102. Yin, R.K. (1981). The case study as a serious research strategy. *Science communication*, 3(1): 97-114.
103. Yin, R. K. (1994). *Case study research: Design and methods* (2<sup>nd</sup> Ed.). Newbury Park, CA: Sage Publications.
104. Zee, F.A van der & Brandes, F. (2007). Manufacturing Futures for Europe: A survey of the literature, TNO the Netherlands, available at:  
[http://ec.europa.eu/enterprise/enterprise\\_policy/industry/doc/future\\_manufacturing\\_europe\\_literature\\_final\\_report.pdf](http://ec.europa.eu/enterprise/enterprise_policy/industry/doc/future_manufacturing_europe_literature_final_report.pdf)



## **Chapter 4: Article 3-Offshore Outsourcing of Core and Non-Core Activities and Integrated Firm-Level Performance: An Empirical Analysis of Québec Manufacturing SMEs**

### **Résumé**

L'objectif de cette étude est de démontrer la relation entre la sous-traitance internationale (STI) des activités clés et des activités non-clés et de performances intégrées des entreprises sous-traitantes (PIES). Ce dernier est constitué de la performance de compétitivité, financière, stratégique, et de la performance des parties prenantes. Les données empiriques ont été recueillies à partir de petites et moyennes entreprises (PME) manufacturières québécoises qui font de la sous-traitance, en utilisant un questionnaire en ligne. Une analyse de régression linéaire a été effectuée pour établir la relation entre la STI et PIES. Les résultats montrent que la STI des activités non essentielles et l'internalisation des activités clés ont un impact positif sur la performance intégrée des entreprises sous-traitantes. Les résultats montrent également que la STI améliore les performances économiques, sociales et stratégiques des PME manufacturières, ce qui leur permet de prospérer dans l'environnement d'affaires actuel volatile. Toutefois, les gestionnaires ont besoin de bien identifier les activités qui pourraient être sous-traités, afin de bien déterminer les compromis entre la STI et internalisation des activités clés. La largeur de la notion de PIES et la complexité intrinsèque des tâches de STI appellent un complément d'étude avec des échantillons plus importants.

Mots-clés: Sous-traitance internationale, performance intégrée, Internalisation, PME, Sustainable competitive advantage.

## **ABSTRACT**

The objective of this study is to demonstrate the relationship between outsourcing of core and non-core activities and integrated firm-level performance (IFLP) consisting of competitive, financial, strategic, and stakeholders' performance. Empirical data was collected from manufacturing small and medium size enterprises (SMEs) in Quebec that outsource, using a web-based questionnaire. A linear regression analysis was performed to establish the relationship between outsourcing and IFLP. The findings show that outsourcing of non-core activities and insourcing (internalization) of core activities have a positive impact on a firm's integrated performance. The findings also demonstrate that offshore outsourcing enhances the economic, social, and strategic performances of manufacturing SMEs, which enables them to thrive in the current volatile business environment. However, managers need to identify carefully functions that could be outsourced in order to determine trade-offs between outsourcing and internalization. The broadness of the IFLP concept and the intrinsic complexity of offshore outsourcing tasks call for further study with larger samples.

**Keywords:** Offshore outsourcing, Firm-level, Integrated performance, Internalization, SMEs.

## 4.1.INTRODUCTION

Offshore outsourcing in this study refers to the delegation of any task or subtask to a foreign-based external organization or the competitive procurement of components, including embedded services, from a specialized middle market. The terms offshore outsourcing and outsourcing are employed interchangeably in this article. Outsourcing is a poorly understood business strategy that is highly publicized and debated among researchers, practitioners, and the public. Researchers have studied it from diverse points of view, using different theories (Mohiuddin, 2011), and applying different research methodologies.

Canada is the second largest per-capita exporter among the top manufacturing countries in the OECD (Organization for Economic Co-operation and Development) (Mohiuddin & Su, 2013). Many Canadian small and medium enterprises (SMEs) that adopt offshore outsourcing themselves supply specialized products and services to large multinational companies (MNCs) from the United States and elsewhere. The offshore outsourcing done by Canadian manufacturing SMEs is very different from the outsourcing utilized by other OECD countries. Canadian export-oriented manufacturing firms are largely dependent on the US market for their complete or modular products and services. Through outsourcing, export-oriented manufacturing SMEs in Québec and the rest of Canada are able to delegate activities in which they do not have a competitive advantage, and thus create for themselves a level playing field in the US market.

The debate on the implications of offshore outsourcing is pronounced. There are many intuitively appealing arguments for and against outsourcing as a means of achieving sustainable competitive advantages (SCAs). The arguments for the beneficial effects of outsourcing are many. Gorzig and Stephan (2002) find that outsourcing materials are positively correlated with profits. Bertrand (2011) finds a positive correlation between outsourcing and overall exports. In general, outsourcing enables firms to become more flexible in adjusting production to fluctuations in market demand and unforeseen changes (Contractor, Kumar, Kundu, & Pedersen, 2011). Outsourcing improves an organization's responsiveness and "leads to the availability of higher quality goods and services by creating competition among suppliers" (Rasheed & Gilley, 2005: 523). Thus, outsourcing can expand a firm's capacities (Callahan, Smith, & Spencer, 2013), even when the company in question does not possess all necessary resources and competencies.

Outsourcing allows a firm to improve the quality of its products and services, thereby opening new opportunities to development in the long term (Ellram, Tate, & Billington, 2008). However, there are also negative outcomes associated with the practices of outsourcing; namely, it can cause a firm to lose its organizational competencies, become dependent on supplier firms, and suffer from opportunistic behavior.

Until now, studies dealing with the effects of outsourcing have been wanting or inconclusive. Jabbour (2010), Tomiura (2007), and Daveri and Lasinio (2007) find conflicting results in their study of the impact of offshore outsourcing on firms' productivity. In addition, another shortcoming of the extant literature is that its focus is imbalanced, devoting much attention to the study of large firms and insufficient attention to small firms. For instance, previous studies (Bertrand, 2011; Chen, 2009; Jiang & Qureshi, 2006; Kotabe, Mol, Murray, & Parente, 2012) have largely focused on the outsourcing practices of large firms, with the exception of a few studies (Di Gregorio, Musteen, & Thomas, 2009; Mohiuddin & Z. Su, 2013; Rashid & Al-Azad, 2013; Scully & Fawcett, 1994) focused on outsourcing practices of SMEs. This is an important issue because the outsourcing of large firms and SMEs may differ, according to company size and other characteristics. In summary, firms outsource for a variety of reasons, including but not limited to: access to competitive production factors, economies of scale, higher innovation capabilities, higher quality products, lower operating costs, greater focus on critical processes, and increased flexibility for coping with the current volatile business environment. The perceived benefits of outsourcing encompass competitive, financial, strategic, and stakeholder issues. Therefore, an in-depth study must incorporate all these performance components in order to shed light on whether manufacturing SMEs can obtain these benefits from outsourcing.

Most outsourcing performance studies (Gilley, Greer, & Rasheed, 2004; Gilley & Rasheed, 2000; Giustiniano & Clarioni, 2013; Jiang, Belohlav, & Young, 2007) have considered mainly outcome-based financial indicators because of the availability of financial performance data. However, financial indicators are considered historical and backward looking. They excessively reward short-term results that may cause management frustration and resistance (Verbeeten & Boons, 2009). As a result, they are generally incongruent with the *strategic goals* of an organization (Atkinson, Waterhouse, & Wells, 1997). Although profitability is important, short-term financial

performance does not sufficiently indicate the sustainability of a venture. To be sustainable, a firm needs to look beyond profitability and incorporate competitive, strategic, and stakeholder concerns. The present study adopted the sustainability principles of the WCED (World Commission on Environment and Development) Report (1987: 24), which defines sustainability as “meeting the needs of the present generation without compromising the ability of future generations to meet their needs” and appears to consider sustainability beyond its classic ecological definitions. Studies on the effects of offshore outsourcing on firms need to incorporate competitive, financial, strategic, and stakeholder performance issues because such integrated performance can better reflect the firms’ sustainability.

This study sheds light on the effects of outsourcing in terms of integrated firm-level performance (IFLP) in the context of manufacturing SMEs in Québec. IFLP is a broader concept than firm-level performance and incorporates competitive, financial, strategic, and non-equity stakeholder performance. In this regard, the outsourcing practices of non-core competencies and internalization of core competencies and their relation to the IFLP of manufacturing SMEs need to be studied rigorously. It is with this aim that this study examines whether outsourcing can influence IFLP. The concepts of core competencies and firm-level performance are distinctly defined and are evaluated differently by researchers and practitioners. When focusing on their core competencies, firms decide which goods to produce in-house (internalization) and those whose production will be delegated to suppliers. The remainder of this paper is organized as follows: Section 2 discusses the literature on the relationships between core and non-core activity outsourcing and IFLP; Section 3 describes the research methodologies used; Section 4 presents the findings and their analysis; finally, Section 5 presents the conclusions and limitations of this study.

#### **4.2. ANALYTICAL FRAMEWORK AND HYPOTHESIS: OFFSHORE OUTSOURCING AND INTEGRATED FIRM-LEVEL PERFORMANCE (IFLP)**

Many scholars and practitioners view outsourcing as an efficient way to address organizational competitiveness (Giustiniano & Clarioni, 2013; Mohiuddin & Su, 2013; Mohiuddin, Z. Su, & A. Su, 2010; Mukherjee, Gaur, & Datta, 2013; Wu, Li, Chu, & Sculli, 2005). Outsourcing involves the process of vertical disintegration across the globe in favor of competitive production factors

and market opportunities, which correspond to the new international division of labor (A. Su, Regnière, & Z. Su, 2013). An increasing number of studies discuss the different operational, managerial, governance, and strategic issues of outsourcing as well as its firm-level implications. However, despite the increasing use of outsourcing as a business strategy, the effects it has on IFLP, the increasing complexities of outsourcing governance, and how and what activities to choose for outsourcing remain hotly debated. This would suggest that there is still an incomplete understanding of outsourcing as a concept. The following subsection discusses outsourcing of core and non-core activities to highlight which of these can be outsourced or internalized to improve a firm's overall competitiveness.

#### 4.2.1. Theoretical Insights on Governance Structure and Non-Core Activities in Offshore Outsourcing

Outsourcing issues are being investigated in several academic research fields (Marchegiani, Pirolo, Peruffo, & Giustiniano, 2010). Owing to the variety of perspectives represented in outsourcing research, studies often produce contradictory results (Mol, van Tulder, & Beije, 2005). This implies that scholars and practitioners need to address more unresolved questions related to outsourcing, one of which is the effect of outsourcing on IFLP.

Core competencies are the highest level of organizational knowledge and skills shared across business units, which contribute the most to added values and result from the integration and harmonization of the strategic business unit competencies. A core competency is defined as a collection of competencies that are widespread in the firm (Javidan, 1998). Outsourcing enhances firm performance because it helps the firm operate more efficiently by reducing costs and augmenting managerial focus on core competencies (Gulbrandsen, Sandvik, & Haughland, 2009; Javalgi, Dixit, & Scherer, 2009; McNally & Griffin, 2004). Sharpe (1997) asserts that through outsourcing of non-core activities, firms can concentrate on core competencies and improve their productivity, competitiveness, and sustainability in the marketplace. Corporate survival in the long term is dependent on a firm's ability to exploit core competencies (Torkkeli & Tuominen, 2002).

In the field of research pertaining to the motivations and outcomes of outsourcing, the two most prominent theories on how to decide what to outsource and what to internalize are transaction cost



economics (TCE) and the resource-based view (RBV) (Espino-Rodríguez & Padrón-Robaina, 2006; Mayer & Salomon, 2006; Reitzig & Wagner, 2010).

#### *4.2.1.1. Transaction Cost Economics (TCE) and Offshore Outsourcing*

Drawing on the Coase theorem (1937), the transaction cost economics (TCE) theory uses frequency, asset specificity, and uncertainty to explain the boundaries of firms and to identify when a “task” is transacted in a hierarchy instead of “in a market”. Assumptions about “transactions” in TCE are relaxed to some extent from the neoclassical perspective of economics, in order to reconcile economic theory with organizational reality where there are hierarchies as well as markets. For example, in the neoclassical economic paradigm, information is considered perfect, whereas in the TCE perspective information is considered asymmetric and a source of uncertainty. The TCE perspective recognizes that parties involved in a transaction may not disclose all relevant information, which leads to opportunistic behavior.

In neoclassical economics, the identities of the buyer and seller do not matter, whereas in TCE, they do, which leads to asset specificity (Nagpal, 2004). In economic science, agents are considered as rational. However, in reality, economic actors are intendedly rational, but only limitedly so in reality; this is called bounded rationality (Williamson, 1985). TCE assesses the choices between internal production (hierarchy) and outsourcing of the same activities by comparing the internal costs and the costs of “using” the market (Jones & Hill, 1988). The available outsourcing literature sheds some light on the possible ambiguities related to the assessment of the actual dynamics of transaction costs (Chen, 2009). For example, economic, political, and institutional differences including cultural and linguistic factors, may have a great impact on transaction costs. Understanding this might limit the repetition of generalizations made in prior studies across national governance systems (Marchegiani, Giustiniano, Peruffo, & Pirolo, 2012; Sultana, Rashid, Mohiuddin, & Mazumder, 2013).

Moreover, from a TCE perspective, it seems that outsourcing becomes crucial when markets are not able to allocate resources efficiently and reduce uncertainty (Giustiniano & Clarioni, 2013). Therefore, outsourcing could represent a means of reducing selection, negotiation, reorganization,

and control costs (Coase, 1937), particularly when the resource dependence of firms is high (Hillman, Withers, & Collins, 2009). In general, TCE uses frequency, uncertainty, and asset specificity to propose an optimal set of governance structures; the cost of transactions varies systematically with the attributes of transactions (Williamson, 1985). TCE addresses deciding between internal production and outsourcing, as shown in Table 5.

Table 5: Governance structure under TCE

| Uncertainty | Frequency | Asset specificity                 |                                      |                            |
|-------------|-----------|-----------------------------------|--------------------------------------|----------------------------|
|             |           | Non-specific                      | Mid-level specific                   | Idiosyncratic              |
| Low         | Low       | Outsource with classical contract | Outsource with neoclassical contract |                            |
| High        | High      |                                   | Relational contract                  | Insource (Internalization) |

(Developed by authors with adaptation from Nagpal, 2004).

#### 4.2.1.2. Transaction Cost Economics (TCE), Outsourcing, and Performance

Rise in frequency of transaction increases the cost of maintaining the transaction relationship between two organizations. Transaction cost economics (TCE) asserts that the higher the frequency of transaction, the greater the chances of internalization of activities by the organization. However, utilizing information and communication technology can reduce the transaction cost between the collaborating organizations in the standardized low-to-medium technology industries. In addition, there is a trade-off between the fixed setup cost of production and the variable cost of transactions. Generally, the fixed cost of production is higher than the variable cost of market transactions. This means that companies can change their cost structure from a fixed setup to variable cost through outsourcing. The fixed setup cost structure is more rigid and investment-dependent and is less able to cope with the volatile market environment. Thus, firm performance can be enhanced by outsourcing rather than by incurring significant fixed setup costs. To avoid such inertia, a firm can also outsource high-frequency tasks to improve its overall performance and to ensure that high-frequency transactions minimize marginal cost. This type of TCE is different from classical TCE, which asserts that high-frequency tasks should be internalized.

Asset specificity is the most important attribute of TCE. Asset specificity means the degree of customization associated with the transaction (McIvor, 2009). There are at least three types of asset specificities: (i) physical asset specificity, (ii) human asset specificity, and (iii) locational asset specificity. Asset specificity can be standardized, i.e., it can be non-specific. When this is the case, outsourcing can enhance the performance of firms, especially in low-to-mid-technology manufacturing industries. TCE suggests that firms should internalize tasks related to idiosyncratic (specific) assets to protect themselves from the opportunistic behaviors of partner firms in market transactions. Internalization allows firms to effect more innovations and protect more valuable assets, including intellectual property rights. Firms can then exploit these advantages in order to survive over the long term and to create higher value-added job opportunities for their communities. Hybrid assets, which fall between standardized and idiosyncratic assets, can be outsourced under a joint governance system, such as captive outsourcing, to enhance organizational performance. Among the tasks of the three types of asset specificity, those for human idiosyncratic assets can also be outsourced because of the ease of their transferability and their ability to improve firm performance.

The third attribute of TCE is uncertainty, which can be either external uncertainty determined by the marketplace or internal uncertainty in relation to the organization's decisions of what to outsource and what to internalize. The external uncertainties are market volatility, unpredictability, and any other aspects that can disrupt the market and its predictability. In the event of high external uncertainty, TCE posits an internalization of tasks so that strategies can be adapted according to changes in market movements. In the case of high asset-specific tasks, internal uncertainties stem from firms' bounded rationality and their lack of awareness of outsourced tasks. However, in the case of low-to-medium asset-specific tasks, the level of external uncertainty is generally acceptable and the level of internal uncertainty is low, making the outsourcing of such tasks usually beneficial to the performance of the firm. The outsourcing of tasks can also mitigate the impact of some external uncertainties, such as natural disasters and disruption of supply chains, because of its reliance on multiple channels and multiple locations. On the whole, outsourcing can contribute to the downsizing of firms and make them more flexible and competitive in a volatile marketplace. Divesting from less-performing activities saves resources, which can be redirected to more value-added activities. In turn, these higher value-added activities make these focal firms more

productive and more distinctive than their competitors, enabling them to adopt strategic positions in the marketplace, create better-value jobs, and bring more wealth into their communities. Based on the conclusions of the preceding discussion, our first hypothesis is as follows:

*H1: Offshore outsourcing of non-core activities enables Québec manufacturing SMEs to be more productive, profitable, competitive, and strategic and to create opportunities for non-equity stakeholders.*

#### 4.2.2. Offshore Outsourcing of Core Activities and Integrated Firm-Level Performance (IFLP)

Core competencies are an organization's strengths and abilities developed over a long period of time. They provide value to customers and are difficult for competitors to replicate. Core competencies can be considered the *raison d'être* of the firm. Rather than outsourcing core activities, a company should outsource non-core functions to supplier firms. By doing so, skilled employees are able to focus on core operations; that is, on activities that add higher values to the product or service of the firm and improve overall productivity of the firm.

##### 4.2.2.1. Resource-Based View (RBV) and Outsourcing

The RBV of the firm has been employed over the last decade to explain outsourcing strategy. The RBV assists in analyzing organizational capabilities, and therefore can help link outsourcing with an organization's performance and competitive priorities (McIvor, 2009). The RBV assumes that firms maximize long-term profits by developing and exploiting resources for competitive advantage (Javalgi et al., 2009). It also enables firms to expand beyond their own limits in order to have greater access to organizational resources and capabilities they do not possess. Grant (1996) and Mohiuddin and Z. Su (2010) point out that an organization's competency depends on its capability to continuously combine, recombine, and reconfigure resources and processes to meet desired objectives.

The RBV provides some insightful views and overcomes some of the limitations found in the TCE tenants, such as the problems of bounded rationality. The outsourcing decision depends on the

capabilities of the firm in relation to that of their suppliers. Espino-Rodríguez and Padrón-Robaina (2004) divide this perspective into two subcategories: (1) the focus on the propensity to outsource and (2) the relationship between the decision to outsource and organizational performance. The RBV predicts that firms with a rich competency base that can be deployed to undertake an activity may internalize it. On the other hand, firms less prepared internally for that activity may outsource it. Thus, when a company is highly capable of tackling an activity there is a reduced likelihood that it will outsource that activity (Barney, 1999; Leiblein, Reuer, & Dalsace, 2002). Outsourcing tasks for which there are insufficient internal capabilities, focusing on tasks for which there are core capabilities, and outsourcing non-core tasks enhance organizational performance. Focusing on tasks for which there are core capabilities enables firms to specialize and create more value-added job opportunities for their community. However, selectively outsourcing to enter a new emerging market, such as China, can also open new opportunities. Firms that outsource gain access to complementary resources, interactions, and exchanges with other firms, which can improve knowledge transfer and organizational agility for all firms involved. Thus, the RBV posits that firms that outsource tasks can improve their competitive, financial, strategic, and stakeholder performances.

Within the resource-based literature, the concept of organizational competencies has evolved from focusing on the skills and capabilities of a firm towards emphasizing its distinctive competencies—areas in which the organization excels and performs better than its competitors (Reed & DeFillippi, 1990). However, the concept of core competencies is problematic (Quinn & Hilmer, 1994), mainly because it is difficult to determine a company's short-term and long-term core competencies, and almost impossible to predict what these will be in the future. Prahalad and Hamel (1990) identified three characteristics: a core competency (i) must contribute significantly to customer benefit from a product; (ii) should be competitively unique, and as such, should be difficult for competitors to imitate; and (iii) should provide potential access to a wide variety of markets. However, core competencies are dynamic and need to be evaluated continuously that become challenging for managers.

The construction of a core competency is difficult because developing skills and capabilities is time-consuming and costly. Moreover, a company's priorities change over time due to dynamic

environments and the capabilities other firms develop (Lei, Hitt, & Bettis, 1996). This means that a company's current decisions will be critical for its uncertain future. On the other hand, Goddard (1997) emphasizes the "uniqueness" of a core competency. According to him, a firm can have only one core competency at a time, and this core competency is scattered across the firm's SBUs. According to the comparative advantage theory, this core competency should be based on the firm's specific capability or competency and not simply on any of its resources (Javidan, 1998; Mooney, 2007).

According to Quinn (1999), keeping core competencies under internal control and outsourcing non-core activities simultaneously enables companies to focus and flatten their organizations because they concentrate their limited resources on a few knowledge-based core competencies to develop "best in class" capabilities. This leverages their internal innovation capabilities through effective personal, IT, and motivational links to outside knowledge sources. The outsourcing of non-core activities also eliminates the rigid fixed overhead, bureaucracy, and physical plant-related costs by conscientiously tapping into the more nimble resources of their customer value chain downstream, and technology and supply value chain upstream (Al-Azad, Mohiuddin, & Rashid, 2010). In addition, companies can expand their own knowledge and physical investment capabilities by exploiting the facilities and program investments of outside sources.

#### *4.2.2.2. Resource-Based View (RBV), Outsourcing, and Performance*

Researchers and policy makers have long argued about what should be outsourced and what should remain in-house. Common wisdom indicates that any function or sub-function that is strategic—and therefore, an essential part of the core competency of an organization—should not be outsourced. Logically, anything that is not a core competency can be outsourced; by doing so, firms can redirect resources to the core competency and improve their sustainability. By outsourcing non-core activities and concentrating on core activities, firms may increase their performance by becoming more flexible and innovative. By developing a web of specialized firms for each non-core activity in a virtual production network, a firm creates a virtuous circle of best performers that make it the most competitive in the marketplace. Divesting from non-core activities and investing resources into core activities also improves the specialization of the firm

and offers opportunities for stockholders and stakeholders in the high value-added segments of the firm. For example, firms can procure non-core intermediate goods and services at lower costs from specialized firms in low-cost advanced emerging countries like China and India.

Several authors have identified relationships between outsourcing of core-competencies and firm performance. Among them, Elmuti (2003) analyzes the relationship between outsourcing strategy and organizational performance. He demonstrates that outsourcing benefits a firm's performance by improving its expertise and service quality, minimizing the number of employees it needs, optimizing its processes, and reducing costs and administrative burden. Gilley and Rasheed (2000) find evidence that a core competency enables a firm to differentiate between peripheral outsourcing and core outsourcing. Dekkers (2011) states that firms should consider their core competency when deciding to outsource. He classifies firms' activities according to the location of their performance, that is, as outsourcing to a supplier firm, as internalization, or as near-core activities under a strategic partnership. Commonly, these authors highlight the importance of focusing on core competencies and internalizing them for better performance.

The kind of activities a firm should outsource is still widely debated. Most scholars concur that a firm should not outsource its core activities (Arnold, 2000; Quinn & Hilmer, 1994), because doing so may reduce interfaces for innovation, disclose critical technologies and processes to competitors, increase potential opportunistic behaviors from partners, and create moral hazards, all of which offset the potential benefits to be gained from outsourcing. Hence, managers prefer to maintain their companies' core activities and outsource "disposable and core-distinct activities" (Arnold, 2000, p. 134) to external providers. Modular production systems and ever-increasing technological developments allow firms to break up their activities into tasks that are carried out in a variety of locations around the globe. This is what Mudambi (2007) calls "fine slicing" (McDermott, Mudambi, & Parente, 2013). Firms have fewer opportunities to collaborate, interact, and exchange among their different modules of activities and miss out on the opportunity to introduce and improve new inter-departmental processes and innovation (Bettis, Bradley, & Hamel, 1992). Outsourcing in manufacturing fragments and disintegrates the supply chain, which makes it easier for new competitors to enter the industry and undermines pricing power and profitability. The fragmentation and slicing of core activities in manufacturing can lessen a firm's

inimitability, providing its supplier firms access to proprietary product processes and creating potential imitators and competitors. The presence of the latter can intensify the competition, shorten product cycles, and squeeze return on investment (ROI). In sum, one of the negative outcomes of outsourcing rather than internalizing core activities is that it diminishes a firm's potential for innovation, competitiveness, and consequently, long-term performance. Based on the preceding discussion, the following hypotheses are proposed:

*H2a: Outsourcing core tasks "hollows out" a firm, reducing its innovative capability and profitability.*

*H2b: Internalizing core tasks enables a firm to specialize, improving its innovative capability, competitiveness, strategy, and profitability.*

Combining TCE and the RBV, Mayer and Salomon (2006) find that contractual hazards provide firms with an incentive to internalize, regardless of a firm's capabilities. However, firms with weak technological capabilities are more likely to outsource. The TCE and RBV perspectives appear to complement each other as ways to approach outsourcing analysis (Leiblein & Miller, 2003; Mohiuddin & Z. Su, 2013), especially in their focus on the positive aspects of in-house strategic activities (Espino-Rodríguez & Padrón-Robaina, 2006) and resources (Prahalad & Hamel, 1990). Resource-based models recognize the idiosyncratic capabilities of every organization. They suggest that organizations can gain SCAs by deploying firm-specific resources and capabilities efficiently and strategically. These resources and capabilities should be rare, valuable, and non-substitutable (Barney, 1991; Kotabe, & Murray, 2004).

#### 4.2.3. Conceptual Framework

The production characteristics of SMEs are more traditional than those of large firms. SMEs can produce more customized products, focus on niche regional markets, and interact more easily with their clients. The proximity of SMEs to the market makes it possible for them to offer a fast, direct, and close response to customer demand (Pelham, 2000). Previous research on outsourcing has focused primarily on large firms. Blackburn, Hart, and Wainwright (2013), for instance, argue that the size and age of enterprises are the dominant factors in their performance and are more important



than strategy. As such, it follows that the antecedents, processes, and outcomes of outsourcing for large firms differ from those of outsourcing SMEs, particularly in the manufacturing sector.

Previous research on SME outcomes is also inconclusive. Scully and Fawcett (1994) find that international sourcing provides few benefits to SMEs and does not necessarily help them compete with low-cost manufacturers. On the other hand, Sinha, Akoorie, Ding, and Wu (2011) find that manufacturing SMEs that pursue offshore outsourcing gain flexibility, lower their production costs, and customize delivery, and as a result improve their overall competitiveness. Hayes, Hunton, and Reck (2000) find that outsourcing provides more positive and more significant market value gains for smaller firms than for larger firms, and for service firms than for non-service firms. Gilley and Rasheed (2000), and Park, Vertinsky, and Lee (2012) suggest that the size of a firm influences its performance. SMEs outsource differently from large firms. Size can moderate the effects of outsourcing for Québec manufacturing firms. This idea is the basis of this study's conceptual framework relating outsourcing and performance, shown in Figure 9.

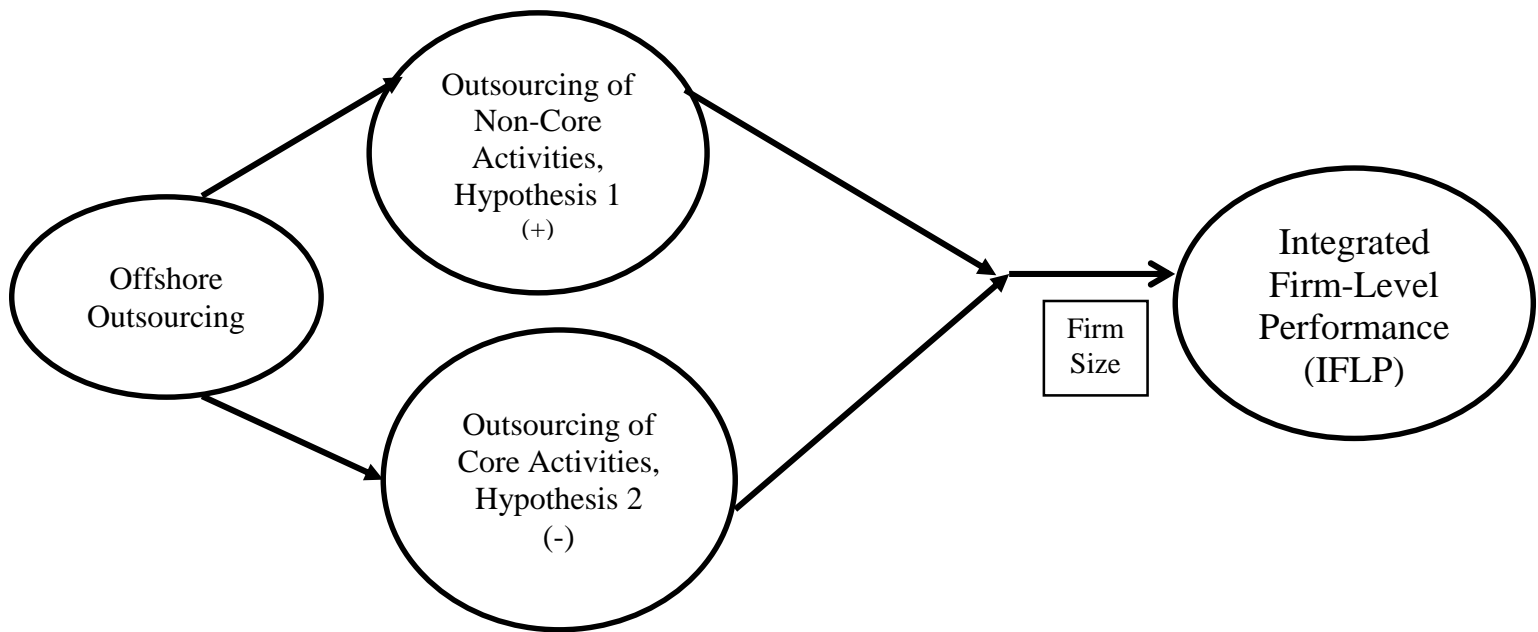


Figure 9: Conceptual Framework

### 4.3. RESEARCH METHODOLOGY

The objective of this study is to investigate the relationship between outsourcing of core and non-core activities and IFLP. A web-based survey was conducted using a quantitative approach based on the study of Gilley and Rasheed (2000). The survey data culled from the responses of Québec manufacturing firms were then analyzed with the help of the SPSS software package. Most of the activities of the manufacturing firms were grouped under 14 categories (Table 6).

Table 6: Activities of Québec manufacturing firms

|                         |                |
|-------------------------|----------------|
| Accounting              | Product repair |
| Advertising             | Purchasing     |
| Assembly                | R&D            |
| Customer service        | Publicity      |
| Information systems     | Logistics      |
| Machining/manufacturing | Training       |
| Payroll                 | Warehousing    |

#### 4.3.1. Performance Variables and Measures

In this study, the level of outsourcing was defined by two criteria—intensity and breadth—based on the method used by Gilley and Rasheed (2000). Outsourcing intensity was measured as the percentage of any category of activities that have been outsourced. Outsourcing breadth was measured as the number of activities outsourced (e.g., accounting, human resources, manufacturing), divided by the maximum number of activities that could be outsourced by the firm. The indicators of outsourcing were calculated by multiplying the mean of the intensity by the breadth of outsourcing for each firm. A task was considered outsourced if it could be performed internally (under the firm's current financial and managerial capacity) and if 25% or more of the task is outsourced. Each category of task or activity was rated on a Likert scale from 1 to 5 (1 = completely outside the capacity of the firm; 5 = completely within the capacity of the firm). The Likert scale values 3, 4, and 5 indicate tasks that are within the financial and managerial capacities of the firm.

Two indicators were used to measure each core competency. First, the subjective opinions of executives on the importance of each activity were taken. Then, each category of activities was classified on the Likert scale of 1 (not at all important) to 5 (extremely important). Each task was classified according to its importance in the industry for superior performance in terms of sales growth and profitability (Gilley & Rasheed, 2000). The averages of these two indicators were utilized in deciding the strategic importance of each category of activities. Activities classified on the Likert scale as 3, 4 and 5 were considered as core competencies and activities classified as 1 and 2 were considered as peripheral or non-core activities.

Many authors have proposed a variety of performance measure alternatives, from enhanced economic profit measures to balanced scorecards integrating financial and non-financial measures (Kaplan & Norton, 2001; Maksoud, 2004). Leading authors such as Kotabe, Murray, and Javalgi (1998) and Carney (1997) have focused on outsourcing performance measures. Kotabe et al. (1998) identifies three types of performance measures as necessary components in any outsourcing performance measurement system: strategic, financial, and quality measures. Carney (1997) uses additional dimensions of market performance such as cost savings, cycle time, customer satisfaction, and productivity to measure the effectiveness of outsourcing strategy. However, no

study has addressed the effects of offshore outsourcing on IFLP, which consists of competitive, financial, strategic, and stakeholder performances. The objective of the present study is to shed light on this gap in available research. IFLP deserves more attention in the post-financial crisis era when firms are looking for alternative competitive strategies such as outsourcing to survive in the marketplace. Outsourcing emphasizes the efficient use of scarce resources, both by investing in strategic activities of the firm in order to gain SCAs, and by divesting from less important arms of the firm so that the firm can avail itself instead of competitive services offered by other firms in the marketplace. Offshore outsourcing allows a firm to create a network of the best performers in non-core activities in the marketplace.

To determine the IFLP of the firms, four types of performance—competitive, financial, strategic (innovation), and non-equity stakeholder—were taken into consideration. Our dependent variable is IFLP. In the web-based survey, executives were asked whether they had improved their organization’s performance based on these four types of performance measures. The improvement of all four types of performance was collectively considered as IFLP. Our independent variables are categorized into competitive, financial, strategic, and non-equity stakeholder performances. The measures of each independent variable category are presented in Table 7.

Table 7: Measures of Independent Variables

| Type of indicators     | Elements and measures of indicators   |
|------------------------|---|
| Competitive            | <ul style="list-style-type: none"> <li>• Productivity (Görg, Hanley, &amp; Strobl, 2008; Kitcher, McCarthy, Turner, &amp; Ridgway, 2013). (% Change of gross output).</li> <li>• Market share (Kotler, 2006; Wang, Lo, &amp; Yang, 2004). (% change).</li> </ul>                            |
| Financial              | <ul style="list-style-type: none"> <li>• Return on investment (ROI) (Chakravarthy, 1986; Greer et al., 1999). (% change)</li> <li>• Sales (revenue) performance (Chakravarthy, 1986; Gilley &amp; Rasheed, 2000). (% change).</li> </ul>  |
| Strategic (innovation) | <ul style="list-style-type: none"> <li>• Investment in R&amp;D (Gilley &amp; Rasheed, 2000). (% change)</li> <li>• Volume of product and process innovations (Chakravarthy, 1986; Gilley &amp; Rasheed, 2000; Narasimhan &amp; Das, 1999). (Number of innovations).</li> </ul>              |
| Non-equity stakeholder | <ul style="list-style-type: none"> <li>• Employment creation in core activities (Mohiuddin et al., 2010). (Number of jobs created).</li> <li>• Relationship with clients (Gilley &amp; Rasheed, 2000; Gilley, Greer, &amp; Rasheed, 2004). (Perception on 5-point Likert scale).</li> </ul> |

These four types of indicators can be categorized into two groups, internal and external performance, as shown in Table 8.

Table 8: Categorization of Performance Indicators

| <b>Type of indicators</b> | <b>Internal performance</b>       | <b>External performance</b>                 |
|---------------------------|-----------------------------------|---|
| Competitive               | • Productivity                    | • Market share                              |
| Financial                 | • Return on investment (ROI)      | • Sales (revenue) performance               |
| Strategic (innovation)    | • Investment in R&D               | • Volume of product and process innovations |
| Non-equity stakeholder    | • Job creation in core activities | • Client satisfaction                       |

#### 4.3.2. Data Collection

A web-based questionnaire was used to collect the data for this research. The questionnaire was sent to executives of Québec manufacturing firms that use outsourcing. The executives were asked to first classify their firm's internal capacity for performing any task and then to classify the percentage of outsourcing adopted for any given task or activity. When the activity was performed entirely internally, outsourcing was 0%, and when the activity was entirely outsourced, outsourcing was 100%. The questionnaire had four parts: (1) general information on the firm, (2) evaluation of outsourcing, (3) performance evaluation, and (4) executives' comments. The web-based survey method was chosen because it is cost-effective and time-efficient. One of its drawbacks, however, is that it has varying response rates according to the target population of the study. Berry's (2005) survey obtained a response rate of 21% from a sample of university students, and Cobanoglu, Warde, and Moreo's (2001) survey obtained a response rate of 44% from a sample of university professors. In contrast, the response rates from samples of manufacturing firms have ranged from 10 to 17%. Griffis, Goldsby, and Cooper (2003) obtained a 14.3% response rate, and Gilley and Rasheed (2000) obtained a 16.8% response rate. In the present study, the web-based questionnaire was sent to 598 firm executives, of which 102 responded, representing a 17.1% response rate.

To conduct this study, a database was created with a list of SMEs in the manufacturing sector of the Québec province in Canada. According to the data bank of Québec manufacturers and wholesale distributors managed by the *Banque d'information industrielle* of the *Centre de recherche industrielle du Québec* (CRIQ, 2009) in 2009 there were 883 manufacturing firms in this province. Of these, 724 (82%) were considered SMEs (between 5 and 250 employees). Firms with five or fewer employees were excluded, as their use of outsourcing was negligible. In addition, 176 firms did not have an e-mail address and 62 were subsidiaries of other firms, and were thus excluded from participation in the survey. A total of 598 (68%) firms were taken into consideration for this study.

The firms in this study belong to the 21 broad sectors of the North American Industry Classification System (NAICS). Specifically, they belong to five major manufacturing industries: (1) production of metal products; (2) manufacturing of wood products; (3) manufacturing of furniture and related products; (4) food processing; and (5) machinery manufacturing. A breakdown of the annual revenues of the Québec SMEs in this study is shown in Table 9.

Table 9: Breakdown of Annual Revenue of Firms under Study

| <b>Annual revenue (CAD)</b>    | <b>Percent of total firms</b> |
|--------------------------------|-------------------------------|
| \$0.1 million to \$0.5 million | 12%                           |
| \$0.5 million to \$1 million   | 13%                           |
| \$1 million to \$3 million     | 25%                           |
| \$3 million to \$5 million     | 10%                           |
| \$5 million to \$10 million    | 13%                           |
| \$10 million to \$25 million   | 13%                           |

Note: The revenue for 14% of the firms is unknown.

#### **4.4. RESULTS AND DISCUSSION**

Some 71% of the firms had 5 to 49 employees, and the remaining firms (29%) had 50 to 250 employees. The average number of employees was 52 ( $\sigma = 94.5$ ), and the median number of employees was 22. Further, 29% of the firms were in the metal industry, 16% in the wood product industry, 16% in the machinery industry, 12% in the chemical and plastic industry and 27% in other industries. Concerning the position of the respondents, 26% were president, 23% were

director general, and 23% were CEO. In summary, 71% of the respondents were senior managers of the sample firms.

#### 4.4.3. Survey Results

The analysis of the data from the web-based questionnaire survey revealed that machinery and electronic manufacturing firms had the best performance (3.70 and 3.60, respectively) after beginning to outsource part of their activities. Chemical and wood industry firms had the lowest overall performance (3.00 and 3.01, respectively). The external performance of firms was similar across all sectors. The score of ‘three’ indicates the average performance of Québec firms. Table 10 provides an overview of the performance of Québec manufacturing firms.

Table 10: External Performance of Firms by Industry

| <b>Industry</b>                | <b>Average</b> | <b>Std. Dev.</b> | <b>N</b> |
|--------------------------------|----------------|------------------|----------|
| Machinery                      | 3.70           | 0.72             | 16       |
| Electronics                    | 3.60           | 1.25             | 3        |
| Metal products                 | 3.39           | 0.62             | 30       |
| Food processing                | 3.20           | 0.95             | 4        |
| Paper and pulp                 | 3.20           | 0.87             | 3        |
| Others                         | 3.17           | 0.63             | 6        |
| Furniture                      | 3.16           | 0.84             | 9        |
| Clothing                       | 3.10           | 0.71             | 2        |
| Wood products                  | 3.02           | 0.88             | 17       |
| Chemical and plastics products | 3.00           | 0.99             | 12       |

Table 11 shows the firms' performance as perceived by the executives. Note that the average performance of the Québec manufacturing firms is three.

Table 11: External Performance of Firms according to Executives' Position

| <b>Position in firm</b>             | <b>Average</b> | <b>Deviation</b> | <b>N</b> |
|-------------------------------------|----------------|------------------|----------|
| Director                            | 3.60           | 0.41             | 7        |
| Vice-president and director general | 3.60           | N/A              | 1        |
| Director general                    | 3.57           | 0.75             | 23       |
| Secretary                           | 3.55           | 0.77             | 4        |
| CEO                                 | 3.42           | 1.03             | 23       |
| President                           | 3.22           | 0.64             | 27       |
| Administrator                       | 3.20           | 0.42             | 2        |
| Vice president                      | 3.16           | 0.91             | 5        |
| Others                              | 2.88           | 0.73             | 5        |
| Owner                               | 2.68           | 0.70             | 5        |

Finally, it is interesting to note that the external performance of outsourcing firms is correlated positively and significantly with the annual revenue ( $R = 0.2568$ ). This suggests that the higher the annual revenue, the better the estimated performance of the firm. The estimated performance ( $> 3.00$ ) of the firm is higher than the average of the respective Québec industry sector.

#### 4.4.4. Testing of Hypotheses

Table 12 presents descriptive statistics of the executives' responses.

Table 12: Descriptive Statistics of Executives' Responses

| <b>Type of outsourcing</b>    | <b>Frequency</b> | <b>% Respondents</b> | <b>Rate of outsourcing</b> |
|-------------------------------|------------------|----------------------|----------------------------|
| General (all types)           | 64               | 62.75%               | 45%                        |
| Non-core activity outsourcing | 23               | 32.55%               | 70%                        |
| Core activity outsourcing     | 57               | 55.88%               | 26.7%                      |

Table 12 shows that 64 of the 102 respondents utilized outsourcing for one of the 14 categories of activities. Furthermore, 55.88% of the firms (57) firms utilized outsourcing for core activities. The data collected from the web-based questionnaire survey was analyzed by a simple linear regression to determine the impact of outsourcing on IFLP. The results of the statistical analysis showed that outsourcing (all kinds of outsourcing for the 14 categories of activities), regardless of outsourcing



classification, has effects on IFLP but not significant. As we mentioned previously, an outsourcing rate of at least 25% of an activity can have a measurable impact on the IFLP; a lower rate of outsourcing does not. However, the explanatory power of the model is very weak ( $R^2 = 0.0150$ ) compared to that for a level of 1% ( $R^2 = 0.0048$ ).

Covariance analysis was performed to test the impact of non-core and core activity outsourcing on firm performance for the different categories of activities. There were fewer responses for non-core activity outsourcing than for core activity outsourcing; the impact of non-core and core activity outsourcing on firm performance was calculated for only six activities: payment services, logistics, client services, accounting, sales, and publicity. The results of the analysis indicate that non-core activity outsourcing had a positive and significant impact on firm performance for the logistics and publicity activities. However, the results regarding the impact for the other four activities are inconclusive.

The internal performance of a few selected categories of activities following the outsourcing of non-core and core activities is shown in Table 13.

Table 13: Internal Performance of Activities by Category

| Category of activities | Internal performance level    |                           | P-value |
|------------------------|-------------------------------|---------------------------|---------|
|                        | Non-core activity outsourcing | Core activity outsourcing |         |
| Publicity/promotion    | 5.75                          | 3.28                      | 0.028   |
| Logistics              | 4.33                          | 3.14                      | 0.007   |
| Payment services       | 3.94                          | 3.33                      | 0.214   |
| Client services        | 3.78                          | 3.33                      | 0.405   |
| Sales                  | 2.83                          | 3.56                      | 0.067   |
| Accounting             | 2.75                          | 3.54                      | 0.310   |

Since the analysis was incomplete, the correlation between firms' external performance and firms' utilization of different kinds of outsourcing was tested. Specifically, the correlations between firms' performance and intensity of non-core activity outsourcing, core activity outsourcing, internalization of core activities, and internalization of non-core activities were tested. Only one significant correlation was found: the correlation between the internalization of core activities and firms' performance ( $R = 0.2191$ ).

Table 14: Correlation between Internalization and Firm Performance

|             | Internalization |                     | Outsourcing     |                     |
|-------------|-----------------|---------------------|-----------------|---------------------|
|             | Core activities | Non-core activities | Core activities | Non-core activities |
| Correlation | 0.2191          | 0.1026              | 0.1244          | -0.1003             |
| P-value     | 0.0277          | 0.3074              | 0.2152          | 0.3185              |

Table 14 shows that the greater a firm’s internalization of core activities, the better its external performance. However, this result explains only a small portion of the observed variable values ( $R^2 = 0.0480$ ).

Based on this analysis, *Hypothesis 1 is accepted*. Three out of the 14 categories of activities that were outsourced positively affected performance. Similarly, internalization of core activities positively affected firms’ external performance. Thus, *Hypothesis 2b is accepted*. In contrast, *Hypothesis 2a cannot be accepted*, in part because of the low number of survey responses from the firms that outsource core activities across the 14 categories of activities. Thus, outsourcing of non-core tasks and internalization of core tasks does improve the performance of focal firms. The regression results do not show a moderating effect of the number of employees on the relationship between outsourcing and firm performance among the sample of SMEs. We also tested for the moderating effect of firm size on the relationship between outsourcing of a category of activities and performance of that category of activities. This test was performed only for three categories of activities, namely payment services, logistics, and client services, and showed no moderating effects. These results suggest that the size of a firm does not have a moderating effect on the relationship between a firm’s outsourcing of a function and its performance. Likewise, in the results of our study the number of employees does not have any effect on the relationship between internalization of core activities and external performance.

To clarify further, the first hypothesis on the effects of non-core activity outsourcing on firm performance is supported, and the second hypothesis on the effects of internalization of core activities is only partially supported. The results show that outsourcing non-core activities that have no or low uncertainty has positive effects on firm-level performance in spite of the high frequency of transactions as shown in Table 9. Thus, the results of the present study validate two

(asset specificity and uncertainty) of the three attributes of TCE. On the other hand, internalization of core activities—activities which are valuable, rare, inimitable, hard to substitute, and create competitive advantages—has positive effects on firm-level performance. This result satisfies the tenants of the RBV of the firm. Thus, our results validate the TCE and RBV theories.

However, the results do not indicate the moderating effects of firm size. This would indicate that outsourcing non-core activities and simultaneously internalizing core activities does improve firm-level performance. However, firm size does not seem to affect this relationship. That is, the relationship between outsourcing and firm-level performance does not seem to differ between smaller and bigger SMEs. Nevertheless, it is important to keep in mind that the performance implications of outsourcing decisions have been widely debated.

## **4.5. CONCLUSIONS**

Presently, outsourcing is more than merely a financial strategy for firms. It has evolved from an efficiency oriented strategy to a growth-oriented, value-creating strategy. This study's objective was to identify the relationship between core and non-core activity outsourcing of manufacturing SMEs and IFLP. The results showed a positive relationship between outsourcing of non-core activities and IFLP as well as between internalization of core activities and IFLP. However, the correlation  $R^2$  is weak. There are several reasons for this result. The first reason is the broadness of the IFLP measure, which consists of competitive, financial, strategic, and non-equity stakeholder performance. Some firms may not demonstrate all four kinds of performance, which may explain the weak IFLP reported by firms in this study. The second reason is that the responses on the impact of core outsourcing for each of the 14 categories of activities or tasks were relatively low at the category or sub-category levels. This might be explained by the fact that there are near-core activities that are not suitable for arm's length outsourcing but can be done under a hybrid governance system (validating one of the attributes of TCE). Managers, owing to their bounded rationality, very often are undecided on whether to outsource near-core activities and miss opportunities to gain advantages from working with advanced supplier firms. Thirdly, outsourcing itself is even more complex an operation than it appears to be. For example, coordination and re-integration of dispersed outsourced activities into one concerted organization are necessary but

complicated. Transferring knowledge from the client firm to the supplier firms is also difficult to implement.

Future research should attempt to collect longitudinal data. Critical knowledge transfer to supplier firms is one of the setbacks of outsourcing and can be studied only with longitudinal data, which existing studies have not addressed adequately. Moreover, the effects of outsourcing on focal firms can be understood better when comparing their performance between two time periods, instead of their perceived performance from survey data. Simon (1962: 468) states that complexity should be understood as a system consisting of “a large number of parts that interact in a non-simple way”. Since the system governing firms' performance and their outsourcing is complex, one remedy for the challenges mentioned above could be enlarging the sample size and changing the web-based survey to a more rigorous survey with regular follow-up calls in order to increase the response rate and perform a more robust statistical analysis.

Despite its shortcomings, this study still makes some valuable contributions to the field of available research. Firstly, this is the first study, in our knowledge, to consider the four IFLP constructs of competitive, financial, strategic, and non-equity stakeholder performances in relation to the results of the outsourcing of non-core activities and insourcing (internalization) of core activities. The findings indicate that outsourcing contributes to the economic and social performances of focal firms and enables them to thrive in the volatile business environment of the 21<sup>st</sup> century. Outsourcing can be one of the best ways to gain SCAs. Secondly, the study extends the TCE perspective that high-frequency activities can also be outsourced. Lastly, the study combines the principles of TCE and the RBV to show that offshore outsourcing contributes to both the efficiency and growth of manufacturing SMEs. In brief, this study improves our understanding of core activity insourcing and non-core activity outsourcing of manufacturing SMEs and their effects on IFLP. The results of this study can help practitioners in determining functions to outsource and to insource (internalize). The results suggest that managers cannot only improve their firm's financial benefits but also create competitive, strategic, and non-equity stakeholder advantages through well-managed offshore outsourcing. However, managers need to categorize core and non-core tasks carefully. Challenges could arise in deciding whether to outsource or internalize *near-core* tasks. Moreover, managers need to be aware of the modular and integral nature of products. The

latter products are those made of components whose functionalities are closely related. The interfaces of these integrative systems are physically distributed across all or most other systems and, as such, they pose formidable challenges to managers who need to reintegrate dispersed integral components.

This paper discusses the strategic aspects of offshore outsourcing. The results indicate that managers also need to be aware of the impact of their firms' relationships with suppliers and sub-suppliers on quality and timely delivery of outsourced goods. A high degree of due diligence and commitment is required from offshoring both focal firms and supplier firms. Policy makers may find this study interesting, as it shows that outsourcing contributes to improving the overall performance of the focal firms. The results show that offshore outsourcing is a win-win rather than zero-sum game strategy. A pro-outsourcing policy allows low-to-mid-tech manufacturing firms to thrive in an era when firms can choose the global value chain over high-cost countries like Canada and other OECD countries.

The relationship between outsourcing and vertical disintegration needs to be studied further. In particular, researchers should examine the extent to which outsourcing can reduce a firm's involvement in successive stages of production. Managers still face difficulties in determining core and non-core activities and in deciding whether to outsource or insource these activities. The survey responses in this study indicate that some managers had difficulties distinguishing between core and near-core activities, which might have caused the low number of responses regarding the outsourcing of non-core activities or the insourcing of core activities. This limitation presents an opportunity for rigorous study using larger samples of firms and larger corresponding data sets. Likewise, additional data need to be collected for each of the categories of activities and for all types of outsourcing to facilitate a more rigorous analysis for all outsourced tasks and subtasks. It is highly likely that outsourcing influences the relevant individual functional areas such as publicity and logistics. For example, by outsourcing in these areas, manufacturing operations may reduce costs and/or improve customer service by shifting publicity and other promotional activities to an outside specialist organization. Therefore, outsourcing may improve or impair individual functional areas. Although it is certain that outsourcing will always present empirical and normative challenges, firms' experiences are contributing to a theory that can provide some

guidance on how to perform better in terms of this important issue (Golembiewski, 1999). Ultimately, further study is needed to establish the relationship between each outsourced task or subtask and its contribution to performance, instead of focusing only on the relationship between the task or subtask and aggregate firm-level performance.

The manufacturing firms in this study belong to different sectors, and the number of responses differed according to the type of outsourcing of tasks with different degrees of (low, mid or high) specificities. Taking into account these response variations and the weak  $R^2$ , we conclude that the results cannot be generalized for the entire population of outsourcing manufacturing SMEs. Firms must also be classified into beginning, mature, and declining stages of their development and their outsourcing practices because such classification may reveal new outsourcing effects on IFLP. There is also a need to better understand the particularities of Québec manufacturing firms. Many of these firms are themselves supplier firms for larger outsourcing Canadian and US MNCs. For these Québec firms, outsourcing is of secondary importance, which may have caused confusion among the firms' survey respondents.

Another potential limitation of this study is the common method bias. This is a general criticism of survey-based research, because independent and dependent constructs are often measured entirely using self-reported data. The evaluation of performance of some variables on a 5-point Likert scale is another limitation. In this study, we found that respondents most often choose the average response of 3, which made it difficult for us to determine whether the effects of outsourcing are positive or negative. Future studies might find it helpful to use a paired Likert scale to encourage respondents to indicate either positive or negative effects on IFLP. There were also some ambiguities in the determination of a firm's core competency. Some respondents confused core competency with associated concepts such as capability, comparative and competitive advantages, and other important tasks. Future research needs to define core competency more clearly in survey questions to ensure that it obtains responses that are more articulate and therefore conducive to a more transparent analysis. A Delphi method questionnaire can be administered to responding executives before the administration of the main survey to enhance their understanding of core and non-core activities and IFLP variables, and consequently, to obtain more accurate responses.

## 4.6. REFERENCES

1. Al-Azad, M. S., Mohiuddin, M., & Rashid, M. M. (2010). Knowledge transfer in offshore outsourcing and international joint ventures (IJVs): A critical literature review from cross-cultural context. *Global Journal of Strategies and Governance*, 1(1), 41-67.
2. Arnold, D. (2000). Seven rules of international distribution. *Harvard Business Review*, 78(6), 131-137.
3. Atkinson, A. A., Waterhouse, J. H., & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *Sloan management review*, 38(3), 25-37.
4. Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <http://dx.doi.org/10.1177/014920639101700108>
5. Barney, J. B. (1999). How a firm's capabilities affect boundary decisions, *Sloan Management Review*, 40(3), 137-145.
6. Berry, R. M. (2005). Web-based survey research: Lessons from the University of Akron study. *Journal of Public Administration*, 28(1), 57-72. <http://dx.doi.org/10.1081/PAD-200044562>
7. Bertrand, O. (2011). What goes around comes around: Effects of offshore outsourcing on the export performance of firms. *Journal of International Business Studies*, 42(2), 334-344. <http://dx.doi.org/10.1057/jibs.2010.26>
8. Bettis, R. A., Bradley, S. P., & Hamel, G. (1992). Outsourcing and industrial decline. *The Executive*, 6(1), 7-22.
9. Blackburn, R. A., Hart, M., & Wainwright, T. (2013). Small business performance: Business, strategy and owner-manager characteristics. *Journal of Small Business and Enterprise Development*, 20(1), 8-27. <http://dx.doi.org/10.5465/AME.1992.4274298>
10. Callahan, C. M., Smith, R. E., & Spencer, A. W. (2013). The long-term performance consequences of strategic partnerships in high tech industries. *Journal of Applied Business Research*, 29(1), 217-134.
11. Carney, W. (1997). Outsourcing HR and benefits: Navigating the right course. *Compensation International*, 26(7), 15-23.
12. Centre de recherche industrielle du Québec. (2009). Répertoire d'entreprises du Québec [Directory of Québec firms]. <http://www.icriq.com/fr/index.html>

13. Chen, S. S. (2009). A transaction cost rationale for private branding and its implications for the choice of domestic vs. offshore outsourcing. *Journal of International Business Studies*, 40(1), 156-175. <http://dx.doi.org/10.1057/palgrave.jibs.8400419>
14. Chakravarthy, B. S. (1986). Measuring strategic performance. *Strategic Management Journal*, 7(5), 437-459. <http://dx.doi.org/10.1002/smj.4250070505>
15. Cobanoglu, C., Warde, B., & Moreo, P. J. (2001). A comparison of mail, fax and web-based survey methods. *International Journal of Market Research*, 43(4), 441-452.
16. Contractor, F. J., Kumar, V., Kundu, S., & Pedersen, T. (2011). Global outsourcing and offshoring: In search of the optimal configuration for a company. In F. J. Contractor, V. Kumar, S. Kundu, & T. Pedersen (Eds.), *Global outsourcing and offshoring: An integrated approach to theory and corporate strategy* (pp.3-47). Cambridge University Press, London.
17. Coase, R. (1937). The nature of the firm. *Economica*, 4(16), 386-405. <http://dx.doi.org/10.1111/j.1468-0335.1937.tb00002.x>
18. Daveri, F., & Lasinio, C. J. (2007). *Offshoring and productivity growth in the Italian manufacturing industries*, (Working Paper No. 08/2007). [Parma]: Università degli Studi di Parma.
19. Dekkers, R. (2011). Impact of strategic decision making for outsourcing on managing manufacturing. *International Journal of Operations & Production Management*, 31(9), 935-965. <http://dx.doi.org/10.1108/01443571111165839>
20. Di Gregorio, D., Musteen, M., & Thomas, D. E. (2009). Offshore outsourcing as a source of international competitiveness. *Journal of International Business Studies*, 40(6), 969-988. <http://dx.doi.org/10.1057/jibs.2008.90>
21. Elmuti, D. (2003). The perceived impact of outsourcing on organizational performance. *American Journal of Business*, 18(2), 33-41. <http://dx.doi.org/10.1108/19355181200300010>
22. Ellram, L. M., Tate, W. L., & Billington, C. (2008). Understanding professional services outsourcing and offshoring. *Journal of Operations Management*, 26(2), 148-163.
23. Espino-Rodríguez, T. F., & Padrón-Robaina, V. (2004). Outsourcing and its impact on operational objectives and performance: A study of hotels in the Canary Islands. *International Journal of Hospitality Management*, 23(3), 287-306. <http://dx.doi.org/10.1016/j.ijhm.2003.11.004>



24. Espino-Rodríguez, T. F., & Padrón-Robaina, V. (2006). A review of outsourcing from the resource-based view of the firm. *International Journal of Management Reviews*, 8(1), 49-70. <http://dx.doi.org/10.1111/j.1468-2370.2006.00120.x>
25. Greer, C. R., Youngblood, S. A., & Gray, D. A. (1999). Human resource management outsourcing: The make or buy decision. *The Academy of Management Executive*, 13(3), 85-96.
26. Gilley, K. M., Greer, C. R., & Rasheed, A. A. (2004). Human resource outsourcing and organizational performance in manufacturing firms. *Journal of Business Research*, 57(3), 232-240. [http://dx.doi.org/10.1016/S0148-2963\(02\)00304-1](http://dx.doi.org/10.1016/S0148-2963(02)00304-1)
27. Gilley, K. M., & Rasheed, A. A. (2000). Making more by doing less: An analysis of outsourcing and its effects on firm performance. *Journal of Management*, 26(4), 763-790. <http://dx.doi.org/10.1177/014920630002600408>
28. Giustiniano, L., & Clarioni, G. (2013). The impact of outsourcing on business performance: An empirical analysis. *Journal of Modern Accounting and Auditing*, 9(2), 153-168.
29. Goddard, J. (1997). The architecture of core competence. *Business Strategy Review*, 8(1), 43-52. <http://dx.doi.org/10.1111/1467-8616.00006>
30. Golembiewski, R. T. (1999). Lessons from downsizing: Some things to avoid, and others to emphasize. *M@n@gement*, 2(3), 45-53.
31. Görg, H., Hanley, A., & Strobl, E. (2008). Productivity effects of international outsourcing: Evidence from plant-level data. *Revue Canadienne d'Économique*, 41(2), 670-688.
32. Görzig, B., & Stephan, A. (2002). Outsourcing and firm-level performance. *DIW-Discussion paper No. 309*. Berlin.
33. Grant, R. M. (1996). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7(4), 375-387. <http://dx.doi.org/10.1287/orsc.7.4.375>
34. Griffis, S. E., Goldsby, T. J., & Cooper, M. (2003). Web-based and mail survey: A comparison of response, data, and cost. *Journal of Business Logistics*, 24(2), 237-258. <http://dx.doi.org/10.1002/j.2158-1592.2003.tb00053.x>
35. Gulbrandsen, B., Sandvik, K., & Haugland, S. A. (2009). Antecedents of vertical integration: Transaction cost economics and resource-based explanations. *Journal of Purchasing and Supply Management*, 15(2), 89-102. <http://dx.doi.org/10.1016/j.pursup.2008.12.003>

36. Hayes, D., Hunton, J., & Reck, J. L. (2000). Information systems outsourcing announcements: Investigating the impact on the market value of contract-granting firms. *Journal of Information Systems*, 14(2), 183-193.
37. Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404-1427.
38. Jabbour, L. (2010). Offshoring and firm performance: evidence from French manufacturing industry. *The World Economy*, 33(3), 507-524.
39. Javidan, M. (1998). Core competence: What does it mean in practice? *Long Range Planning*, 31(1), 60-71. [http://dx.doi.org/10.1016/S0024-6301\(97\)00091-5](http://dx.doi.org/10.1016/S0024-6301(97)00091-5)
40. Javalgi, R. G., Dixit, A., & Scherer, R. F. (2009). Outsourcing to emerging markets: Theoretical perspectives and policy implications. *Journal of International Management*, 15(2), 156-168. <http://dx.doi.org/10.1016/j.intman.2008.08.001>
41. Jiang, B., Belohlav, J. A., & Young, S. T. (2007). Outsourcing impact on manufacturing firms' value: Evidence from Japan. *Journal of Operations Management*, 25(1), 885-900. <http://dx.doi.org/10.1016/j.jom.2006.12.002>
42. Jiang, B., & Qureshi, A. (2006). Research on outsourcing results: Current literature and future opportunities. *Management Decision*, 44(1), 44-55. <http://dx.doi.org/10.1108/00251740610641454>
43. Jones, G. R., & Hill, C. W. (1988). Transaction cost analysis of strategy-structure choice. *Strategic Management Journal*, 9(2), 159-172. <http://dx.doi.org/10.1002/smj.4250090206>
44. Kaplan, R. S., & Norton, D. S. (2001). *The strategy-focused organization*. Boston: Harvard Business School Press.
45. Kitcher, B., McCarthy, I. P., Turner, S., & Ridgway, K. (2013). Understanding the effects of outsourcing: Unpacking the total factor productivity variable. *Production Planning & Control*, 24(4-5), 308-317.
46. Kotabe, M., Murray, J., & Javalgi, R. (1998). Global sourcing of service and market performance: An empirical investigation. *Journal of International Marketing*, 6(4), 10-13.
47. Kotabe, M., & Murray, J. Y. (2004). Global sourcing strategy and sustainable competitive advantage. *Industrial Marketing Management*, 33(1), 7-14. <http://dx.doi.org/10.1016/j.indmarman.2003.08.004>

48. Kotabe, M., Mol, M. J., Murray, J., & Parente, R. (2012). Outsourcing and its implications for market success: Negative curvilinearity, firm resources, and competition. *Journal of the Academy of Marketing Science*, 40(2), 329-346. <http://dx.doi.org/10.1007/s11747-011-0276-z>
49. Kotler, P. (2006). *Marketing management*. New York: Prentice Hall.
50. Leiblein, M. J. & Miller, D. J. (2003). An empirical examination of transaction- and firm-level influences on the vertical boundaries of the firm. *Strategic Management Journal*, 24(9), 839-859. <http://dx.doi.org/10.1002/smj.340>
51. Leiblein, M. J., Reuer, J. J., & Dalsace, F. (2002). Do make or buy decisions matter? The influence of organizational governance on technological performance. *Strategic Management Journal*, 23(9), 817–833. <http://dx.doi.org/10.1002/smj.259>
52. Lei, D., Hitt, M. A., & Bettis, R. A. (1996). Dynamic core competencies through meta-learning and strategic context. *Journal of Management*, 22(4), 549-569. <http://dx.doi.org/10.1177/014920639602200402>
53. Maksoud, A. B. (2004). Manufacturing in the UK: Contemporary characteristics and performance indicators. *Journal of Manufacturing Technology Management*, 15(2), 155-171. <http://dx.doi.org/10.1108/09576060410513742>
54. Mayer, K. J., & Salomon, R. M. (2006). Capabilities, contractual hazards, and governance: Integrating resource-based and transaction cost perspectives. *Academy of Management Journal*, 49(5), 942-959. <http://dx.doi.org/10.5465/AMJ.2006.22798175>
55. McIvor, R. (2009). How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operations Management*, 27(1), 45-63.
56. McNally, R.C., & Griffin, A. (2004). Firm and individual choice drivers in make-or-buy decisions: A diminishing role for transaction cost economics. *Journal of Supply Chain Management*, 40(1), 4-17. <http://dx.doi.org/10.1111/j.1745-493X.2004.tb00252.x>
57. Marchegiani, L., Giustiniano, L., Peruffo, E., & Pirolo, L. (2012). Revitalising the outsourcing discourse within the boundaries of firm's debate. *Business System Review*, 1(1), 157-177.
58. Marchegiani, L., Pirolo, L., Peruffo, E., & Giustiniano, L. (2010). National corporate systems and outsourcing decisions: A cross-country analysis. *Proceedings of Strategic Management Society Conference*, Rome, Italy.

59. McDermott, G., Mudambi, R., & Parente, R. (2013). Strategic modularity and the architecture of multinational firm. *Global Strategy Journal*, 3(1), 1-7.
60. Mohiuddin, M. (2011). Research on offshore outsourcing: A systematic literature review. *Journal of International Business Research*, 10(1), 59-76.
61. Mohiuddin, M., & Su, Z. (2010). Firm level performance of offshore outsourcing strategy of manufacturing enterprises: A research agenda. *Competition Forum*, 8(1), 13-27.
62. Mohiuddin, M., & Su, Z. (2013). Manufacturing small and medium size enterprise's offshore outsourcing and competitive advantage: An exploratory study on Canadian offshoring manufacturing SMEs. *Journal of Applied Business Research*, 29(4), 1111-1130.
63. Mohiuddin, M., Su, Z., & Su, A. (2010). Towards sustainable offshore outsourcing: A case study of Quebec manufacturing firms Outsourcing to China. *The Journal of CENTRUM Cathedra*, 3(1), 84-95. <http://dx.doi.org/10.7835/jcc-berj-2010-0040>
64. Mol, M. J., van Tulder, R. J. M., & Beige, P. R. (2005). Antecedents and performance consequences of international outsourcing. *International Business Review*, 14(5): 599-617.
65. Mooney, A. (2007). Core competence, distinctive competence, and competitive advantage: What is the difference? *Journal of Education for Business*, 83(2), 110-115.
66. Mudambi, R. (2007). Offshoring: Economic geography and the multinational firm. *Journal of International Business Studies*, 38(1), 206-221.
67. Mukherjee, D., Gaur, A. S., & Datta, A. (2013). Creating value through offshore outsourcing: An integrative framework. *Journal of International Management*, 19(4), 377-389.
68. Nagpal, P. (2004). Use of Transaction Cost Economics Framework to Study IT Sourcing: Over-Application or Under-Theorizing? *Sprouts: Working Papers on Information Environments, Systems and Organizations*, 4(2), 98-110. Available online at: <http://sprouts.case.edu/2004/040206.pdf>
69. Narasimhan, R., & Das, A. (1999). An empirical investigation of the contribution of strategic sourcing to manufacturing flexibilities and performance. *Decision Sciences*, 30(3), 683-718.
70. Park, C., Vertinsky, I., & Lee, C. (2012). Korean international joint ventures: how the exchange climate affects tacit knowledge transfer from foreign parents. *International Marketing Review*, 29(2), 151-174.

71. Pelham, A. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of Small Business Management*, 38(1), 48-67.
72. Prahalad, C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.
73. Quinn, J. B. (1999). Strategic outsourcing: leveraging knowledge capabilities. *Sloan management review*, 40(4), 9-21.
74. Quinn, J. B., & Hilmer, F. G. (1994). Strategic outsourcing. *Sloan Management Review*, 35(4), 43-55.
75. Rasheed, A. A., & Gilley, K. M. (2005). Outsourcing: National and firm-level implications. *Thunderbird International Business Review*, 47(5), 513-528.
76. Rashid, M. M., & Al-Azad, M. S. (2013). Relocating low-to-medium tech manufacturing activities to developing countries: Empirical analysis of Taiwanese and South Korean manufacturing outsourcing to Bangladesh. *Transnational Corporations Review*, 5(2), 16-29.
77. Reed, R., & DeFillippi, R. (1990). Casual ambiguity, barriers to imitation, and sustainable competitive advantage. *Academy of Management Review*, 15(1), 80-102.
78. Reitzig, M., & Wagner, S. (2010). The hidden costs of outsourcing: Evidence from patent data. *Strategic Management Journal*, 31(11), 1183-1201. <http://dx.doi.org/10.1002/smj.852>
79. Scully, J. I., & Fawcett, S. E. (1994). International procurement strategies: Challenges and opportunities for the small firm. *Production & Inventory Management Journal*, 35(2), 39-46.
80. Sharpe, M. (1997). Outsourcing, organizational competitiveness, and work. *Journal of Labor Research*, 18(4), 535-549. <http://dx.doi.org/10.1007/s12122-997-1021-8>
81. Simon, H. A. (1962). The architecture of complexity. *Proceedings of the American Philosophical Society*, 106(6), 467-482.
82. Sinha, P., Akoorie, M. E., Ding, Q., & Wu, Q. (2011). What motivates manufacturing SMEs to outsource offshore in China? Comparing the perspectives of SME manufacturers and their suppliers. *Strategic Outsourcing: An International Journal*, 4(1), 67-88.
83. Sultana, M. A., Rashid, M. M., Mohiuddin, M., & Mazumder, M. N. H. (2013). Cross-cultural management and organizational Performance: A content analysis perspective.

- International Journal of Business and Management*, 8(8), 113-146.  
<http://dx.doi.org/10.5539/ijbm.v8n8p133>
84. Su, A., Regnière, M.-H., & Su, Z. (2013). “Made with the World” vs. “Made for the World”: What would be the future of “Made in China” products? *Transnational Corporations Review*, 5(2), 1-15. <http://dx.doi.org/10.5148/tncr.2013.5201>
  85. The World Commission on Environment and Development (WCED). (1987). *Our common future: Report of the World Commission on Environment and Development*. Oslo: Gro Harlem Brundtland, UN.
  86. Tomiura, E. (2007). Foreign outsourcing, exporting, and FDI: A productivity comparison at the firm level. *Journal of International Economics*, 72(1), 113-127.
  87. Torkkeli, M., & Tuominen, M. (2002). The contribution of technology selection to core competencies. *International Journal of Production Economics*, 77(3), 271-284.
  88. Verbeeten, F. H. M., & Boons, A. N. A. M. (2009). Strategic priorities, performance measures and performance: An empirical analysis in Dutch firms. *European Management Journal*, 27(1), 113-128. <http://dx.doi.org/10.1016/j.emj.2008.08.001>
  89. Wang, Y., Lo, H.-P., & Yang, Y. (2004). The constituents of core competencies and firm performance: Evidence from high-technology firms in China. *Journal of Engineering & Technology Management*, 21(4), 249-280.
  90. Williamson, O. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York: Free Press.
  91. Wu, F., Li, H. Z., Chu, L. K., & Sculli, D. (2005). An outsourcing decision model for sustaining long-term performance. *International Journal of Production Research*, 43(12), 2513-2535. <http://dx.doi.org/10.1080/00207540500045717>

## **Chapter 5: Article 4 - Offshore Outsourcing of Manufacturing SMEs and Developing Dynamic Capabilities**

### **Résumé**

La recherche sur les avantages et les inconvénients de la sous-traitance internationale (STI) est abondante. Cependant, à notre connaissance, il y a peu de recherches qui ont abordé la sous-traitance internationale des PME manufacturières en tant qu'une source de développement des habiletés dynamiques. L'objectif de cet article est d'explorer la façon dont les PME manufacturières peuvent améliorer des habiletés existantes et de développer de nouvelles habiletés dynamiques organisationnelles grâce à la STI en plus des avantages d'efficacité du coût de production que les entreprises tirent de cette stratégie. Le processus de développement des habiletés dynamiques organisationnelles se développent en faisant de plus en plus l'accent sur les activités clés de la PME sous-traitante, par le développement des habiletés d'innovation, par l'augmentation des parts dans les marchés déjà existants et/ou dans les nouveaux marchés, et en améliorant la flexibilité de l'entreprise sous-traitante pour mieux s'adapter aux tendances du marché volatiles. Les résultats de l'étude de cas sur dix PME manufacturières du Québec montrent que la STI des PME manufacturiers contribue au développement des capacités dynamiques avec des degrés variables de succès. Cet article donne lieu à de nouvelles pistes pour la recherche sur la STI et permet de mettre la lumière sur les perspectives de croissance et des avantages concurrentiels durables (ACD) que la STI apporte aux PME manufacturières malgré la lacune des ressources qu'elles héritent de leurs relativement petites tailles.

Mots clés: Habileté dynamique, la sous-traitance internationale, PME, Avantage compétitive durable.

## **ABSTRACT**

Research on advantages and disadvantages of offshore outsourcing is abundant. However, there are insignificant research, in our knowledge, has addressed the case of manufacturing SME offshore outsourcing as a source of dynamic capabilities development. The objective of this paper is to explore on how manufacturing SMEs enhance their dynamic capabilities through offshore outsourcing in addition to the efficient related advantages that firms gain from this strategy. Organizational dynamic capabilities development process consist of increasing focus on Core competency of the focal firm, developing innovation capabilities, increasing market share in existing and/or new markets, and improving flexibility of the firm to match with the volatile market trends. Results from the case study on ten manufacturing SMEs from Quebec show that offshore outsourcing contributes to the development of dynamic capabilities with varying degrees of success. This article open-up a new horizon on offshore outsourcing research and shed light on growth perspective and sustainable competitive advantages (SCA) that offshore outsourcing bring to manufacturing SMEs despite the size and resource constraints they inherit.

Key words: Dynamic capability, Offshore outsourcing, SMEs.



## 5.1. INTRODUCTION

Taking into consideration the global value chain (GVC) and new global division of labor (NGDL), manufacturing SMEs distribute their “tasks” across the planet depending on the expertise the offshore supplier firms can offer competitively (Jensen, & Pedersen, 2011). The previous research on offshore outsourcing was dominated by the cost advantages of arm’s-length offshoring of large enterprises (LE). Offshore outsourcing, however, can also enable firms to have access to emergent expertise from offshore supplier firms and to procure low-cost/high-value innovations (Rashid & Al-Azad, 2013). The current research sheds light on exploring how offshoring contributes to developing organizational dynamic capabilities of Canadian manufacturing SMEs by focusing more on their CC, developing innovation capabilities, accelerating new product development process, and enhancing organizational flexibility. These capabilities are considered as dynamic capabilities, defined as “Specific organizational and strategic processes by which managers alter their resource base” (Eisenhardt & Martin, 2000). The continuous renewable nature of these capabilities can enable firms to adapt with rapidly changing market conditions and be competitive in the volatile market and create SCA. The SMEs, in general, lack internal capabilities compared to large companies. SMEs can benefit from the supplier’s resources and capabilities and minimize consequences of their internal shortcomings. They can overcome size-induced resource constraints and develop networked structure and can behave in the marketplace as a single larger firm, thereby achieving market penetration through synchronized competency building (Liesch, Buckley, Simonin, & Knight, 2012; Manning & Moore, 2006). Organizational capability, business process, market development, and product innovation are critical for Canadian manufacturers to compete in the GVC. Rapid changes in the organizational environment force firms to integrate, build, and reconfigure their resources, competences, and capabilities in a way that can regenerate dynamic capabilities continuously and follow the rhythms of the changing business environment. Dynamic capabilities thus are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die (Eisenhardt & Martin, 2000; Mohiuddin & Su, 2013). In a highly competitive market, SMEs need to redesign their value chain along with organizational and network capability in order to remain competitive in the marketplace. To the best of our knowledge, there is insignificant empirical research that has studied

the role of offshoring in developing organizational dynamic capabilities of manufacturing SMEs with collaboration of suppliers.

This paper has multiple objectives. First of all, this paper sheds light on leveraging resources and competences from offshoring supplier firms by the offshoring SMEs to develop their marketplace competitiveness. Whereas the dominant view on offshore outsourcing is to reduce production cost, this paper rather looks to organizational capability development process through building, integrating, and reconfiguring inter-firm resources and competences of the offshoring SMEs with those of their suppliers, more specifically, to investigate how offshore outsourcing enables SMEs to focus on CC, improve continuous innovation capacity, increase rapid product and market development, and enhance organizational flexibilities. Our overall objective is to explore how offshore outsourcing enables manufacturing SMEs to develop their organizational dynamic capabilities that lead to SCAs. Section 2 grounds the research topic into the wider research field as well as highlighting the research gaps that are supposed to be addressed by this paper. Section 3 describes the methodology of this study and Section 4 offers the results and analysis and concurrently demonstrates the theory development process. Finally, Section 5 adds the conclusion.

## **5.2. LITERATURE REVIEW**

### **5.2.1. Theoretical grounding of offshore outsourcing and dynamic capabilities**

Offshore outsourcing is a multidimensional and multifaceted business strategy explained by theoretical perspectives brought from other fields, such as economics, strategy, system science, and sociology. Primary stage of theoretical development in offshore outsourcing research also corroborates Treffler (2008), who asserts that many Canadian firms have yet to recognize the sea change in their sourcing possibilities. Nor do they adequately understand that offshoring will enable them to concentrate on core activities that will improve their efficiency and competitiveness and enhance productivity and performance (Gulbrandsen, Sandvik, & Haughland, 2009; Javalgi, Dixit, & Scherer, 2009; McNally & Griffin, 2004; Mohiuddin & Su, 2013). By focusing on the CC, firms can improve organizational skills, specialization, invest more resources to enable them to adapt quickly to the changing environment, overcome challenges, and finally prosper in the long

run. Grossman and Rossi-Hansberg (2006; 2008) compare offshoring with “trading tasks,” whereby the production process is modeled as a continuum of discrete tasks. Offshoring tasks to other locations enjoying a comparative advantage could increase productivity in the tasks retained by the outsourcing firm. Jones (2008) and Bhagwati, Panagariya, and Srinivasan (2004) argue that offshore outsourcing is fundamentally a trade phenomenon, and that subject to the usual theoretical caveats and practical responses, offshore outsourcing results in gains from trade. Moreover, offshore outsourcing of manufacturing SMEs can be different from those of MNCs. Scully and Fawcett (1994) found that SMEs found few benefits from offshoring and viewed it as less helpful in competing with low-cost manufacturers. On the other hand, Sinha, Akoorie, Ding, and Wu (2011) found that manufacturing offshore outsourcing enables SMEs to gain the benefits of flexibility, lower production costs, and customized delivery without incurring additional costs. Manufacturing offshore outsourcing enables the SME to operate within the constraints of its limited physical and managerial resources. Among the multiple theories, two influential theories in the study of offshore outsourcing have been TCE and the RBV (Jiang, Belohlav, & Young, 2007; Vivek, Banwet, & Shankar, 2008). These theories tell us the motivation of offshoring of SMEs, such as reduced cost and greater efficiencies, concentration on CC, increased innovation, overcoming resource constraints and size disadvantages by tapping into resources owned by others, and gaining flexibility, network and learning benefits, are similar (Gregorio, Musteen, & Thomas, 2009). However, these theories do not explain how offshoring SMEs can reconfigure their resources to create organizational capability in the current volatile business ecosystem in order to gain SCA. The DCV can fill this gap and explain how outsourcing firms can develop their organizational dynamic capabilities through offshoring and collaboration with supplier firms. While the RBV put high importance on firm-level resources respecting value, rarity, inimitability, and non-substitutability (VRIN) (Barney, 1991) for competitive advantage, critics say resource itself cannot create competitive advantage. Many critics consider the RBV as “inward” looking and unable to adjust firm strategy with changing business environment. Among the key limitations of the RBV theory, most pervasive is the explicit absence of the environment of the firm. While resources are akin to stocks, capabilities are embedded in process (Dosi, Fagiolo, & Roventini, 2008). The RBV is criticized for ignoring factors surrounding resources and just taking into consideration that those factors simply “exist.” In the RBV theory, considerations of how resources

are developed, how they are integrated within the firm, and how they are released have been under-explored. The DCV can guide firms to formulate strategies in these circumstances.

The issue of creating dynamic capabilities for SCA, especially in a hyper-competitive environment, has received a considerable amount of attention recently in the strategic management field (Augier & Teece, 2009). To create dynamic capability (DC), a firm has to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Teece, Pisano, & Shuen, 1997). According to Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, and Winter (2007), dynamic capability is the capacity of an organization to purposefully extend, create, or modify its resource base. Augier and Teece (2009) argue that a firm's DC stems from the particular capacity that firms have to shape, reshape, configure, and reconfigure idiosyncratic assets so as to respond to changing technologies and markets. Dynamic capabilities attempt to bridge these gaps by adopting a process approach. By acting as a buffer between the firm's resources and the changing business environment, dynamic resources help a firm to adjust its resource mix and thereby maintain the sustainability of the firm's competitive advantage, which otherwise might be quickly eroded. Thus, the DCV comes to complement the shortcomings of the RBV. The concept of DC revises the RBV insofar as not only the markets, but also the organizational capabilities are conceptualized as being dynamic and flexible (Helfat & Peteraf, 2003). While RBV asserts that better performance is achieved through different resources compared with the competitors, the DC perspective suggests that firms achieve superior performance than their competitors by developing resources and capabilities (Makadok, 2001) without mentioning how to develop these capabilities; alone or in collaboration of other firms. For some authors, the DC perspective extends the RBV arguments by addressing how resources and capabilities can be created and how the current stock of resources and capabilities can be refreshed in changing environments (Ambrosini & Bowman, 2009). The most salient issue is the relationship between the development of new capabilities and organizational performance (Sapienza, Autio, George, & Zahra, 2006). Augier and Teece (2009) disaggregate dynamic capabilities into three: the capability to sense opportunities, the capacity to seize the opportunities, and the capacity to manage threats through the combination, recombination, and reconfiguring of assets inside and outside the firm's boundaries (p. 412). They consider the critical point about configuring assets outside the firm's boundaries. Exploring the central issue of offshoring research – how firms

address environmental challenge and manage the increasing complexity resulting from more and more different business functions and activities being offshored – could be a way to understand dynamic capabilities (Manning, Massini, & Lewin, 2008; Massini, Perm-Ajchariyawong, & Lewin, 2010; Mudambi & Vezina, 2010). Algezau and Filieri (2011) argue that the offshoring strategy is a firm's core capability as well as the ability to coordinate its distributed activities for the purpose of enhancing long-term competitive advantage. This implies also that those offshore outsourcing firms that do not have this capability of coordination of offshore activities properly are at risk of losing from this strategy. Thus, the DCV can help managers to understand how to configure resources and capabilities in order to procure advantages from the offshore outsourcing strategy.

DCs are argued to comprise four main processes: coordination, reconfiguration, leveraging learning, and replication (Bowman & Ambrosini, 2003). Reconfiguration refers to the transformation and recombination of assets and resources, such as the consolidation of manufacturing resources that often occurs as a result of an acquisition or strategic alliances that allows inter-firm resources sharing and reconfiguring. Leveraging refers to the replication of a process or system that is operating in one area of a firm in another area, or extending a resource by deploying it into a new domain, for instance applying an existing brand to a new set of products. Learning allows “tasks” to be performed more effectively and efficiently, often as an outcome of experimentation, and permits reflection on failure and success. Finally, integration refers to the ability of the firm to integrate and coordinate its assets and resources, resulting in the emergence of a new resource base. Firms need not only have the resources but also need to know and have the competencies of coordinating and configuring dispersed inter-firm and intra-firm resources and competences in order to create a network capability so that firms can compete in the global marketplace and create SCA. Offshore outsourcing collaboration among the complementary firms with heterogeneous resources and capabilities can create the framework for developing capabilities that can be advantageous for each of the partners.

## 5.2.2. Offshore outsourcing and organizational dynamic capabilities

Globalization, ease of communication, and logistics allow firms today to collaborate simultaneously with multiple partners across the globe. Competitive advantage (CA) in this new environment is the fleeting commodity that must be won again and again, and that requires continual disintegration and reintegration of routines, competences and capabilities of firms, with frequent reshuffling of structural, technological, financial, and human assets, as every player in the value chain seeks some sort of temporary competitive advantage. Regardless of the business sector or industry, firms need to adjust their corporate designs and develop their value chain continuously in order to remain and move up the value ladder in the marketplace, which requires organizational capability to assure a continuous capability renewal process in the firm's extended boundary.

### *5.2.2.1. Characteristics of organizational capabilities*

A basic assumption of the “capability view” is that each firm has ways of doing things and dealing with organizational problems that show strong elements of continuity (Dosi, Faillo, & Marengo, 2003). They develop different organizational routines even if they belong to the same industry and produce similar outputs. Firm-specific ways of acting are based on organizational capabilities that have been gradually accumulated and shaped within firms. Organizational capabilities enable firms to deal effectively in a firm-specific way with key organizational problems (Dosi, Nelson, & Winter, 2000). This view contradicts the “positioning view” developed by Porter (1990), which assumes that opportunities are exogenous when they can actually be created by firms themselves on the basis of firm-specific capabilities. “Rather than opportunities determining the allocation of resources, it is the allocation of resources to develop competencies that develops opportunities” (Nooteboom, 1999, p. 88). Whitley (2003) differentiates capabilities into three sub-types; coordinating capabilities, organizational learning capabilities, and reconfiguring capabilities. “Coordinating capabilities” focus on the accumulation and integration of information about internal and external processes. “Organizational learning capabilities” involve joint problem-solving and continuous improvement of production and related processes through incremental innovations. They are related to a firm's ability to codify, diffuse, and apply new knowledge throughout the organization. “Reconfiguring capabilities” involve the transformation of organization resources and skills to deal with rapidly changing technologies and markets.

Henderson and Cockburn (2000) suggested distinguishing between “component competencies” and “architectural competencies.” Firms’ competitive strength depends particularly on their “architectural competencies,” which depend on their capability to recombine their existing knowledge to produce new products and services that can meet changing demands “as well as integrating knowledge from the external partners” (Al-Azad, Mohiuddin, & Rashid, 2010).

#### *5.2.2.2. Organizational capability and competitiveness of firms*

In a truly competitive environment, the only real source of competitive advantage is the ability to respond consistently to a changing market ecosystem with new products and ever improving competitiveness. A firm can obtain this ongoing renewal by identifying, developing, and maintaining its critical “capabilities” (Bartmess & Cerny, 1993). Capabilities are a company’s proficiency in the business processes that allow it to constantly distinguish itself along the dimensions that are vital to its customers. Organizational capability is rapidly becoming recognized as the key to organizational success. However, individual firm’s capabilities can lose value overnight, hastened by rapidly changing technologies, abrupt shifts in the larger economy, or by the new tactics of competitors. A firm’s real core capability and perhaps its only sustainable one is its ability to design and redesign its value chain, resources, and capabilities configuration in order to continually find sources of maximum advantage (Fine, Vardan, Pethick, & El-hout, 2002). By choosing suppliers with complementary resources and competences, offshoring SMEs can develop such capabilities but researchers have not adequately addressed this issue yet.

In offshore outsourcing, the critical capabilities can unfold from past experiences of offshoring or firms can learn, gain, assimilate, and co-develop capabilities based on their interactions and strategic collaboration with supplier firms. Business executives need to pay attention to the set of strategic capabilities that they can develop with collaboration of offshore supplier firms and that can allow them to compete with strong footing and provide distinct advantages in their offshore outsourcing endeavors. Offshore outsourcing can allow firms to develop capabilities and make them stronger in the face of ongoing market volatilities. Capability sourcing improves a company’s competitive position by ensuring that processes and functions are obtained from the right source and at the right cost. As sourcing matures, firms can leverage outsourcing and offshoring for more

processes, in more countries, and to achieve a broader set of objectives, be it improved costs, quality, service levels, or capabilities. Internal capabilities are needed to secure an organization's future success (Roghé, Toma, Kilmann, Dicke, & Strack, 2012). Collis (1994) proposed that competitive advantage came from organizational capabilities that he defined as “the socially complex routines that determine the efficiency with which firms physically transform inputs into outputs” while constantly improving.

Grant (1991) examined the distinction between resources and capabilities. Resources are inputs into the production process – they are the basic units of analysis. Firms' resources include items of capital equipment, skills of individual employees, patents, brand names, finance, and so on. However, few resources are productive on their own. Productive activity requires cooperation of resources to perform value-creating activity. While resources are the source of a firm's capabilities, capabilities are the main source of its competitive advantage (p. 118). Ulrich (1987) reviewed that competitive advantage traditionally is believed to come from economic, strategic, or technological means. Ulrich contended that a sustained competitive advantage, a firm's ability to generate unique valued products or services that cannot be easily copied can no longer be achieved solely by traditional means. While companies must still try to produce at lower cost and maintain efficiency and innovativeness, they must now also develop organizational capabilities. As the pace of change increases and the economy changes, organizational capabilities are becoming more critical for firms to remain competitive. According to Doz and Prahalad (1988), the variables that are used to provide competitive advantage, cost advantages, imperfect market knowledge, and financial market imperfections, provide less and less of an SCA. In the current environment, competitive advantage is derived from how quickly and effectively the company can muster and employ its resources. That requires an ability to re-deploy and change in coordinating patterns in order to respond to new competitive needs and strategies.

Stalk, Evans, and Schulman (1992) stated that time was the focus of competitive advantage in the 1980s: ability to get products to the market quickly, just in time manufacturing, and responding to customer complaints quickly. They proposed that time based acuity is just a piece of a larger puzzle of “capabilities-based competition.” It consists of fine-tuning business processes and organizational practices. Today's competitive environment requires firms to concentrate on



developing infrastructure that supports the capabilities that can give them a competitive advantage. “The prize will be companies that combine scale and flexibility to outperform the competition along five dimensions: speed, consistency, acuity, agility, innovativeness” (Stalk, et al., 1992, p.63).

#### 5.2.2.3. *Developing resources and capabilities*

Developing capabilities process is invisible and involves teams of resources working together. Despite the business process mapping, there is a very meager understanding of how people, machine, technology, various alliance partners, and organizational partners fit together to achieve a particular level of capability and the firm’s performance. Strategic offshore outsourcing is a cooperative relationship between firms involved in sharing resources in pursuit of common goals. They can have formal agreements or informal dealings among themselves. They may or may not involve ownership links. Alliances may also be for the purpose of acquiring the partner’s capabilities through organizational learning (Mowery, Oxley, & Silverman, 1996). Developing organizational capabilities through offshore outsourcing is to create a conducive environment among the partner organizations to develop the know-how of each of the partners, which requires integrating the knowledge of multiple organizations and its members. Organizational excellence through capability development cannot be achieved merely by optimizing formal structures, setting up new rules, and detailing organizational role mandates. Firms must foster cooperation, exchange best-practice ideas, and involve employee engagement to fill the formal structures with life. By creating an environment conducive to collaboration, a firm can avoid adding dotted lines to its organization charts. By curtailing complexity in this way, the company is freer to respond more easily to changes in its markets. The development and sustenance of organizational capabilities is a continuous process, and business leaders need to take it as a journey rather than a one-off project. In offshore outsourcing research, this collaborative inter-firm resource, competences and capabilities configuration is badly missing that can lead towards superior capabilities called dynamic capability.

### **5.3.METHODOLOGY**

Offshore outsourcing research is mostly undertaken by importing theories from other fields, such as economic science, system science, sociology, etc. The varieties of research orientations and findings and import of theories from other fields imply that the field is still in its pre-paradigmatic stage, though this business strategy is widely used for at least last three decades. Moreover, research on offshore outsourcing and organizational dynamic capabilities development is insignificant to the best of our knowledge. Case study is considered more appropriate when the study questions deal with the early phases of a new management theory when key variables and their relationships are being explored (Yin, 1994; Eisenhardt, 1989). Case studies therefore represent a methodology that is ideally suited to creating managerially relevant knowledge (Amabile, et al., 2001). Further, we are studying the offshore outsourcing of manufacturing SMEs. SMEs are in general less formalized and embody a higher level of tacit knowledge. These assumptions lead us to adopt the multiple case study method for data collection and analysis for this empirical investigation. Case studies serve different research purposes, such as exploration, theory building, theory testing, and theory extension/refinement (Voss, Tsikriktsis, & Frohlich, 2002). We adopted an exploratory design, since developing dynamic capabilities, such as innovation capabilities, new market and product development, and flexibility development capabilities, through offshore outsourcing have not been addressed in the literature and measurement variables of these constructs are hardly assessable by explanatory studies. Case study is a very powerful method for building rich understanding of complex phenomena (Eisenhardt & Graebner, 2007), that requires the capability to answer “how” questions (Yin, 2003; Pedersen, 2006). Multiple case study approach was chosen, as it allows both an in-depth analysis of each case and the identification of contingency variables that distinguish each case from the others. Moreover, multiple case studies allow cross-case analysis and comparisons and generate more robust, generalizable, and testable interpretations of a phenomenon than single case study research (Eisenhardt & Graebner, 2007). We are exploring how offshore outsourcing lead focal firms to develop dynamic capabilities for SCA. The SCA derives from distinctive resource combination unique for each firm. The idiosyncratic nature of distinctive resources and competences can only be captured by in-depth investigation such as case study.

Case selection criteria: Following the choice of case methodology, we have also established the case selection criteria as well as the criteria of the interviewees. The following table describes these criteria:

**Table 15: Criteria for Case and Interviewee Selection**

|                                | Measures   | Rationales  |
|--------------------------------|--|---|
| Criteria for firms             |  |   |
| Offshoring experience          | Three years or more  | To confirm that the firms are familiar with offshoring and had time to get adequate experience.   |
| Type of Offshoring             | Manufacturing offshoring SMEs from different sectors                                   | To cover a wide range of cases.   |
| Firm size                      | No less than 20 employees or more than 500. All of these are medium size firms.        | To indicate the activities of a systematic management model in offshoring. Typical firms whose results can be generalizable.  |
| Rate of offshoring             | Minimum 10% of annual revenue should come from offshore outsourcing activities         | To show that offshore outsourcing is an important part of the firm and success and failure in offshoring will have major impact on the firm's competitive advantages. |
| Criteria for interviewees      |  |   |
| Status of the interviewees     | Mid- to higher-level manager/ decision makers in offshoring activities.                | To be close or involved with the offshoring so that the real picture can be extracted from them.  |
| Experience of the interviewees | At least three years consecutive experience in offshoring activities at the same firm. | To make sure that the interviewees are familiar with the management process of offshoring and the offshoring issues in their current firms.                           |
| Knowledge of offshoring        | Expected to have sufficient offshoring knowledge                                       | To indicate that the interviewees can understand the questions being asked and can provide appropriate answers.   |

The study involves ten Quebec manufacturing SMEs from low and mid-low to mid-high level technological intensity firms drawn from across the industries to ensure the robustness of the analysis and to avoid the risk of deriving an “industry-specific” analysis. The distribution of the firms across the industry enabled us to compare and contrast the findings to get in-depth understanding of their offshore outsourcing activities and how these outsourcing strategies assist these firms to develop their organizational dynamic capabilities. These are the medium sized firms having between 20 and 500 employees. The descriptive statistics on the sample firms are given in the following table:

**Table 16: Descriptive Statistics of Selected Cases**

| Name | Sectors          | Product Complexity | Interviewee status | Foreign Office | # of suppliers | % Offshored | Off-shoring since |
|------|------------------|--------------------|--------------------|----------------|----------------|-------------|-------------------|
| RG   | Shoes            | LT                 | Director SCM       | Yes            | >5             | >50%        | 2000              |
| FP   | Plastic          | LT                 | VP                 | No             | >4             | >50         | 2007              |
| GR   | Equipment        | LMT                | VP SCM             | Yes            | >10            | >30         | 1999              |
| SI   | Utensils         | LMT                | VP                 | Yes            | 12             | >25%        | 2001              |
| ER   | Equipment        | LMT                | CEO                | No             | >3             | >20%        | 2000              |
| CR   | Electric         | LMT                | VP                 | Yes            | 10             | >30%        | 2002              |
| PW   | Instruments      | MT                 | VP (Operation)     | No             | >3             | >35%        | 2005              |
| IR   | Slaughter system | MT                 | Director SCM       | No             | >10            | >25%        | 1998              |
| MR   | Equipment        | MHT                | Director SCM       | Yes            | >4             | >30%        | 1990              |
| CN   | Engineering      | MHT                | VP SCM             | Yes            | >10            | >40%        | 1990              |

LT=Low-tech, LMT=Lower-mid-tech, MT=Mid-tech, MHT=Mid-to-high-tech

The selection of case firms was undertaken first from the database of Quebec manufacturing firms maintained by ICRIQ. However, the database does not distinguish the manufacturing SMEs that are involved in offshore outsourcing activities. We then called companies with the pre-established criteria and if the firm fulfilled our criteria of selection and if a senior manager from production or in-charge of supply chain management (SCM)/outsourcing accepted our request for an interview,

we fixed the interview date and time for duration of approximately 90 minutes. However, on several occasions, we had interviews of longer duration than the 90 minutes agreed upon while fixing the interview. We visited each company, took the interview face-to-face, and recorded it. We also took notes during the interview and added further explanations of principal themes and issues after the interview. Interviews comprised a set of semi-structured interviews with open questions for each of the relevant constructs in our conceptual framework. Secondary data was collected in the form of company reports and brochures as well as the websites of the sample SMEs. We also searched for information on the Internet, Eureka database, and local newspapers such as “Les Affaires,” “Le Soleil”, Montreal Gazette etc. to check for any articles on the selected firms. These secondary data helped us to understand the background information of manufacturing activities of these firms, the characteristics of the products, and their markets. The secondary data, to some extent, confirmed the information revealed by the interviewees. These secondary information sources were triangulated with the data drawn from the interviews to avoid post-hoc rationalization and retrospective interpretations, ensuring construct validity (Yin, 2003). The recorded interviews with the senior managers were transcribed and along with the secondary data were put in an electronic file for each firm. Following transcription, a telephone call was made to the interviewees in order to assess the outcomes and to gather missing data, if any. A comprehensive content analysis procedure was undertaken for each firm in all the documents in order to categorize and gather the principal items through an inductive approach.

**Table 17: Categories of Content Analysis**

|   |   |
|---|---|
| <b>Focus on CC</b>                                  |   |
| Focused leadership (strategic manager)              | Offshore outsourcing is supported by the senior management and they concentrate on the retained activities and detect upcoming opportunities and challenges.  |
| Focus on higher value added activities              | Offshoring focal firms send selected activities to the supplier firms and reduce total numbers of activities undertaken in the offshoring firm.   |
| Access to specialized knowledge/technologies        | Savings from offshoring activities (as the firm does not need to invest in those outsourced activities) are invested into capital goods and feedbacks received from suppliers on core activities and new possibilities/opportunities. |
| Enhancing core business capability                  | Divesting through offshoring allows the focal firm to invest more in engineering and skilled manpower (engineers, technicians, and logisticians).   |
| <b>Innovation capabilities</b>                      |   |
| Product engineering capabilities                    | Offshoring allows exchange of engineers and technicians between offshoring focal and supplier firms to work on the same product.  |
| Process   | Offshoring tooling to supplier firms and subsequent feedback and re-adjustments of the process for production.  |
| New ideas and concepts                              | Feedback and new ideas on new product or process from suppliers.  |
| Organizational learning and research & development. | Suppliers' experience and their learning from working with large multinationals as well as their investment in R&D contribute to the organizational learning of offshoring focal firm.  |
| <b>New product and market development</b>           |   |
| Collaboration on NPD                                | Offshoring firm works together with the supplier for a new product or significantly modifying an existing product.  |
| Reduced cycle time                                  | Offshoring to suppliers contributes faster product or process development.  |
| New market penetration                              | Offshoring helps to raise the market share in Canada or other exporting countries.  |
| Close to end market                                 | Offshoring contributes to export more to the supplier's local market or the neighboring countries.  |
| <b>Improving flexibility</b>                        |   |
| Product & process                                   | Offshoring contributes to manufacturing flexibility.  |
| Volume  | Offshoring helps to adjust easily with the market trends.   |
| Machining   | Refining the product by machine tools and the different kind of machining are shared with suppliers.  |
| Personnel   | Personnel are formed in multitasking and inbreeding with the personnel of supplier firms.   |

| <b>SCA</b>     |   |
|----------------|---|
| Market share   | Offshore outsourcing contributes to higher market share (local and/or export market in terms of volume and value).          |
| Specialization | Offshoring focal firms become more specialized in higher value added activities.  |
| Productivity   | Productivity increases following offshore outsourcing due to investment in and production of higher value added activities. |



The coding process started from the beginning of the data collection in order to get to the theory development mode faster and take advantage of subsequent field trips and interviews. We adopted four steps coding process: Initial coding, Axial coding, Selective coding, and theoretical coding. From the selective coding stage, we developed the categorizations of coding. Data categorization and contextualization (Miles & Huberman, 1984) were applied to reveal unforeseen relationships between events and circumstances. We followed theory development cycles proposed by Carlile and Christensen (2005) by observation, classification and defining relationship. Explanation-building procedures were applied so that the relationships between the firm level and the transactions with the supplier firms were identified. These structured procedures for data collection and analysis, as well as the use of the semi-structured interview guide, helped enhance the reliability of the research (Yin, 2003).

#### **5.4. RESULTS AND DISCUSSIONS**

In our qualitative research, we focused on gathering mainly verbal data as well as information from publicly available documents and then analyzed in an interpretative manner, subjective, impressionistic, or even diagnostic. Case or field-derived data is, in general, subjective in approach, but its objective is to understand human behavior and reasons that govern such behavior. The value of data depends on their usefulness in helping us to understand how the world works, identifying categories, making predictions and surfacing anomalies (Carlile & Christensen, 2005). In reality, all research describes a situation and is, therefore, a case and all data are subjective (Carlile & Christensen, 2005). We become subjectively immersed for objective outcomes in the subject matter of this research.

DCV literatures are mainly conceptual and this research field is still in the process of maturing. Though the literature recognizes the role of the external environment, the paucity of addressing dynamic capabilities development in a strategic alliance context such as offshore outsourcing is still prevalent. In our case study, we observed that there are two stages of the dynamic capabilities development process. The first stage deals with the antecedents of DC development and the second is the outcomes of collaborative activities between the offshoring client and supplier firms.

#### 5.4.1. Offshore outsourcing and evolutionary process of dynamic capabilities

Offshore outsourcing SMEs follow an evolutionary path for developing their dynamic capabilities in collaboration with their offshore suppliers. They follow the “three-S” model of sensing, seizing, and shaping (Augier & Teece, 2009). Following the sensing of the opportunities and threats in the market, offshoring SMEs exploit the sensed opportunities and fend off the threats by aligning and reconfiguring resources and competences with those from the supplier firms.

**Table 18: “Three-S” Evolution Process for Dynamic Capabilities (Adapted from Augier & Teece, 2009)**

| Evolutionary process | Explanations  | Evidence from the Cases  |
|----------------------|---|--|
| Sensing              | <p>Offshoring SMEs start first with identifying and anticipating the trends in the macro, meso, and microenvironments surrounding their business activities. Sensing capability refers to the capacity to spot, interpret, and pursue opportunities in the environment through generating, disseminating, and responding to market intelligence (Teece, 2007). Based on their perception of dynamic environment and available resources, managers develop and deploy different forms of dynamic capabilities. Hyper-competitive business environments require firms to continuously modify and revamp the firm’s activities in order to keep good fit with the enterprise ecosystem. From this stage, the focal firms start to look for suppliers with complementary resources, competences and capabilities for inter-firm resource configuration.</p> | <p>Local market openness and accelerated changes in the export markets led manufacturing SMEs to look for alternatives for improving competitiveness. The VP of the Firm FP describe their case as:</p> <p><i>“In 2006, the company experienced a major crisis, mainly due to the appreciation of the exchange rate, which melted the profits in United States, where we realized about 65% of our turnover. We quickly adopted lean manufacturing, which helped to improve our sales but was insufficient to correct the situation, as the gains were eroded by the appreciated US dollar.”</i> In 2008, China appeared on our radar screen and <i>“I went to China with ACIP-Québec [Canadian Association of Plastics Industry] and we found suppliers with complementary capabilities to our products.”</i> [Translation from French text].</p> |
| Seizing              | <p>Sensing the macro, meso, and micro trends allows managers to mobilize inter-firm resources with collaboration of offshoring supplier firms to capture opportunities available in the market, as well as to sustain in the often volatile markets. It helps them to prioritize</p>  | <p><i>“Our products were innovative but we could not diversify our market due to the resource constraints,”</i> said the market development director of the firm RG. He further added: <i>“We found some sourcing partner through an ‘intermediate search firm’ and agreed to offshore some of our activities, which gave us the scale</i></p>   |

|         |   |   |
|---------|---|---|
|         | <p>their resource allocation and location of modular activities on a competitive basis. Managers develop consensus among the senior members about the strategic intent and aligning the business model and strategy with the offshoring supplier firms.</p>   | <p><i>economy and we went to the European market for our high-end sports garments.”</i></p>   |
| Shaping | <p>Following sensing the market trends and adopting the strategic decisions to capture the available opportunities offered in the market, offshoring firms devise plausible responses to the market trends by modifying existing or developing new or exploring new ways of their manufacturing activities following the new global division of labor. Managers develop co-evolving strategies through connecting with the best performer supplier firms for generating synergetic resources and reconfiguring them for responding to the hyper-velocity market requirements.</p> | <p><i>“The Canadian market is very open to foreign companies, not vice versa, particularly since the Buy American Act,” said the VP of supply chain management of the firm CN. He added, “Increased foreign competition in the home market and introduction of the Buy American Act have forced us to redefine our activities. We have opened ‘design development centers’ in Romania and India, where skilled architects are available competitively and developed offshoring collaboration with firms south of the border and assemble our product there to sell in the American public sector market.”</i></p> |

#### 5.4.2. Offshore outsourcing and dynamic capability development

Offshore outsourcing focal firms configure their internal resources and competences with those from the supplier firms in order to develop their specialization by focusing on core activities and develop their innovativeness for product, process, marketing, and organizations or management. The new configurations render focal firms more flexible and fit for the dynamic environment.

**Table 19: Offshore Outsourcing and Dynamic Capabilities Development**

|                                |  | RG | FP | GR | SI | ER | CR | PW | IR | MR | CN |
|--------------------------------|--|----|----|----|----|----|----|----|----|----|----|
| <b>Focus on CC</b>             | Focused leadership                                 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Focus on higher value added activities             | ✓  | ✓  | ✓  | X  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Access to specialized knowledge/technologies       | X  | X  | X  | X  | X  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Enhancing core business capability                 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | X  | ✓  |
| <b>Innovation capabilities</b> | Product engineering capabilities                   | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | X  | X  |
|                                | Process  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | New ideas and concepts                             | ✓  | ✓  | X  | X  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Organizational learning and research & development | ✓  | X  | X  | X  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| <b>New product and market</b>  | Collaboration on NPD                               | ✓  | X  | X  | ✓  | X  | ✓  | X  | ✓  | X  | X  |
|                                | Reduced cycle time                                 | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | New market penetration                             | ✓  | ✓  | X  | X  | X  | ✓  | ✓  | X  | X  | ✓  |
|                                | Close to end market                                | X  | X  | ✓  | ✓  | X  | ✓  | X  | ✓  | ✓  | ✓  |
| <b>Improving flexibility</b>   | Product & process                                  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Volume   | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | X  | X  | ✓  |
|                                | Machining  | X  | X  | ✓  | X  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Personnel  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| <b>SCA</b>                     | Market share                                       | ✓  | ✓  | ✓  | X  | X  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Specialization                                     | ✓  | ✓  | ✓  | X  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
|                                | Productivity                                       | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | X  |

✓ = Higher or improved, X = No change

### 5.4.3. Cross-case analysis

In the *within case analysis* phase, we aimed to create micro-theories of the phenomena, that is, developing organizational dynamic capabilities through offshore outsourcing in each case and to explore adequacy of an emerging cross-case pattern to each individual case. During the cross-case analysis, we aimed at creating an overarching, integrative theory that is compatible with all cases. Cross-case analysis shows that low-tech manufacturing SMEs offshore higher rate of activities and focus mostly on core activities, such as conception and designing, marketing, and logistics. Our discussions with the managers reveal that offshore outsourcing follows gradual approaches to offshore activities starting from standardized non-core activities and sending more higher-technological intensity activities to the supplier firms. Cross-case analysis also shows that for some variables of the constructs where outsourcing focal firms could develop both their dynamic capabilities and efficiency and some others they adopt only the efficiency strategy. Most outsourcing firms in our sample could not get that much feedback for new product development and developing markets in the suppliers' countries or in neighboring countries. On the other side, most companies said that they could better focus on their core activities after offshoring part of their activities. Most companies could improve their specialization, cover higher market share, and improve overall productivity of their firms following offshore outsourcing. The overall trend shows that offshoring firms get more concentrated on fewer suppliers than looking for new suppliers or dispersed among many suppliers as they develop their understanding of the outsourcing process, opportunities and challenges. Inter-industrial differences of innovation show that the relatively high-tech firms have more joint development teams and informal exchanges on R&D than the relatively lower-tech firms. High-tech firms also have higher rate of outsourcing of *near-core* activities such as design and conception of the product. Further analysis shows that the overall competitiveness of SME manufacturing depends on both technical fit and evolutionary fit. Close collaboration with the supplier firms contributes both technical and evolutionary fit; however, the contribution to the latter is more than that to the former. The above cases can be further categorized into three according to the level and pace of dynamic capability development.

**Table 20: Level of Dynamic Capacities Development Process**

| Dynamic capabilities level | Explanations  | Evidence from the cases   |
|----------------------------|---|---|
| Incremental                | <p>Offshore outsourcing SMEs, who consider the market is moving slowly, develop incrementally their resources and competences as well as adapt their business processes to their resources and competences. This is considered as first-level dynamic capability. This is the case for low-tech firms that enter into efficiency seeking offshore outsourcing for low-cost production location. The incremental dynamic capabilities development process does not necessarily change the resource base. In this stage, offshoring manufacturing SMEs are mostly re-active than pro-active in their offshoring strategy.</p> | <p>VP of the firm RG mentioned, <i>“We had first relocated our manufacturing low-cost activities to China in the ‘90s”</i> (but due to the rapid rise of wages and other production factors) <i>“we have relocated our Chinese facilities to Cambodia where production cost is at least 20% less than the previous place.”</i> [Translation from French text]. He further added, <i>“the host country’s contribution to our value creation is low.”</i></p>   |
| Renewing                   | <p>In a comparatively dynamic environment, manufacturing SMEs involved in offshoring follow both the efficiency and the growth strategy. The latter strategy requires these focal firms to refresh and renew their resource stocks and enlarge them by collaborating with supplier firms in lieu of incrementally adapting to the external environment. While incremental dynamic capabilities refer to adjusting, and incrementally improving, renewing dynamic capabilities are concerned with “the capability of an organization to</p>  | <p>The firm SI is a manufacturer of stoves since 1996. In early years of its efficiency-led outsourcing since 2002, SI renewed its resources base by in-house R&amp;D and savings from the offshoring. It introduced new models of the same product. It had then offshored its activities to Brazil and eastern Europe first for low-cost production location. This strategy enabled it to develop its efficiency level and productivity by refreshing its resource base without radically changing the dynamic capabilities.</p> |



|              |   |   |
|--------------|---|---|
|              | purposefully create, extend, or modify its resource base” (Helfat, et al., 2007).   |   |
| Regenerative | In a hyper-turbulent business environment and for higher-technology firms, offshoring allow them to regenerate dynamic capabilities in collaboration with their suppliers to modify their current dynamic capabilities and create new ones suitable for the new environment. They involve restructuring, learning, leverage, and impact on the renewing or incremental dynamic capabilities. These are the higher-level capabilities. | Since 2006, SI started to develop closer ties with its supplier firms by concentrating on fewer large-scale suppliers who are considered as <i>lead firms</i> in their respective activities. These large outsourcing supplier firms invest heavily in their R&D and gained experience through working with other large and/or innovative companies. The close relation with lead suppliers and a few acquisitions in West Canada allowed this firm to introduce new high-end products and high-end products in related industries. By doing so, SI developed its capabilities by entering the low-cost production base, accessing R&D of lead suppliers, and the acquisition of other firms. This new configuration of its resources enhanced its higher-level dynamic capabilities, considered “regenerative” capabilities, as these capabilities can further improve the capability level of the firm. |

#### 5.4.4. Dynamic capabilities development process and SCAs

In today's hyper-competitive business environment, offshore outsourcing allows firms to have access to many complementary resources and capabilities. These resources assist these firms to improve their competitiveness and survivability in the competitive marketplace. According to Quinn (1999), firms with successful knowledge strategies follow some well-established principles by: i) Concentrating more power than anyone else on a few capabilities that customers genuinely care about; ii) Innovating continuously to ensure that their performance and value-adds stay ahead of competitors; iii) Developing consciousness of flexibilities to deal with changing competition pressures and opportunities; and, iv) Leveraging their resources significantly by using the capabilities and investments of others. Insignificant research on offshore outsourcing as a vehicle for improving dynamic capabilities prompted the current research to explore how offshoring allows the manufacturing SMEs to put more emphasis on core activities, improve the innovation capabilities, develop new products and markets, and increase organizational flexibility, and these dynamic capabilities lead to SCAs.

##### *5.4.4.1. Offshore outsourcing and higher concentration on CC*

Core competency is the "raison d'être" for the firm in a competitive marketplace. The resource-based view (RBV) recognizes that firms possess different competitively useful resources including the CC. CC are capabilities that provide competitive advantage for a firm, help firms to gain access to key markets, and deliver distinctive value to customers. According to Prahalad and Hamel (1990), in order to be considered as a core competency, a competency needs to have the attribute of being valuable, rare, inimitable, and non-substitutable. Characteristics of the core competency, such as rarity and inimitability, suggest that they are idiosyncratic to the firm. That implies also that every firm has its own core competency not similar to other competitors in the same industry. That is why the core competency needs to be identified by individuals within the firm. According to Barney (1991), competitive advantage results from a combination of skills that carry cross-functional departments. Klein and Hiscocks (1994) posited that the competencies can be identified by examining the organizational structure, products, and services, and by interviewing the firm's executives. Winterschild (1994) identified the CC during the interviewing of organizational

executives, coding any response described as “being good at” as a core competency. Tampoe (1994) suggested that CC be identified by selecting the products and services that contribute the most to the organization’s strategy, revenues, and profit and identify the technology, skills, assets, processes, and strategic assets used to create them. Core competency is a widely discussed but less explained and often misunderstood concept in management. Even corporate managers, sometimes, do not know exactly what their CC are (Mohiuddin, Z. Su & A. Su, 2010). Definition of core competency embodies the notion of knowledge (know-how) and action (skilled application) simultaneously (Walsh & Linton, 2001). Keeping the balance of these two phenomena is challenging. Perspectives vary as to what people hold as a competency (knowledge) and what the competency enables them to do (Walsh & Linton, 2001). Several authors describe CC as understanding an intellectual discipline or topic (Prahalad & Hamel, 1990; Walsh & Linton, 2001), knowledge of some specific phenomena (Hafeez, YanBing, & Malak, 2002), technology or skills in effective use of technology (Wang, Lo, & Yang, 2004), functional skills within an organization (Wang, Lo, & Yang, 2004), integration of some kind of skills (Wang, Lo, & Yang, 2004), and more generalized organizational abilities (quality management, strategic thinking, and foresight) (Winter, 2003). According to the World Economic Forum (WEF), competency refers to the ability of businesses and business leaders to design, to manufacture, and to sell products, as well as to provide services at a more attractive price or higher quality level than their competitors can offer. From a management perspective, firm’s core competency refers to the ability of a company to sustain development, asset value appreciation, and performance improvement. Firms need to acquire or have access to external sources of capability related to its core business in order to sharpen the tool to respond to new competition of different types and characteristics. External resources create value once integrated with internal resources. The integration of core business and management of outsourcing holds the key for a firm’s competitiveness in offshoring production system. The more sophisticated the market, the more intense competition companies might face, higher the level of core competency will be (Guoqiang, Shen, Peng, Yao, & Jun, 2005).

Despite difficulties in identifying the core competences, most of the authors (Prahalad & Hamel, 1990; Barney, 1991) agree on the prominent role of CC in creating a competitive advantage for the firm. More focus on CC makes them more specialized and capable of contributing to SCA. According to Kotabe, Mol, & Kethar (2008), outsourcing leads to an increased focus on core

competency, thereby improving effectiveness. Offshoring is a powerful way to rapidly build capabilities and reap the benefits of increased specialization (Hagel & Brown, 2005). Developing the core competency process is, therefore, important for any firm. Many studies (Prahalad & Hamel, 1990; Mohiuddin, Z. Su & A. Su, 2010) show that savings of time and resources from offshore outsourcing allows firms to invest more in CC and allows corporate managers to have more managerial focus on core activities. Managing offshoring and linking it with internal resources and core business can open up new ways for companies to develop CC. The key is to transform external resources into the firm's core competency, considered as hybrid-core competences. Offshoring supplier firms can contribute to support services of the CC and thus accelerate further development of the core competency. By establishing the offshoring partnership with a complementary supplier firm, offshoring SMEs can have access to the process capability and the capabilities of quality assurance, fast response, and service awareness that come with the supplier (Guoqiang, Shen, Peng, Yao, & Jun, 2005). Therefore, it is of strategic importance for the firm to transform from traditional arm's-length relation of offshore outsourcing to partnership-oriented offshoring. By doing this, SMEs develop their core competency by integrating external resources. Those offshoring SMEs interested in developing a long-term partnership with the supplier firms develop a new set of rules and concepts for management & operation and build trust with an attempt to create a "win-win" case and shared development goals. Quality, cost, and time (rapid response and flexibility) remain the most salient issues in offshore outsourcing production systems. Offshoring SMEs can develop their competency around these elements by leveraging their partnership with competent suppliers. Core competency is not be discovered or found somewhere; it has to be constructed. Offshore outsourcing allows firms to outsource non-core activities and free up scarce resources and capabilities, which in turn is invested in the core competency activities. Focusing on CC and leveraging capabilities from other offshoring supplier firms allows firms to specialize in CC on one hand and have access to the specialized capabilities from the best-in-class outsourcing suppliers on the other hand.

Data from the selected ten manufacturing SMEs shows that offshore outsourcing allowed them to disperse some activities to the outsourcing supplier firms and enabled them to save investments in those activities in both managerial and financial terms. The savings allowed senior managers to concentrate more on strategic activities and planning. They could divert their attention toward the

activities that create higher value. Firm SI pointed out, “*We are strengthening our core business, renewing our focus on discontinuous innovations while partnering for some activities with our offshoring suppliers* [and we introduced] “*learn, do, and teach approach with our suppliers.*” Outsourcing allowed firms to reduce the number of components or articles they used to make before starting outsourcing. One of the fundamental issues that were revealed in our discussion with the managers was that they started with outsourcing non-core repetitive activities and progressed slowly to outsource activities that require higher technologies and expertise toward near-core activities. This was gradual and some firms (RG, PW, IR) have outsourced a considerable share of their manufacturing activities and concentrated in the few high-valued activities in their headquarters in Canada (Quebec). The manager of RG, the highest outsourcer among the ten firms, mentioned “*Offshoring manufacturing activities enabled us to invest more on high value-added activities in design and conception and also in the marketing and logistics.*” The supply chain manager of IR said that they practically become an integrator of components sourced from multiple outsourcing suppliers from the developed as well as emerging countries. Their CC become in integration of different systems rather than producing any particular component or product. The VP of PW mentioned that outsourcing allowed them to focus more on marketing and on new ideas for product development. Outsourcing also enabled firms to invest more on their R&D or in the engineering department where they develop the new product or modify, change and improve the existing products and components. However, some of the sample firms could not increase their investment in their engineering department or in their core activities due to the financial crises during the 2008–2011 period. But they acknowledged that the situation could be worse if they could not procure the components from their outsourcing suppliers during the economic crises when they were not in a position to invest in the manufacturing infrastructure at their domestic plants.

Thus, we can make the first proposition that:

***Proposition 1. Offshore outsourcing of Manufacturing SMEs enhances focus on organizational core competencies that leads toward higher specialization and superior capabilities.***

#### *5.4.4.2. Offshore outsourcing and developing innovation capabilities*

Innovation is a company's commitment to creating and introducing new products, new production processes, and management systems (Vaccaro, Jansen, Van Den Bosch, & Volberda, 2012). Innovation is the implementation of a novel and manageable (Wagner & Busse, 2008) idea into a new product or new process (Schilling & Phelps, 2007). Innovation may involve existing or new knowledge (Schoonhoven, Eisenhardt, & Lyman, 1990), and may occur formally or informally (Harrison & Samson, 2002). There are at least three kinds of innovation, such as product innovation, process innovation, and managerial innovation. Product innovation occurs when there is a change in the product manufactured by the organization. Process innovation takes place when there is a change in the way a product is manufactured. Managerial innovation is the managerial capabilities that allow generating of new ideas, identifying new market opportunities, and implementing marketable innovations through exploration of the company's existing resources and capabilities (Neely & Hill, 1998) together with that of their partner firms.

In a rapidly evolving business environment and reduced product life cycle, SMEs are facing challenges from competitors coming from low-cost countries (LCC) as well as high-cost countries (HCC). One of the ways by which the manufacturing SMEs from the developed countries like Canada can survive and sustain their competitiveness is by improving their innovativeness in terms of product, process, market, and organization. In order to compete in a new competitive business environment, the SMEs need to develop and hasten their innovation capabilities. That includes the skills, knowledge, and management techniques needed to create, change, improve, and commercialize successfully "artifacts," such as products, services, equipment, processes, and business models (Drucker, 1985, p. VIII). With collaboration from the offshoring supplier firms, the offshoring SMEs develop their innovative capabilities faster and more efficiently. Collaboration and exchanges of knowledge through transferring expertise and skilled personnel between the offshoring client and supplier firm enhance and hasten the innovation process of the offshoring SMEs. Offshoring suppliers' innovations take the form of new products, new production methods, new markets, new sources of supply, or new business processes. Any of these innovation capability factors affect the performance of the offshoring SMEs in their innovation process (Naghavi & Ottaviano, 2009). Offshoring to the advanced emerging countries allow the SMEs to have access to qualified personnel and extended test and trial facilities, which lead to

improved efficiency and service level processes, and increase the speed to market of their products (Peeters, 2007). Access to expert human capital and science and engineering talent facilitate the product development process. Business executives increasingly understand that long-term offshoring bring strategic benefits, such as greater intellectual depth and access, opportunity scanning, richer innovation skills, reliability, quality, value-added solutions, or worldwide outreach (Quinn, 1999). These enhanced capabilities have a significant impact on timing and amplitude of innovation at offshoring SMEs. These multiple facilities allow offshore outsourcing firms to reduce their innovation cycle times and cost, and decrease investments and risks by 60% to 90% (Quinn, 1999).

Manufacturing SMEs are constrained in terms of size and resources to invest in innovation capabilities development. The manufacturing supplier firms are, in general, large enterprises with huge investment in equipment and skilled manpower and offer their services to large offshoring companies from developed countries. Offshoring to large supplier firms allows them access to new technology and innovations. The VP of SCM of the firm CN mentioned, *“We encourage our people from the R&D and product development department to share the development process with our suppliers and get suggestions from them. We trust the partners with whom we work and we think it is easy to be open and honest with long-term suppliers/partners.”* Supplier firms thus contribute to overall development of innovation capabilities. Moreover, when offshoring focal firms send their “tooling” and “prototypes” to the supplier firms and ask them to produce those goods; they come up with refinement of the tooling and improve manufacturability of the product. In case of a “Prototype,” supplier firms from the emerging countries make them with real material and outsourcing firms can observe *“real product with real materials”* (PW vice-president) *“rather than the 3D printing that we do in developed countries.”* Tooling and prototyping are very popular among the offshoring focal firms to send to the outsourcing supplier firms and gain valuable innovative suggestions and contribute to improving these activities for better quality goods production. Offshoring supplier firms contribute greatly to manufacturability through improving the production process of products or components conceived by the focal firms. According to the firm AV, *“It’s very important to the vertical relationship with our suppliers that the innovation process is often supplier led and not from us.”* However, in order to reach the level of getting this feedback from the outsourcing suppliers, focal firms need to integrate them into the product

conception and design stages. The VP of the firm RI mentioned, “*We have clear aims and objectives that both parties understand and we invest our collective efforts to achieve our goal and reward accordingly.*” However, this is not always practiced by the offshoring focal firms due to the fear of losing intellectual property to the supplier firms. At the same time, some of the SMEs revealed that they outsource standardized products and components that do not have many intellectual property issues. Director of the international operations of FP said, “*I am always having my attention on every production process in our suppliers’ factories and we have excellent formal and informal channels of communications and knowledge transfers between our partners and we manage our intellectual properties together.*” Data show that offshoring firms could reap advantages from the capabilities of their supplier firms and their investment in R&D and develop new way of making the same product and/or improve the process. However, this moving-up-the-value-ladder is mostly incremental than radical changes.

Thus, our second proposition is as follows:

***Proposition 2. Offshore outsourcing of manufacturing SMEs leads offshoring focal firms and supplier firms to collaborate, coordinate and share their inter-firm resources, competences and capabilities to perform outsourcing activities that contribute to developing new way of performing the activities and accelerate and co-develop their innovation capabilities.***

#### *5.4.4.3. Offshore outsourcing and developing new products and markets*

With technological advancement and globalization, products continue to become more technically complex but increasingly sliceable and re-integrable in scope, facilitating distributed production in a networked virtual environment (Contractor, Kumar, Kundu, & Pedersen, 2010). SMEs need to have enhanced capabilities to satisfy changing market demand in order to be competitive in the marketplace. As developing in-house capabilities and acquiring firms with the specific capabilities are time consuming and costly, cooperating with offshore supplier firms to gain access to certain capabilities and know-how is especially pertinent in the current, increasingly volatile business environment. Reduced product life cycle, rapid changes in the marketplace, scarce resources, and capabilities force the SMEs to have access to their offshore supplier’s capabilities for faster



response and rapid new product development (NPD) through integrating intermediate components or new kind of components proposed by the suppliers. The current rate of technological change is challenging many manufacturing firms' capabilities, and they are seeking the help of offshoring suppliers with the development and application of critical but non-core technologies in their new products (Handfield, Ragatz, Peterson, & Monczka, 1999). Offshore outsourcing as an operation mode is both a source of cost savings as well as a way to acquire know-how for a firm (Kotabe, Mol, & Kethar, 2008). Strategic offshore outsourcing allows Canadian offshoring SMEs to have access to the capabilities of "enabled supplier firms" and respond to volatile market requirements. Offshoring supplier firms provide intermediate components or systems that create competitive advantages in the product development process, such as the primary operating system, application-specific inputs, and proprietary materials (Huang & Chu, 2010). Past experiences and both public and private policies enabled emerging country firms (ECF) to develop technology, innovation, and system improvement capabilities. With access to these capabilities, offshoring SMEs improve product quality and reduce cost. Offshoring supplier firms help them in generating new ideas for differentiating products, offer solutions to technical design problems, and communicate insights into emerging global markets and their varying needs. Collaboration with the offshoring supplier is a fast, low-risk, and flexible way to try out new markets without fully committing the resources or developing needed capabilities. New product development research points out that if firms want to announce new products effectively and efficiently, they should obtain the involvement and support of offshoring suppliers, contributing to new product success (Petersen, Handfield, & Ragatz, 2005). Thus, globalization and technological advancement are deepening the need for Canadian SMEs to develop long-term partnership with the offshoring supplier firms in creating new products or redefined products in the shortest possible time with minimum investments and shared risks. Offshore outsourcing can also help SMEs to have exposure to the foreign market via their offshoring supplier and become familiar with that market and expand to this market as well as get footing to the regional neighboring markets.

Access to resources and capabilities (Ouyang, 2008) of supplier firms allows offshoring SMEs to fill the gaps of some of their shortcomings in the international market. With technological development and "modularization" of products, offshoring SMEs outsource final production, as well as integrate offshoring suppliers into the design phase of the product in order to reduce

development and production time and offer speedy response to changing customer demand. Building credible relationships with offshoring suppliers is particularly beneficial for long-term partnership. Suppliers provide innovative product or process technologies that are critical to the novelty of the final product (Swink & Mabert, 2000; Handfield, et al., 1999; Azadegan, Kevin, Carter, & Carter, 2008). Consistency in business approaches and frequent contacts are prerequisites for long-term relationships. The best-in-class offshoring supplier firms provide ideas and design concepts early in the fuzzy front end of product development (Swink & Mabert, 2000). Offshoring suppliers also enhance offshoring SMEs' new product development (NPD) processes by offering rapid and "production type" prototyping, tool design, and product testing. On the other hand, managers must ensure that suppliers are creative, technically skilled, and contribute in a team environment. Offshoring SMEs need to ensure these criteria while selecting offshoring supplier firms. Offshoring supplier firms can also provide knowledge of or access to foreign markets, regulatory requirements, and local customs. Tapping into their capabilities also gives access to skills or talents not available in the home markets, especially engineering talents. With the integration of the offshoring supplier's capabilities, offshoring SMEs are able to design products that cater to the distinct tastes and needs of different markets. The so-called "world product" consists of variations on a basic platform design created to meet a multitude of differing local regulatory and customer requirements (Swink & Mabert, 2000). The mass customization is possible only collaborating with different suppliers with particular capabilities. Offshoring SMEs also have local presence through their partnership with offshoring suppliers without much investment in foreign market development. On top of these advantages, offshoring suppliers also absorb cyclical demand, economic swings, and disruptions due to labor strikes or natural disasters. In fact, making good use of offshoring supplier capability so as to reduce production cost and introduce a new product has become a critical strategic issue (Araujo, Dubois, & Gadde, 1999). Competition itself transformed from firm level toward the supply chain (Gomes-Casseres, 1996). The first thing we need to understand is that we are no longer competing against global companies but against entire global value chains for each components of any product or activities. The success and failure of the final product depends on not only the capability of offshore outsourcing SMEs, but also on the manufacturing, research, and development capabilities of the suppliers. Knowledge and capabilities of suppliers influence the offshoring SMEs' competency (Asmus & Griffin, 1993). Offshoring suppliers' participation in the NPD process help reduce cost, reduce concept-to-

customer development time, improve quality, and provide innovative technologies that help capture market share. Bertrand (2011) studied the effect of offshore outsourcing on the export performance of firms. Building on the theories of international business, the RBV, and TCE, the author argued that offshore outsourcing helps firms – directly or indirectly – to export more. It reduces their production costs and enhances their flexibility. It also provides them with new resources and market knowledge. However, the impact of offshore outsourcing depends on the resources and capabilities of firms to manage a network of foreign suppliers, and to absorb foreign knowledge (Bertrand, 2011). Frequent inter-firm communication, building trust, establishing partnership equity, ensuring that parties contribute as expected, and employing a product or collaboration champion increases the likelihood of success (Littler, Lieverick, & Bruce, 1995).

Offshoring firms in our sample were mostly low- to mid-tech industries. That means the products of these firms were not very sophisticated and were mostly modular products. That implies that the components were modularizable and outsourced to the supplier firms and taken back to re-integrate to make the *complete* product. For some modules, outsourcing firms proposed different components to integrate into the product. As the CEO of ER said, *“We have sent our design to our Taiwanese outsourcing partner and they proposed a new way of making the component”* with similar utility but cheaper. However, outsourcing firms did not propose any completely new product. The idea was mostly originated from offshoring focal firms. On the other hand, outsourcing allowed the offshoring firms to avail the low-cost development of tooling and prototyping and that allowed the focal firms to take more risks for conceiving and developing more new products. In this case, the contributions of the outsourcing firms were indirect. Outsourcing further aided the new product development process by accelerating the process of the new product development cycle. The manager of the firm PW said, *“Together with our suppliers, we accomplished more than what one of us can do on our own. Together we increased our market share, developed new products faster, and won many customers. It is a win-win partnership with less financial investment in this time of crises.”*

We have found also that the manufacturing SMEs could develop new markets through offshoring to supplier firms, especially to China. Due to the emergence of China as a world factory, many companies outsource to China. Some of those firms in our sample send their core components to

China for assembling with components produced in China and deliver their goods to the distributors in China and name it as “Made-in-Canada, delivered in China” (PW). The distributors have other suppliers in China and receive the final goods from all their Chinese suppliers in China for economy of scale concern. The distributor may bring those products to North American markets or other destinations. Thus, outsourcing is shifting the place where the transactions take place, though it does not open new market that much in real term in the supplier countries. However, some of our sample firms found markets in the supplier countries and/or neighboring countries, though it is still in the beginning. For example, our sample firms IR, MR, and ER found new markets in their outsourcing countries. IR offers building a halal slaughtering system and do outsourcing to China among others and it found clients in Malaysia. However, this is not the case with all the firms in our sample. In terms of expansion in local markets, outsourcing provides economy of scale both through access to the manufacturing facilities of the supplier firms and by saving investment in fixed infrastructure. Thus, outsourcing contributes to market development.

Thus, the third proposition is as follows:

***Proposition 3. Manufacturing offshore outsourcing allows firms to collaborate for new product development and new market development.***

#### *5.4.4.4. Enhanced organizational flexibility*

Rapidly changing business environment and market volatility require fast adjustment of firms to the prevailing market situation. Flexibility is considered solely as an adaptive response to environmental uncertainty (Gupta & Goyal, 1989; Golden & Powell, 2000). On the other hand, a forward-looking firm can proactively (Hitt, Keats, & Demarie, 1998) redefine market uncertainties through market scanning. Market needs can be influenced by what customers have come to expect from a particular industry (Von Hippel, 1988). A firm can encourage customers to see the benefits of shorter lead times or more frequent new product introductions and then provide these higher levels of service through superior manufacturing flexibility. This will create more uncertainties for its rivals and establish a powerful competitive advantage for the firm (Gerwin, 1993). Suarez,

Cusumano, & Fine (1995) argued that flexibility is multidimensional, that an organization can be highly flexible in some ways and less flexible in others. Consequently, they argue, it is not entirely appropriate to talk simply of a “flexible system.” Evans (1991) supports this conclusion that flexibility is polymorphous, having different meanings in different contexts. In order to advance research on flexibility, Upton (1994) argued that what is required is the identification of multiple types of flexibility so that they can be split into parts that can be prioritized, measured, and improved. Krijnen (1979) argued that strategic flexibility possesses elements that prepare for the foreseen and provides avenues to react to the unforeseen. Many authors classify manufacturing flexibility by variations such as process, product, or production volume (Chang, Lin, & Sheu, 2002).

Organizational flexibility becomes increasingly critical for firms to remain competitive in the marketplace. According to McDermott and O’Connor (2002), firms are looking to outsource business areas to achieve greater flexibility and to gain greater ability to respond nimbly, in addition to reducing the cost of operations. It is critical to be able to respond to changing market conditions and a competitive environment. In particular, “outsourcing as a means to gain flexibility” was identified as the third most significant outsourcing motive, just behind operational cost savings and focusing on CC (Quelin & Duhamel, 2003). Besides efficiency and effectiveness improvements, flexibility is argued to be a source of value on its own in outsourcing deals (Lancellotti, Schein, Stefan, & Stadler, 2003). Despite the rich literature on the need for organizational flexibility, few have studied the empirical aspects of how SMEs become more flexible due to offshore outsourcing. Multidimensional features and multilevel organizational flexibility add complexity to empirical measures. Flexibility dimensions can be market oriented as well as manufacturing process oriented. The dimensions of flexibility can also be classified in terms of time and range (Golden & Powell, 2000). The temporal dimensions can be described in terms of the length of time that it takes an organization to respond to environmental changes. The range dimension of flexibility is the degree to which an organization can adapt to foreseeable and unforeseeable changes.

Flexibility in manufacturing is a critical source of competitive advantage. This can be brought by creating a flexible factory or network production system. Building a networked production system

through strategic offshore outsourcing brings to SMEs the manufacturing efficiency advantages historically available only to large firms (Elango & Fried, 1993). Offshoring allows firms to have more flexibility in the step-up or step-down of production volume, depending on market volatility in demand, without incurring losses. This capability leveraging strategy enables offshoring SMEs to switch, at short notice, between the products that offshoring suppliers produce, as well as to change suppliers if needed. This strategy renders offshoring firms more flexible than before. Cooke (1988) believed that organizations working together as a network achieve “flexible integration.” The hybrid governance structure of alliances creates the flexibility necessary to promptly seize opportunities in a rapidly changing market (Veilleux, et al., 2012). That means the network provides greater flexibility than that achievable through vertical integration by a single organization. One main reason for this is that individual firms in the network can be added or dropped rapidly as required. The network implies a narrower range of output at the level of the individual firm, but a substantial degree of flexibility at the level of the network (Sayer, 1989). Thus, an individual organization in a network obtains lower internal flexibility while simultaneously obtaining increased external flexibility. Technological advancement, modularity, and ease of trade flows have also facilitated offshore outsourcing firms to procure intermediary products from competent firms around the globe and rendered the offshoring firms more flexible.

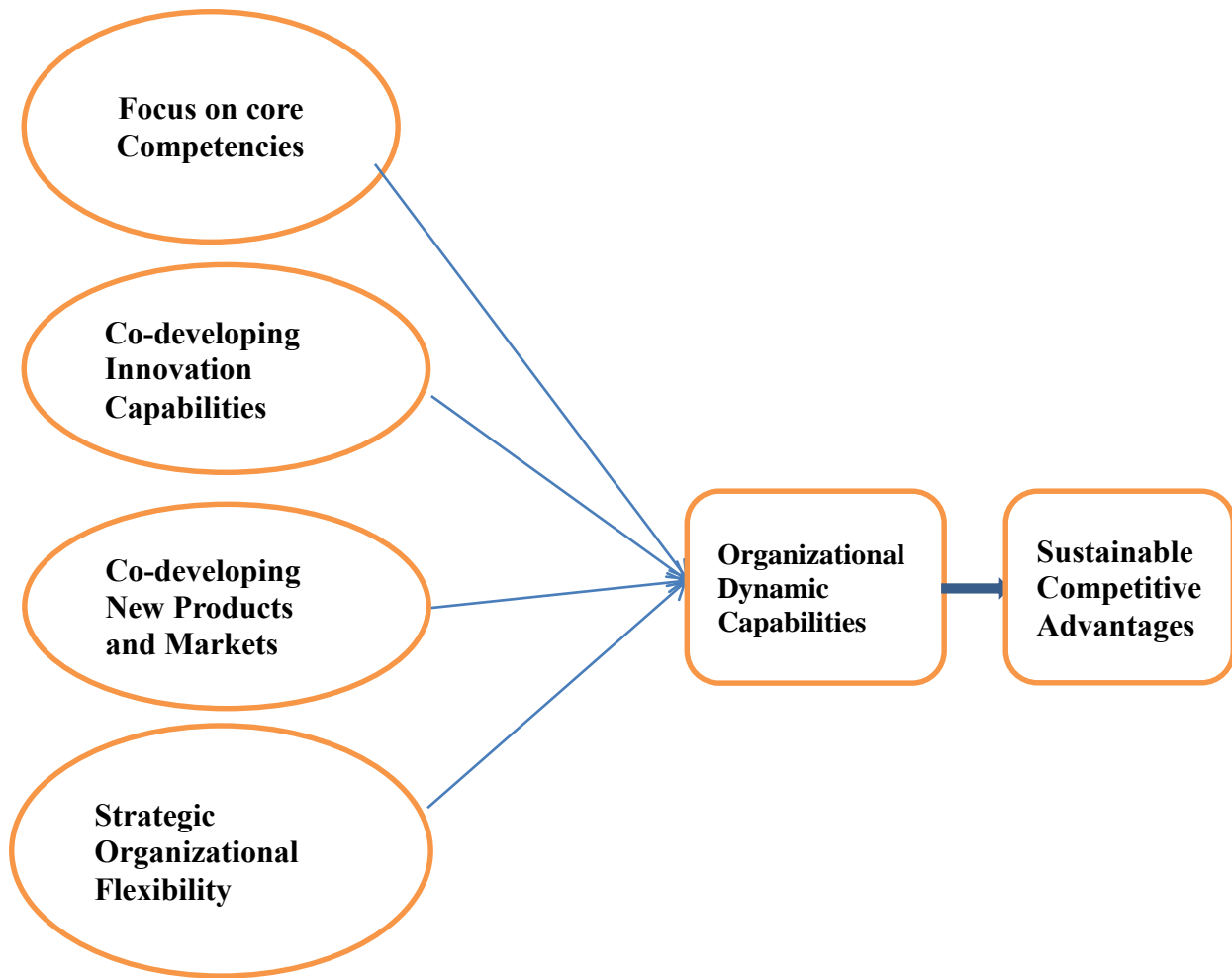
Globalization and volatility of the market require firms to be flexible in a way that can follow and adjust to the market trends. Offshore outsourcing allowed manufacturing SMEs to transform fixed cost (capital investment, etc.) into variable costs and rendered firms more flexible. Data from our sample SMEs show that offshoring enabled them to adjust their production volume according to the market trends. Modular production allowed firms to act on different parts of their production and processes when needed without completing the whole process of the production system. Manufacturing SMEs are no more constrained by their shortages of investment in capital equipment and immobile infrastructure. For some of the sample SMEs (IR, PW, MR) we found also that they do not find enough qualified technicians for expanding their production facilities here in Quebec and outsourcing facilitated them to have access to the required low-cost/high-value workforce. They also revealed that some of their large outsourcing suppliers have also delayed the delivery of their outsourcing goods and components during the financial crises and offered also

indirect credit by allowing the payment after receiving from the clients (IR). Thus, offshore outsourcing enabled manufacturing SMEs to be more flexible and leaner.

Thus, our fourth proposition is:

***Proposition 4. Offshore outsourcing allows manufacturing SMEs to collaborate and share expertises and capabilities for performing complementary production activities together and develop capabilities to follow market trends and adjust fast accordingly.***

Based on our findings and analysis, we hence propose the following framework of offshore outsourcing, organizational dynamic capabilities, and SCAs.



**Figure 10: Dynamic capabilities and SCA**

## **5.5. CONCLUSION**

This paper shed light on how offshoring enables SMEs to develop their organizational dynamic capabilities that lead them toward SCA in the marketplace. Liberating resources from offshoring allows SMEs to invest and focus more on their core activities. Moreover, offshoring those activities where SMEs are not in a position of comparative advantage helps the remaining activities to perform more efficiently. Offshoring also allows the SMEs to accelerate their innovation process by introducing better quality products, introducing a new product, or acquiring a new



process of production, and thus renders the SMEs more competitive in the marketplace. Accessing the resources and capabilities from offshore supplier networks helps also the offshoring SMEs to be more flexible in terms of time, frequency, and volume of production of their products. Offshore outsourcing, thus, allows SMEs to reconfigure their resources and capabilities, and redesign their value chain with collaboration from their offshore supplier firms and leads them to become more competitive, sustainable, and agile in the volatile business ecosystem. Developing a web of best performers through offshore outsourcing partnership enhances the competitiveness of the value chain and enables SMEs to compete with both large firms and other SMEs, especially in the niche market. Manufacturing SMEs in Canada are facing steep competition from emerging countries, and offshoring is one of the “level playing field” in the marketplace. This study contributes toward better understanding of the SMEs’ offshoring and how the offshoring enable them to develop dynamic capabilities. For low-tech and low-to-mid tech firms, offshore outsourcing enable them to keep some activities in the home countries and compete in the world market on similar footings thanks to procuring intermediate components and other services from the low-cost-countries (LCC).

The study also presents the theory development process and highlights the managerial strategies of how SCAs are created from organizational dynamic capabilities developed in collaboration with supplier firms. Application of the DCV to manufacturing offshoring SMEs is the fundamental contribution to this field of knowledge. Managers will be able to build, integrate, and reconfigure their internal as well as external resources for distinctive organizational capabilities for SCAs. The current project, thus, is very promising for both the theory building process as well as the professional managers’ understanding.

While the offshoring supplier firms enhance the specialization and focus on core activities and improve innovativeness and flexibility, only two cases demonstrated that the familiarity of the offshoring host countries’ can open new markets for their products. The same can be concluded for new product development (NPD). In a world of hyper-competition and multiple levels of exchanges and partnerships, manufacturing firms need to develop ambidexterity (the art of thriving in complex environments), where they are capable of exploring new ways of doing things along with exploiting existing ones. In our research, we found the manufacturing SMEs are involved

both exploring and exploitative offshore outsourcing. Integrating these two approaches not only enable them to develop further their capabilities but also enabling the suppliers to develop their expertises in some cases and thus developing a long term partnership. In a dynamic environment, manufacturing firms need to pass through continuous transition between styles and strategies for introducing new products and developing existing products and targeting both emerging and developed markets. Organizational dynamic capabilities are self-tuned to acquire experience and changing business environment and allow firms to explore new opportunities and exploit existing ones and enable them to thrive under uncertainty and rapid change. In brief, strategic offshore outsourcing enables SMEs to become evolvable enterprises that recombine, reconfigure, and co-develop inter-firm resources for SCA. Previous research addressed the developing dynamic capabilities as an internal organizational issue or in an equity based partnership following a substantialist approach that most methodological tools are focused on and best suited in identifying convenient sources data that can be easily counted and categorized more readily than the relational properties that exist between individuals, groups or organizations in a given social space over time (Bourdieu, 1989). The current study showed the developing dynamic capabilities in a relational approach with the supplier firms in a non-equity based partnership. This is one of the fundamental contributions of this paper. Future research with longitudinal data needs to evaluate the extent of dynamic capabilities development by manufacturing SMEs offshoring. Future research can also address the strength of the collaboration in the framework of offshore outsourcing and how the degrees of the collaboration affect the dynamic capabilities development process. One of the limitations of this research is the generalizability of the results from the case study, though many researchers in the field advocate analytical or theoretical generalization instead of statistical generalization. Our results are presented in the wider framework of the dynamic capabilities development process in an offshore outsourcing context to fulfilling the requirement of theoretical generalization.

## 5.6. REFERENCES

1. Al-Azad, M.S., Mohiuddin, M., & Rashid, M.M. (2010). Knowledge Transfer in Offshore Outsourcing and International Joint Ventures (IJVS): A Critical Literature Review from Cross-Cultural Context. *Global Journal of Strategies and Governance*, 1(1), 41-67.
2. Alguezaui S., & Filieri, R. (2011). Innovation across Tech-Firm's Boundaries: a Knowledge-Based View, In Contractor, F., Kumar, V., Pedersen, T. and Kundu, S. (Eds.), *Outsourcing and Offshoring of Business Activities: Determinants, Implications and Challenges*, Cambridge University Press, 210-238.
3. Ambrosini, V., & Bowman, C. (2009). What are Dynamic Capabilities and are They useful Construct in Strategic Management? *International Journal of Management Reviews*, 11(1), 29- 49. <http://dx.doi.org/10.1111/j.1468-2370.2008.00251.x>
4. Araujo, L., Dubois, A., & Gadde, L.-E. (1999). Managing interfaces with suppliers. *Industrial Marketing Management*, 28, 497-506. [http://dx.doi.org/10.1016/S0019-8501\(99\)00077-2](http://dx.doi.org/10.1016/S0019-8501(99)00077-2)
5. Asmus, D., & Griffin, J. (1993). Harnessing the power of your suppliers. *The McKinsey Quarterly*, 1993(3), 63-78.
6. Augier, M., & Teece, D.J. 2009. Dynamic capabilities and the role of managers in business strategy and Economic performance. *Organization Science*, 20(2), 410-421. <http://dx.doi.org/10.1287/orsc.1090.0424>
7. Azadegan, A., Kevin, J. D., Carter, P.L., & Carter, J.R. (2008). Supplier innovativeness and the role of interorganizational learning in enhancing manufacturing capabilities. *Journal of Supply Chain Management*, 44 (4), 14-35. <http://dx.doi.org/10.1111/j.1745-493X.2008.00070.x>

8. Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, (1), 99–120. <http://dx.doi.org/10.1177/014920639101700108>
9. Bartmess, A. & Cerny, K. (1993). Building Competitive Advantage Through a Global Network of Capabilities. *California Management Review*, 35 (2), 78 -103. <http://dx.doi.org/10.2307/41166723>
10. Bertrand, O. (2010). What goes around comes around: Effects of offshore outsourcing on the export performance of firms. *Journal of International Business Studies*, 42(2), 334-344. <http://dx.doi.org/10.1057/jibs.2010.26>
11. Bourdieu, P. (1989). *Practical Reason*, Stanford: Stanford University Press.
12. Bowman, C., & Ambrosini, V. (2003). How the Resource-Based and the Dynamic capability Views of the Firm Inform Corporate-Level Strategy. *British Journal of Management*, 14, 280-303. <http://dx.doi.org/10.1111/j.1467-8551.2003.00380.x>
13. Carlile, P. R., & Christensen, C. M. (2005). The Cycles of Theory Building in Management Research. Harvard Business School. <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=31018743BDFDBFF6549A544C9569ED14?doi=10.1.1.335.2372&rep=rep1&type=pdf>
14. Chang, S.C., Lin, N.P. & Sheu, C. (2002). Aligning manufacturing flexibility with environmental uncertainty in high-tech industry, *International Journal of Production Research*, 40(18), 4765-4780. <http://dx.doi.org/10.1080/00207540210157196>
15. Contractor, F. J., Kumar, V., Kundu, S. K., & Pedersen, T. (2010). Reconceptualizing the firm in a world of outsourcing and offshoring: The organizational and geographical relocation of high-value company functions. *Journal of Management Studies*, 47(8), 1417-1433.

16. Collis, D.J. (1994). How Valuable Are Organizational Capabilities? *Strategic Management Journal*, 15, 143-152. <http://dx.doi.org/10.1002/smj.4250150910>
17. Cooke, P. (1988). Flexible intergration, scope economies, and strategic alliances: social and spatial mediations. *Environment and Planning D: Society and Space*, 1988(6), 281-300. <http://dx.doi.org/10.1068/d060281>
18. Di Gregorio, D., Musteen, M., & Thomas, D. E. (2008). Offshore outsourcing as a source of international competitiveness for SMEs. *Journal of International Business Studies*, 40(6), 969-988. <http://dx.doi.org/10.1057/jibs.2008.90>
19. Dosi, G., Fagiolo, G. & Roventini, A. (2008). The Micro-foundations of Business Cycles: an Evolutionary, Multi-Agent Model. *Journal of Evolutionary Economics*, 18, 413-432. <http://dx.doi.org/10.1007/s00191-008-0094-8>
20. Dosi, G., Faillo, M., & Marengo, L. (2003). *Organizational Capabilities, Patterns of Knowledge Accumulation and Governance Structures in Business Firms. An Introduction*. LEM Papers Series 2003/11, Laboratory of Economics and Management (LEM), Sant'Anna School of Advanced Studies, Pisa, Italy.
21. Dosi, G., Nelson, R.R. & Winter, S.G. (2000). Introduction: The Nature and Dynamics of Organizational Capabilities, in G. Dosi, R. R. Nelson, and S. G. Winter (eds.), *The Nature and Dynamics of Organizational Capabilities*, Oxford: Oxford University Press, 1–22.
22. Doz, P. & Prahalad, C. K. (1988). Quality of Management: An Emerging Source of Global Competitive Advantage. *Strategies in Global Competition*, N. Hood and J. Vahlne, (Eds): 345-369. London: Croom Helm.
23. Drucker, P.F. (1985). *Innovation and Entrepreneurship: Practice and Principles*, Harper Business Edition. PMCID: PMC1346743

24. Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of management journal*, 50(1), 25-32.
25. Eisenhardt, K. M. & Martin, J.A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21 (10-11), 1105-1121.  
[http://dx.doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](http://dx.doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
26. Elango, B. & Fried, V. H. (1993). Flexible manufacturing technologies: implications for competition between small and large firms. *Journal of High Technology Management Research*, 4(2), 241-54. [http://dx.doi.org/10.1016/1047-8310\(93\)90007-3](http://dx.doi.org/10.1016/1047-8310(93)90007-3)
27. Evans, J.S. (1991). Strategic flexibility for high technology manoeuvres: a conceptual framework. *Journal of Management Studies*, 28(1), 69-89. <http://dx.doi.org/10.1111/j.1467-6486.1991.tb00271.x>
28. Fine, C. H., Vardan, R. Pethick, R. & El-hout, J. (2002). Rapid-response Capability in Value chain design, MIT, *Sloan Management Review*, 43(2).
29. Gerwin, D. (1993). Manufacturing Flexibility: A Strategic Perspective, *Management Science*, 39 (4), 395-410. <http://dx.doi.org/10.1287/mnsc.39.4.395>
30. Golden, W. & Powell, P. (2000). Towards a definition of flexibility: in search of the Holy Grail? Omega .*The International Journal of Management Science*, 28, 373-384.
31. Gomes-Casseres, B. (1996). *The alliance revolution: The new shape of business rivalry*. Cambridge: Harvard University Press.
32. Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114-135.  
<http://dx.doi.org/10.2307/41166664>

33. Grossman, G. & Rossi-Hansberg, E. (2006). *The Rise of Offshoring: It's Not Wine for Cloth Anymore*, Jackson Hole Conference Volume, Federal Reserve Bank of Kansas City.
34. Grossman, G. & Rossi-Hansberg, E. (2008). Trading Tasks: A Simple Theory of Offshoring. *American Economic Review*, 98(5), 1978-97. <http://dx.doi.org/10.1257/aer.98.5.1978>
35. Guoqiang, Y., Shen, X., Peng, L., Yao, C. & Jun, X. (2005). The Link. <http://www.ceibs.edu/link/latest/images/20050630/1361.pdf> (Retrieved on 10th May, 2012).
36. Gupta, Y. P. & Goyal, S. (1989). Flexibility of Manufacturing Systems: Concepts and Measurements. *European Journal of Operation Research*, 43, 119-135.
37. Gulbrandsen, B., Sandvik, K., & Haugland, S.A. (2009). Antecedents of vertical integration: Transaction cost economics and resource-based explanations. *Journal of Purchasing and Supply Management*, 15 (2), 89-102.
38. Hafeez, H., YanBing, Z., & Malak, N. (2002). Core competence for sustainable competitive advantage: A structured methodology for identifying core competence. *IEEE Transactions on Engineering Management*, 49(1), 28-35. <http://dx.doi.org/10.1109/17.985745>
39. Hagel III, J. & Brown, J.S. (2005). Productive Friction: How difficult business partnership can accelerate innovation, *Harvard Business Review*, (February 2005).
40. Handfield, R. B., Ragatz, G. L., Peterson, K., & Monczka, R. M. (1999). Involving suppliers in new product development? *California management review*, 42, 59-82. <http://dx.doi.org/10.2307/41166019>
41. Harrison, N. & Samson, D. (2002). *Technology management: Text and international cases*. McGraw-Hill.

42. Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. London: Blackwell.
43. Helfat, C. E., & Peteraf, M. (2003). The Dynamic Resource-Based View: Capability Lifecycles, *Strategic Management Journal*, 24, 997–1010. <http://dx.doi.org/10.1002/smj.332>
44. Henderson, R. & Cockburn, I. (2000). Measuring Competence? Exploring Firm Effects in Drug Discovery. In G. Dosi, R. R. Nelson and S. G. Winter (eds.), *The Nature and Dynamics of Organizational Capabilities*, Oxford: Oxford University Press, 155–182. PMID:10646125
45. Hitt, M., Keats, B., & Demarie, S. (1998). Navigating in the New Competitive Landscape Building Strategic Flexibility and Competitive Advantage in the 21st Century, *Academy of Management Executive*, 12(4), 22-44.
46. Huang, Yen-Tsung & Chu, Wenyi. (2010). Enhancement of product development capabilities of OEM suppliers: inter- and intra-organisational learning. *Journal of Business and Industrial Marketing*, 25(2), 147-158. <http://dx.doi.org/10.1108/08858621011017769>
47. Javalgi, G., Dixit, A. & Scherer R. (2009). Outsourcing to Emerging Markets: Theoretical Perspectives and Policy Implications. *Journal of International Management*, 15, 156-168.
48. Jensen, P. D. Ø., & Pedersen, T. (2011). The economic geography of offshoring: the fit between activities and local context. *Journal of Management Studies*, 48(2), 352-372.
49. Jiang, B., Belohlav, J. A., & Young, S. T. (2007). Outsourcing impact on manufacturing firms' value: Evidence from Japan. *Journal of Operations Management*, 25, 885–900.
50. Jones, R. W. (2008). Production fragmentation and outsourcing: General concerns. *The Singapore Economic Review*, 53(03), 347-356.



51. Kotabe, M., Mol, M. J., Murray, J. Y., & Parente, R. (2012). Outsourcing and its implications for market success: negative curvilinearity, firm resources, and competition. *Journal of the Academy of Marketing Science*, 40(2), 329-346.<http://dx.doi.org/10.1007/s11747-011-0276-z>
52. Kotabe, M., Mol, M.J., & Ketkar, S. (2008). An evolutionary stage model of outsourcing and competence destruction: a triad comparison of the consumer electronics industry. *Management International Review*, 48(1),65-93.<http://dx.doi.org/10.1007/s11575-008-0004-1>
53. Klein, J.A. & Hiscocks, P.G. (1994). Competence-based competition: A practical toolkit. In: Hamel, G. & Heene, A. (1994). *Competence-based Competition*. John Wiley & Sons: New York, 183-212.
54. Krijnen, H.G. (1979). The flexible firm. *Long Range Planning*, 12: 63-75.  
[http://dx.doi.org/10.1016/0024-6301\(79\)90074-8](http://dx.doi.org/10.1016/0024-6301(79)90074-8)
55. Lancellotti, R., Schein, O. Stefan, S. & Stadler. V. (2003). ICT and Operations Outsourcing in Banking-Insights from an Interview-Based pan-European Survey. *Wirts chafts informatik*, 45(2), 131-141. <http://dx.doi.org/10.1007/BF03250890>
56. Lewin, A.Y., Massini, S. & Peeters, C. (2009). Why are companies offshoring innovation? The emerging global race for talent. *Journal of International Business Studies*, 40: 901–925.  
<http://dx.doi.org/10.1057/jibs.2009.64>
57. Liesch, P.W., Buckley, P.J., Simonin, B.L.,& Knight, G. (2012).Organizing the Modern Firm in the Worldwide Market for Market Transactions. *Management International Review*, 52:3-21. <http://dx.doi.org/10.1007/s11575-011-0096-x>

58. Littler, D., Leverick, F., & Bruce, M. (1995). Factors affecting the process of collaborative product development: a study of UK manufacturers of information and communications technology products. *Journal of Product Innovation Management*, 12(1), 16-32.
59. Makadok, R. (2001). Toward a Synthesis of the Resource-Based and Dynamic-Capability Views of Rent Creation. *Strategic Management Journal*, 24: 387–401.
60. Manning, S., Massini, S. & Lewin, A.Y. (2008). A dynamic perspective on next-generation Offshoring: the global sourcing of science and engineering skills. *Academy of Management Perspectives*, 22(3), 35–54. <http://dx.doi.org/10.5465/AMP.2008.34587994>
61. Manring, S. & Moore, S. (2006). Creating and managing a virtual inter-organizational learning network for greener production: a conceptual model and case study. *Journal of Cleaner Production*, 14: 891–899. <http://dx.doi.org/10.1016/j.jclepro.2005.11.033>
62. Massini, S., Perm-Ajchariyawong N, & Lewin AY. (2010). Role of corporate wide offshoring strategy in directing attention to offshoring drivers, risks and performance. *Industry and Innovation*, 17, 337-371. <http://dx.doi.org/10.1080/13662716.2010.496242>
63. McDermott, C. M., & O'Connor, G. C. (2002). Managing Radical Innovation: An Overview of Emergent Strategy Issues, *The Journal of Product Innovation Management*, 19, 424-438.
64. McNally, R.C. & Griffin, A. (2004). Firm and Individual Choice Drivers in Make-or-Buy Decisions: A Diminishing Role for Transaction Cost Economics? *Journal of Supply Chain Management*, 40(1), 4-17. <http://dx.doi.org/10.1111/j.1745-493X.2004.tb00252.x>
65. Miles, M. B., & Huberman, A. M. (1984). Drawing valid meaning from qualitative data: Toward a shared craft. *Educational researcher*, 13(5), 20-30.

66. Mohiuddin, M., & Su, Z. (2013). Offshore outsourcing of core and non-core activities and integrated firm-level performance: An empirical analysis on Quebec manufacturing SMEs. *Journal of “M@n@gement.”* [http://www.management-aims.com/about\\_en.html](http://www.management-aims.com/about_en.html)
67. Mohiuddin, M., Su, Z., & Su, A. (2010). Towards Sustainable Offshore Outsourcing: A case study of Quebec manufacturing Firms Outsourcing to China, *The Journal of CENTRUM cathedra*, 3(1): 84-95. <http://dx.doi.org/10.7835/jcc-berj-2010-0040>
68. Mowery, J., Oxley, E., & Silverman, B.S. (1996). Strategic Alliances and Inter-firm Knowledge Transfer. *Strategic Management Journal*, 17(winter special issue): 77-93.
69. Naghavi, A. & Ottaviano, G. (2009). Offshoring and product innovation, *Economic Theory*, 38(3): 517-532. <http://dx.doi.org/10.1007/s00199-007-0322-8>
70. Neely, A. & Hill, J. (1998). Innovation and Business performance: A literature review. Cambridge: Judge Institute of Management Studies, UK.  
<http://dx.doi.org/10.1504/IJBPM.1998.004544>
71. Nooteboom, B. (1999). Innovation, learning and industrial organization. *Cambridge Journal of Economics*, 23(2), 127–150. <http://dx.doi.org/10.1093/cje/23.2.127>
72. Ouyang, H.S. (2008). Resources, absorptive capacity, and technology sourcing. *International Journal of technology Management*, 41(1), 183-202.
73. Pedersen, T. (2006). Managing global offshoring strategies: A case approach. Copenhagen Business School Press DK.
74. Peeters, C. (2007). Expertise. Solvay Business School, Brussels, Belgium.

75. Petersen, K.J., Handfield, R.B., & Ragatz, G.L. (2005). Supplier integration into new product development: Coordinating product, process and supply chain design. *Journal of Operations Management*, 23: 371-388. <http://dx.doi.org/10.1016/j.jom.2004.07.009>
76. Porter, M.E. (1990). *The Competitive Advantage of Nations*, Free Press, New York
77. Prahalad, C. K. & Hamel, G. (1990). The Core Competence of The Corporation, MA: *Harvard Business Review*, May-June. PMID: 2130941
78. Quelin, B. & Duhamel, F. (2003). Bringing Together Strategic Outsourcing and Corporate Strategy: Outsourcing Motives and Risks. *European Management Journal*, 21(5): 647-661
79. Quinn, J.B. 1999. Strategic Outsourcing: Leveraging Knowledge Capabilities. *Sloan Management Review*, 40(4): 8-21.
80. Rashid, M. M., & Al-Azad, M. S. (2013). Relocating Low-to-Medium Tech Manufacturing Activities to Developing Countries: Empirical Analysis of Taiwanese and South Korean Manufacturing Outsourcing to Bangladesh. *Transnational Corporations Review*, 5(2), 16-29. <http://dx.doi.org/10.5148/tncr.2013.5202>
81. Roghé, F., Toma, A., Kilmann, J., Dicke, R. & Strack, R. (2012). Organization of the future- Designed to win: Organizational capabilities Matter. *Boston consulting Group (BCG)*.
82. Salvador, F., Forza, C., & Rungtusanatham, M. (2002). Modularity, product variety, production volume, and component sourcing: theorizing beyond generic prescriptions. *Journal of Operations Management*, 20(5), 549-575.
83. Sapienza, H. J., Autio, E., George, G., & Zahra, S. A. (2006). A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review*, 31(4), 914-933. <http://dx.doi.org/10.5465/AMR.2006.22527465>

84. Sayer A. (1989). Post-Fordism in question. *International Journal of Urban Region*, 13, 666-95. <http://dx.doi.org/10.1111/j.1468-2427.1989.tb00141.x>
85. Schilling, M. A., & Phelps, C. C. (2007). Inter-firm collaboration networks: The impact of large-scale network structure on firm innovation. *Management Science*, 53, 1113–1126.
86. Schoonhoven, C.B., Eisenhardt, K.M., & Lyman, K. (1990). Speeding Products to Market: Waiting Time to First Product Introduction in New Firms. *Administrative Science Quarterly*, 35(1), 177-207. <http://dx.doi.org/10.2307/2393555>
87. Scully, J.I., & Fawcett, S.E. (1994). International procurement strategies: challenges and opportunities for small firm. *Production & Inventory Management Journal*, 35(2), 39-46.
88. Sinha, P., Akoorie, M.E.M, Ding, Q. & Wu. Q. (2011). What motivates manufacturing SMEs to outsource offshore in China? Comparing the perspectives of SME manufacturers and their suppliers. *Strategic Outsourcing. An International Journal*, 4(1), 67-88.
89. Stalk G., Evans, P. & Shulman, L.E. (1992). Competing on capabilities: The new rules of corporate strategy. *Harvard Business Review*. March/April 57-69. PMID:10117369
90. Suarez, F., Cusumano, M., & Fine, C. (1995). An empirical study of flexibility in manufacturing. *Sloan Management Review* (Fall): 25-32.
91. Swink, M.L., & Mabert, V.A. (2000). Product development partnerships: Balancing the needs of OEMs and suppliers. *Business Horizons*, 43(3), 59-68.
92. Tampoe, M. (1994). Exploiting the core competences of your organization. *Long Range Planning*, 27, 66–77. [http://dx.doi.org/10.1016/0024-6301\(94\)90057-4](http://dx.doi.org/10.1016/0024-6301(94)90057-4)
93. Teece, D.J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (7), 509-533.

94. Treffler, D. (2008). *Policy Responses to the New Offshoring: Think Globally, Invest Locally*. Ottawa: *Industry Canada Working Paper Series*, 2008-11-25.
95. Ulrich, D. (1987). Organizational capability as a competitive advantage: Human resource professionals as strategic partners. *Human Resource Planning*, 10(4), 169-84.
96. Upton, D.M. (1994). The management of manufacturing flexibility, *California Management Review*, 72- 89. <http://dx.doi.org/10.2307/41165745>
97. Vaccaro, I. G., Jansen, J. J., Van Den Bosch, F. A., & Volberda, H. W. (2012). Management innovation and leadership: The moderating role of organizational size. *Journal of Management Studies*, 49(1), 28-51. <http://dx.doi.org/10.1111/j.1467-6486.2010.00976.x>
98. Veilleux, S., Haskell, N. & Pons, F. (2012). Going global: how smaller enterprises benefit from strategic alliances, *Journal of Business Strategy*, 33(5), 22 – 31.
99. Vivek, S. D., Banwet, D. K, & Shankar, R. (2008). Analysis of interactions among core, transaction and relationship specific investments: The case of offshoring. *Journal of Operations Management*, 26(2), 180-197. <http://dx.doi.org/10.1016/j.jom.2007.02.010>
100. Von Hippel, E. (1988). *The Sources of Innovation*, Oxford University Press.
101. Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International journal of operations & production management*, 22(2), 195-219.
102. Walsh S.T., & Linton, J.D. (2001). The competence pyramid: A framework for identifying and analyzing firm and industry competence. *Technology Analysis & Strategic Management* 13(2), 165-177. <http://dx.doi.org/10.1080/09537320124246>

103. Wagner, S., & Busse, C. (2008). Managing Innovation at Logistics Service Providers-An Introduction. In *Managing Innovation-The New Competitive Edge for Logistics Service Providers*, (ed.) S. Wagner, and C. Busse, 1-12. Berne: Haupt.
104. Wang, Y., Lo, H., & Yang, Y. (2004). The constituents of core competencies and firm performance: evidence from high-technology firms in China. *Journal of Engineering and Technology Management*, 21(4), 249-280.
105. Whitley, R. (2003). The institutional structuring of organizational capabilities: the role of authority sharing and organizational careers. *Organization Studies*, 24(5), 667-695.
106. Winter, S.G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24, 991-995. <http://dx.doi.org/10.1002/smj.318>
107. Winterschild, B. C. (1994). Building capability from within—the insider's view of core competencies. *Competence-based competition* (Eds. G. Hamel and A. Heene., Chichester, London: John Wiley.
108. Yin, R. (1993). Applications of case study research, Beverly Hills, CA, Sage.





## **Chapter 6: GENERAL CONCLUSION**

### **6.1.SUMMARY OF THE CONTRIBUTIONS**

In this study, I sought to understand how offshore outsourcing of manufacturing SMEs contributes to their competitiveness and how this strategy enables manufacturing SMEs to develop their dynamic capabilities through rebuilding, recombining, and reconfiguring the inter-firm resources for SCA. Globalization and openness of markets for both production factors and product markets have dramatically changed the manufacturing landscape in the last three decades. Emergence of the manufacturing global value chain (GVC) has enabled firms to disperse their activities to suppliers from across the planet wherever they find their required competences competitively. Technological development and increasing availability of expertise and markets in many parts of the world have further accelerated this trend. Manufacturing firms no longer depend on their home markets either for a market for their products or for inputs. Increasing inputs from international markets are being integrated into the manufacturing production systems in Canada. The data from OECD and Industry Canada showed that more than 20% of Canadian exports come from foreign inputs and for some sectors, the level of foreign inputs reached close to 40%. Thus, we concluded that the manufacturing sector is highly interconnected with international suppliers, and managers and policy makers alike need to take into consideration this new context of an international manufacturing network and interdependencies.

There are several ways in which manufacturing firms can establish their interconnection with international partners for both inputs and markets for their goods. One of the most used business strategies for manufacturing firms is offshore outsourcing. In this study, we found that offshore outsourcing as a business strategy in manufacturing has gone through three stages of evolution. First, manufacturing firms started their offshoring for a low-cost production base following increased competition in international product markets. The competitiveness of manufacturing firms depends not only on the product's market but also on how it is made. In consequence, firms used to send their standardized production activities to foreign suppliers, principally for low-cost production factors. This can be classified as exploitative offshore outsourcing. Firms offshored their own technology and designs and they use only the low-cost manpower and/or slightly processed raw materials from offshoring suppliers. Our study showed that this kind of offshore

outsourcing enabled firms to save their scarce resources and re-allocate them to their core activities such as R&D, in designing, in conception, as well as in customer care through enhanced logistics and marketing services. These results corroborate the smiling curve concept of manufacturing (Mudambi, 2007, 2008; Dedrick, Kraemer, & Tsai, 1999).

Following the first stage of offshore outsourcing, firms started offshoring not only for a low-cost production base but also for access to resources, competencies, and knowledge from supplier firms that they were missing in the home country. Our study showed that some companies entered into the offshore outsourcing strategy in order to have access to missing knowledge and technologies, and the offshoring enabled them to retain and improve their competitiveness. The findings showed that outsourcing of non-core activities and insourcing of core activities have a positive impact on a firm's integrated performance. Offshore outsourcing enhanced the economic, social, and strategic performances of manufacturing SMEs to thrive in the volatile market. The first stage of offshoring and to a certain extent, the second stage of offshoring, are mainly for the cost-effective reasons that can be categorized as the efficiency seeking strategy of offshore outsourcing. This kind of offshore outsourcing is somewhat static and cannot remain a factor for competitiveness for firms for long. While the first two levels of outsourcing look for mainly a cost-effective way of manufacturing, the third stage of offshoring introduced dynamicity into offshore outsourcing activities. Cost-effective business strategy was in response to market competition, short-term strategy in general, and was not suited for dealing with the often volatile business environment. Manufacturing SMEs need to continuously renew their competencies and capabilities in order to survive and sustain their competitiveness in the marketplace. Increasing servitization of manufacturing activities has further accelerated this process. The renewing process of competencies and capabilities could not be undertaken based on their own limited resources. The SMEs of our sample showed that they could enhance their competitiveness and their dynamic capabilities in collaboration with their offshoring suppliers. The study shows also the prominent role of the "*Strategic manager*" in detecting opportunities and challenges in the marketplace and then recombining and reconfiguring inter-firm resources in order to develop organizational dynamic capabilities to respond to the rapidly changing market environment. It was found that the decision-making process of the top management is the dynamic capability with the highest impact on firm-level performance. Managerial policies in allocating resources in core activities and

offshoring non-core activities and allying with the suppliers in core and essential activities contributed to enhancing dynamic capabilities and the strength of the manufacturing SMEs in the marketplace. Thus, the offshore outsourcing strategy of manufacturing SMEs has transformed from being “*Make-or-buy*” to “*Make-or-buy-and-ally*” strategy. From an arm’s-length strategy of outsourcing, my study shows that manufacturing SMEs are responding to multilevel competition in terms of price, quality, customization, differentiation, and just-in-time through allying with their supplier firms. This partnership allowed firms to re-allocate their scarce financial, human, and time resources toward sensing, seizing, and shaping the activities of their respective firms. They have developed collaboration in order to improve their product manufacturability by exchanging and sharing information, ideas, and learning-by-doing together, and have created inter-firm specific idiosyncratic resources to compete in the marketplace. The partnership further helped manufacturing SMEs to reduce their product development cycle time and incremental innovations and expanded their horizon in international markets. Though we found relatively few firms that could develop their product markets in those places from where they insourced intermediate products and components, the trend is growing and more and more firms look for new markets near their offshoring suppliers. Offshore outsourcing has also contributed to production volume flexibility, production mix flexibility, and partnering flexibility and improved the capability to follow the rapidly changing market trends. In short, I have found that offshore outsourcing enabled manufacturing SMEs to dynamicize their existing capabilities as well as develop new capabilities and jointly enabled them to renew their resources for higher configurability of their production process and improved flexibility of their firms.

Thus, this thesis responds to our two principal questions on how offshore outsourcing contributes to the competitive advantages of outsourcing SMEs and how this competitiveness can be sustainable by developing dynamic capabilities that help to recombine, reconfigure, and rebuild inter-firm resources for mutual benefit. This research accomplishes an integration of both efficient and growth strategy into a complete and holistic perspective of offshore outsourcing. This research also demonstrated that developing dynamic capabilities through partnership with offshore outsourcing supplier firms is an evolutionary strategy. The more experience a manufacturing firm has of outsourcing, the more it outsources higher-level activities and collaborates more on complex and higher-tech activities and develops superior type of dynamic capabilities. Another ongoing

debate is whether dynamic capabilities are developed in anticipation of future changes in the marketplace and then deployed or dynamic capabilities are developed in parallel as environmental dynamism unfolds. My research found that manufacturing SMEs firm adopt offshore outsourcing and in consequence develop their dynamic capabilities in reaction to the competition and challenges faced in the marketplace, rather than anticipating those changes and pre-empting for the future. My finding corroborates findings of Danneels (2010) and Helfat (1997) that dynamic capabilities develop substantially when firms encounter changes in the business environment. My findings, at the same time, differ from the findings of Teece, et al. (1997, p. 516) and Eisenhardt and Martin (2000, p. 1107) who said that dynamic capabilities “address rapidly changing environments” and permit firms to match... market change” respectively. Promising research into the origins of dynamic capabilities has found that dynamic capabilities may at first be latent, requiring strong development from managers who identify and subsequently develop them (Pablo, et al., 2007). Our findings show also that each firm develops its dynamic capabilities in a unique way and focuses on different activities based on its prior capabilities and current needs. This uniqueness contributes to the development of idiosyncratic resources of each firm that embody the valuable, rare, inimitable, and non-substitutable (VRIN) perspectives. This finding reinforces the findings that dynamic capabilities are developed in non-linear ways (Shamsie, Martin, & Miller, 2009). Our study found that the levels of developing dynamic capabilities depend on the density and quality of ties with the supplier firms rather than the size of the firm. The fundamental contribution of this study is to shed light on developing capabilities and competences in the offshore outsourcing context that lead toward SCA, which is different from our existing commodity paradigms. My study shows how manufacturing SMEs develop their dynamic capabilities and what the components that build the individual capabilities in the offshore outsourcing context are.

This study has also contributed to empirical findings on the DCV, which is still overwhelmingly dominated by conceptual research. My research contributed to theory development by showing that offshore outsourcing enables firms to re-allocate resources to core activities and strategic offshoring contributes to developing dynamic capabilities, and together these capabilities enable focal firms to “resources orchestration” by recombining and reconfiguring their inter-firm resources. Focusing on core activities leads to a firm’s specialization, and innovation capabilities

along with enhanced flexibility lead firms toward higher capability that enables them to adjust to market changes and create continuous competitiveness in the marketplace. My study has also contributed to methodological innovation in studying dynamic capabilities. Previous research is dominated by conceptual works and some critics even said dynamic capabilities cannot be observed or measured and most studies do not show much detail of dynamic capabilities (Pavlou & El Sawy, 2011). In my work, I demonstrated that offshoring SMEs collaborate in several ways with their suppliers in order to develop new capabilities together, and those capabilities impact their firms' manufacturing process and performance.

Offshore outsourcing is currently one of the most important business strategies for manufacturing firms. The topic is highly debated but gets comparatively less attention from academic researchers. The previous research was mostly focused on short-term cost advantage benefits and overlooked the aspect of partnership with offshoring supplier firms and developing long-term viable strategic alliances. Research on the capability development process through offshore outsourcing is practically non-existent, to my knowledge. My study fills this gap by exploring how offshore outsourcing can enable manufacturing SMEs to develop their organizational dynamic capabilities.

Developing distinctive organizational capability for SCA is practically rare for offshoring manufacturing SMEs. My study contributes both to theory building as well as to the professional managers' understanding. The current research project demonstrated how offshore outsourcing allowed the offshoring firms to develop their organizational capability and become sustainably competitive in the marketplace. The DCV is still in its embryonic stage and few empirical researches were done employing this theory (Eriksson, 2012). The current research project thus is an addition to the theory development process of the DCV. Application of the DCV to manufacturing offshoring SMEs is a fundamental contribution to this field of knowledge.

## **6.2. IMPLICATIONS FOR MANAGERS AND POLICY MAKERS**

The fast changing business ecosystem requires firms to have the organizational capability to build, integrate, and reconfigure internal as well as external resources rapidly in order to match market

changes. The current research project demonstrated how offshore outsourcing enables firms to develop their organizational capabilities in collaboration with offshoring supplier firms. Thus, managers will find this work interesting and be able to build, integrate, and reconfigure their internal as well as external resources for distinctive organizational capabilities so that they can achieve SCAs. My research has implications for both managers and policy makers. First of all, managers need to understand the changes taking place in their business environment in the short, mid-, and long term and they should configure their resources accordingly. This research showed that offshore outsourcing allows manufacturing SMEs to divest from non-core activities and invest more in higher value adding activities, such as R&D and capital machineries, and develop overall competitiveness. This is one of the most effective ways that low- to mid-tech manufacturing firms can survive and sustain in the increasingly competitive local and export markets. This study shows that manufacturing SMEs can develop their dynamic capabilities in collaboration with their suppliers with relatively less or no monetary investment. However, they need to know whom they will partner with, how they will advance their collaboration with the suppliers, and how they will integrate external knowledge and capabilities into their own production system. Managers should, however, know what kind of dynamic capabilities they need to develop and they should look for suppliers who have the adequate expertise that the focal firm is looking for. For example, depending on the level of technological complexity, different firms need different levels of dynamic capabilities. Firms with very innovative product and process but lacking production infrastructure may need suppliers who can make those products and processes for that firm. Firms in mature or declining market opportunities need to innovate their production process and need to develop dynamic capabilities that can be useful in innovating new processes and products.

### **6.3.LIMITATIONS AND FUTURE RESEARCH**

Research in offshore outsourcing and developing dynamic capabilities for SCA is still in the primary stage and influenced principally by theories brought from economic science, sociology, and other disciplines. However, the economic theories function better in equilibrium market conditions and are not suited to integrate the dynamicity of the continuous changes in the marketplace. That prompted us to adopt a strategic management approach in studying offshore outsourcing and developing dynamic capabilities. This study investigates the link between the

dynamic capabilities and firm performance in terms of SCA. However, the strategic management field is still in the primary stage of its development. Research on offshore outsourcing and developing dynamic capabilities for SCA needs the examination of the processes of creation and evolution over time, which points to the need for more longitudinal studies. The current study explored how the dynamic capabilities are developed in an offshore outsourcing framework. However, it has overlooked the degree of dynamic capabilities, and future studies can address this question by investigating different contexts and their contribution to dynamic capabilities development and firm level performance for both the outsourcing focal and supplier firms. SCA can be created by means other than collaborative offshore outsourcing; therefore, it cannot be concluded that offshore outsourcing and enhanced dynamic capabilities are the only means to SCA. Future studies need to address comparative studies between those firms that are involved in offshore outsourcing and those that are not and test the difference in their SCA. We have principally adopted (except Article 3) an inductive exploratory study to establish how to develop dynamic capabilities through offshore outsourcing that leads toward SCA. This study could be complemented by the deductive testing research (survey) method in future researches, with firm size, technological intensity, and industry sector as control variables. Consequently, the inductive theory building approach that I have adopted does not lead to statistical generalization. Instead, the findings of my research have theoretical generalization (Yin, 2009). My research was undertaken with manufacturing SMEs mostly from the low- to low- to mid-tech industry from Quebec province and the findings may not be generalizable to other contexts for other types of companies, such as high-tech born global (HTBG) firms, given that capabilities are often context-specific (Laamanen & Wallin, 2009; Ethiraj, et al., 2005). Thus, the theories I propose may be limited to dynamic capabilities development of manufacturing SMEs from low- to low- to mid-tech firms. Future researches may investigate a broader range of companies and industries.

This study shows the advantages obtained from offshore outsourcing, and to sustain this advantage my study suggests that manufacturing SMEs could develop their dynamic capabilities for SCAs. The dynamic capabilities discussed in my study are focus on core competency, developing innovation capabilities, and developing new product and market and manufacturing flexibility. Future research can address each of these capabilities' development process with generalizable in-depth study and in what context this development process is fast or slow or any other outcomes.

Future research should address what firms require for achieving higher returns on top of technical fit of dynamic capability.

## **6.4. REFLEXIVITY IN THE THESIS**

The role of the researcher in qualitative research is very important in order to keep the neutrality of the researcher vis-à-vis the research topic. Strauss and Corbin (2004) argue that the researcher is an instrument for analysis in qualitative research, because there is an interaction between the researcher and the research phenomenon. Maxwell supports that it is almost impossible to eliminate the influence of the researcher. The objective of qualitative research is not to eliminate this influence but to understand it and use it in a productive way. In order to avoid bias, Strauss and Corbin (2004) note the importance of maintaining a trade-off between objectivity and sensibility. Maxwell (1996) argued that “[...] validity in qualitative research is not the result of indifference, but of integrity” (p. 91).

One of the most important ways qualitative study differs from its peer quantitative research is that the former allows us to practice reflexivity in order to understand the ontological paradigm of the *subject under research and the research process itself* and the researcher’s own perspectives that lead to the objectivity of research findings. Reflexivity is the reflection of the researcher and an examination of the filters and lenses through which the researcher sees the world (Mansfield, 2006). Reflexivity refers to active acknowledgment by the researcher that her/his own actions and decisions will inevitably impact the meaning and context of the experience under investigation (Horsburgh, 2003). Since the researcher is the primary “instrument” of data collection and analysis, reflexivity is deemed essential (Watt, 2007; Russel & Kelly, 2002; Ortlipp, 2008). Charmaz (2002) would suggest that our knowledge and understanding of our research is aided by the process of reflexivity. It allows the researcher to scrutinize research decisions, his/her bias, and as a result how he has affected the research process and inquiry and ultimately research findings. Reflexivity connects ideas with reality. The current study was conducted with an inductive process in the social science framework that differs from the Newtonian physics perspectives that sought to establish universally and timelessly valid laws governing reality. Social phenomena have thinking participants and have multiple changing realities and truths. Social science accepts the



duality of reality as subjective and objective. The subjective aspects cover the participants' thinking and the objective aspects denote all the observable facts (Soros, 2013). My research took into consideration both the subjective and objective aspects of dynamic capabilities development of SME manufacturing firms with the collaboration of their suppliers.

I would also like to mention my relationship to the offshore outsourcing world. I had around 5 years of experience of working with a UK based manufacturing company that offshore outsourced to a few emerging countries, and I had experience of working in close contact with the supplier firms. That is to say, I had clear understanding of the outsourcing deals from both the outsourcing originator and suppliers' perspectives and the way they create value for their respective firms. My understanding was further improved through my reading of seminal works in this field, such as *Global outsourcing and Offshoring: An Integrated Approach to Theory and Corporate Strategy*, edited by Farok J. Contractor, Vikas Kumar, Sumit K. Kundu, and Torben Pedersen, and *The Oxford Handbook of Offshoring and Global Employment*, edited by Ashok Bardhan, Dwight M. Jaffee, and Cynthia A. Kroll, and many others. I have also participated regularly in thematic seminars and conferences organized by supply chain associations, and my interactions with professionals in this sector gave me an overall understanding of the opportunities and challenges of offshore outsourcing of manufacturing SMEs. All these informal and formal interactions built my mental paradigm on offshore outsourcing and helped me with further in-depth understanding during the current research processes of my PhD thesis. I was also interested in bringing a strategic management perspective to offshore outsourcing, and that led me to work on how to develop dynamic capabilities of manufacturing SMEs with the close collaboration of supplier firms. The dynamic capabilities are to renew resource and competence bases and to reconfigure the resources in a new way that leads toward SCA.

There was no direct funding for this thesis research project. However, I have obtained various funding/scholarships from SSHRC, FQRSC, CIRRELT, Dean's Awards, Faculty of Administrative Sciences, Laval University, and Stephen A. Jarislowsky Chair on International Business; none of this funding had any influence on the content or research process of my thesis.

## 6.5. REFERENCES

1. Bardhan, A., Jaffee, D. M., & Kroll, C. A. (Eds.). (2013). *The Oxford Handbook of Offshoring and Global Employment*. Oxford University Press.
2. Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36(1), 256-280.
3. Danneels, E. (2011). Trying to become a different type of company: dynamic capability at Smith Corona. *Strategic Management Journal*, 32(1), 1-31.
4. Dedrick, J., Kraemer, K.L. & Tsai, T. (1999). Acer: An I.T. Company Learning to Use Information Technology to Compete', I.T. in Business, Center for Research on Information Technology and Organizations, University of California, Irvine. USA.
5. Charmaz, K. (2002). Grounded theory analysis. In J. F. Gubrium & J. A. Holstein (Eds.), *Handbook of interview research* (pp. 675–694). Thousand Oaks, CA: Sage.
6. Contractor, F. J., Kumar, V., Kundu, S. K., & Pedersen, T. (Eds.). (2010). *Global outsourcing and offshoring: an integrated approach to theory and corporate strategy*. Cambridge University Press.
7. Ethiraj, S. K., Kale, P., Krishnan, M. S., & Singh, J. V. (2005). Where do capabilities come from and how do they matter? A study in the software services industry. *Strategic Management Journal*, 26(1), 25-45.
8. Helfat, C. E. (1997). Know-how and asset complementarity and dynamic capability accumulation: The case of R&D. *Strategic Management Journal*, 18(5), 339-360.
9. Horsburgh, D. (2003). Evaluation of qualitative research. *Journal of Clinical Nursing*, 12(2), 307-312.
10. Laamanen, T., & Wallin, J. (2009). Cognitive dynamics of capability development paths. *Journal of Management Studies*, 46(6), 950-981.
11. Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The Qualitative Report*, 13(4), 695-705.
12. Mansfield, S. (2006). *Keeping a critically reflexive research journal*, University of Dundee, UK.
13. Mudambi, R. (2008). Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography*, 8(5): 699 -725,

14. Mudambi, R. (2007). Offshoring: economic geography and the multinational firm. *Journal of International Business Studies*, 38: 206-10.
15. Pablo, A. L., Reay, T., Dewald, J. R., & Casebeer, A. L. (2007). Identifying, enabling and managing dynamic capabilities in the public sector. *Journal of Management Studies*, 44(5), 687-708.
16. Pavlou, P. A., & El Sawy, O. A. (2011). Understanding the elusive black box of dynamic capabilities. *Decision Sciences*, 42(1), 239-273.
17. Russell, G. M., & Kelly, N. H. (2002, September). Research as Interacting Dialogic Processes: Implications for Reflexivity. In Forum: *Qualitative Social Research*, 3(3).
18. Shamsie, J., Martin, X., & Miller, D. (2009). In with the old, in with the new: Capabilities, strategies, and performance among the Hollywood studios. *Strategic Management Journal*, 30(13), 1440-1452.
19. Soros, G. (2013). Fallibility, reflexivity, and the human uncertainty principle, *Journal of Economic Methodology*, 20 (4), 309-329.
20. Strauss, A., & Corbin, J. (2004). *Les Fondements de la Recherche Qualitative*. Éditions Saint-Paul.
21. Teece, D.J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (7), 509-533.  
[http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](http://dx.doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
22. Eisenhardt, K. M. & Martin, J.A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21 (10-11), 1105-1121.  
[http://dx.doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](http://dx.doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
23. Watt, D. (2007). On Becoming a Qualitative Researcher: The Value of Reflexivity. *Qualitative Report*, 12(1), 82-101.
24. Yin, R. K. (2009). *Case Study Research: Design and Methods*. 4th Edition. Sage Publications, California.



## **ANNEX 01: INTERVIEW GUIDE (Article 2)**

### **Interview Guide on Offshore outsourcing of Canadian manufacturing SMEs**

1. What kind of manufacturing activities your firm is engaged in? Please indicate the unit of your company for which you are responding (e.g., corporate, division, SBU (strategic Business unit), region).
2. How widely used is offshore outsourcing?
3. How deeply has offshore outsourcing penetrated company value chains?
4. What is being offshore outsourced and why?
5. What revenue growth is expected thanks to offshore outsourcing?
6. If you do have offshored to multiple regions/ countries, Is there any regional difference of type of activities off-shored? Offshore outsourcing benefits as well as strategies?
7. Please indicate your current and expected future level (%) of outsourcing for the following activities. (Research & Development, Product and service development, Procurement/Supply management, Engineering/detailed design, Manufacturing/operations).
8. For those activities that you are currently offshoring or will offshore, what are the primary reasons that you chose to outsource?
9. For those activities that you are not outsourcing, and do not plan to outsource, what are the primary reasons you have chosen not to outsource?
10. Where you have chosen to offshore outsourcing of some activities, to what extent have you met your goals on these performance dimensions? If the performance dimension was not a goal, please indicate the reasons for outsourcing?
11. How do you qualify the effect of offshore outsourcing on your company's performance trend over the last three years in terms of Total revenue, Market share, customer satisfaction, Manufacturing efficiency, time to market, innovation and investment on core competency/ies?
12. Do offshoring strategies achieve their stated objectives of improving performance, productivity, market share and quality and overall competitiveness of your firm?
13. What range of cost savings have you realized from your outsourcing efforts? Range: (Too early to tell, none, 1 – 5 %, 6 – 10 %, 11 – 15 %, 16 – 20 %, 21 – 25 % 26 – 30 %, Over 30 %).

14. For those activities that you have outsourced, please indicate the activity where you have had the overall best results and the overall worst results?
15. How important is the cultural issues when doing offshore outsourcing in a foreign country?
16. Can you please comment on protecting jobs here in Quebec/Canada and overall survival of your firm?

## ANNEX 02: INTERVIEW GUIDE (Article 4)

### Objectifs du projet

#### Trois objectifs principaux:

- Clarifier la situation actuelle de la sous-traitance internationale (STI) et comprendre comment les PME planifient et gèrent leurs processus de la sous-traitance internationale.
- Étudier la sous-traitance internationale (STI) comme une stratégie de croissance des PME qui pratiquent cette stratégie d'affaire. Vérifier si la stratégie de sous-traitance internationale (STI) pourrait être utilisée comme une stratégie de croissance (Amélioration de la capacité d'innovation, création de valeur ajoutée, développement de compétences clés, création d'emplois hautement qualifiés) en plus de la stratégie d'efficacité qui vise à diminuer le coût de production et augmenter la productivité.
- Plus spécifiquement, étudier la manière dont les PME manufacturières canadiennes peuvent développer leurs habiletés dynamiques organisationnelles par le biais de la STI. Cerner et comprendre la manière dont la STI aide les PME à se focaliser davantage sur leurs activités clés (et donc, plus de spécialisation), comprendre la manière dont la sous-traitance aide pour développer des habiletés d'innovation de produit, de processus et de développement de nouveau marché local ou étranger. Finalement, essayer de cerner la façon par laquelle la STI aide à augmenter la flexibilité des entreprises?

## Les questions semi-structurées pour entrevue

(Vous pouvez éclairer/élaborer des sujets que vous considérez importantes en dehors de nos questions)

### **Thème 1: L'état actuel de la sous-traitance internationale (STI).**

1. Dans quel genre d'activités de manufacture votre entreprise est-elle engagée?
2. Quel est l'état actuel de la sous-traitance internationale/ approvisionnement international au sein de votre entreprise? Que pensez-vous de ces activités: une augmentation, diminution ou stagnation dans les prochains 3 ans?
3. Comment vous choisissez un fournisseur étranger pour confier certains de vos activités à réaliser des transformations ou fabriquer des composants intermédiaires? Indiquez les pays où votre entreprise fait sa sous-traitance ou se procure des composants? Si vous avez délocalisé dans plusieurs pays, y-a-t-il une différence la stratégie de STI parmi ces pays?
4. Comment vous choisissez des activités à sous-traiter? Indiquez votre niveau actuel en termes de pourcentage l'activité que vous menez en collaboration avec vos fournisseurs étrangers. Quelle est la propension sous-traitée de votre activité générale?
5. Quelles sont les raisons principales pour lesquelles vous avez choisi de vous procurer les composants ou faire de la sous-traitance internationale?
6. Quelles sont des principaux dangers de la sous-traitance internationale? Comment peut-on éviter les défis qu'on rencontre pendant la sous-traitance internationale?
7. Comment pouvez-vous qualifier l'effet de la délocalisation sur la performance de votre entreprise au cours des trois dernières années en termes de chiffre d'affaires total, de ventes, part de marché, l'efficacité/ productivité de la production, l'innovation et l'investissement sur des compétences clés?



8. Quelle est la valeur des économies que vous avez-vous réalisée de vos activités de l'approvisionnement ou Sous-traitance internationale? (Trop tôt pour le dire, Aucun, 1 - 5 %, 6 - 10 % 11 - 15 %, 16 - 20 %, 21 - 25 %, 26-30 %, plus de 30%).

**Thème 2: la Sous-traitance internationale (STI) et la concentration accrue sur les activités clés**

9. Comment peut-on classier les activités clés, les activités proches de clés et les activités non-clés? Quelles sont des activités qui réalisent le plus de revenus pour votre entreprise?
10. Pensez-vous que la sous-traitance internationale a permis aux dirigeants/hauts gestionnaires de l'entreprise de se concentrer davantage sur les activités qui créent les valeurs les plus importantes de l'entreprise? Si oui, expliquez SVP quels sont des moyens adoptent-ils pour se concentrer sur les activités clés de l'entreprise?
11. Comment la sous-traitance aide l'entreprise sous-traitante à économiser les ressources et de les affecter en R&D, aux achats des équipements plus performants de hautes technologies, de recruter du personnel qualifié comme des techniciens et/ou des ingénieurs?
12. Suite à la sous-traitance internationale, pouvez-vous expliquer des changements qui ont eu lieu dans votre entreprise par rapport à la concentration sur les activités plus valorisantes comme les designs, conception, développement, marketing ou activités de productions?

**Thème 3: La sous-traitance internationale (STI) et développement d'habilité d'innovation  
(Produit & Processus)**

13. Comment évaluez-vous les connaissances, les technologies ou l'expertises spécialisées que vos fournisseurs détiennent? Quels sont des moyens que vous utilisez pour accéder aux ressources spécialisés de vos fournisseurs? Expliquez-nous quelles sortes de nouvelles connaissance, technologie ou expertises auxquels vous avez pu profiter grâce au partenariat de la STI?
14. Lorsque vous confier une partie de vos activités à vos fournisseurs, quelles sont des suggestions, commentaires, propositions d'amélioration ou des nouvelles idées que vous recevez de ces partenaires stratégiques?
15. Est-ce que vos fournisseurs vous proposent de temps en temps des modifications ou améliorations de vos designs ou activités/composants que vous leur confiez pour certaines transformations de processus de production? Par exemple: pour augmenter la manufacturabilité de ces composants ou amélioration de la qualité ou faciliter le fonctionnement ou autres?
16. Quels sont les échanges/communications que vous avez avec vos fournisseurs? Réunions face-à-face ou par vidéo-conférences, Visite de sites, Échanges des ingénieurs/techniciens, Accords contractuels pour le partage de la propriété intellectuelle ou autres?
17. Quels sont des moyens que votre organisation utilise pour mieux exploiter des informations et des connaissances, pour l'innovation de produits ou processus, venant des sources externes?

18. Comment expliquez-vous les échanges qui ont eu lieu entre votre entreprise et vos fournisseurs et quels sont des obstacles que vous avez rencontré de procurer davantage de l'innovation et des idées de vos partenaires externes?
19. D'après vous, Comment votre entreprise peut développer davantage un partenariat plus étroit avec vos fournisseurs?
20. Quels sont des stratégies que vous utilisez lors de choix des fournisseurs de différents types dans différents pays? Avec combien de partenaires externes votre organisation collabore pour l'innovation, l'approvisionnement et les idées?

**Thème 4: La STI et Développement de nouveaux produits (NPD) et de développement de nouveaux marchés (DNM)**

21. Quels sont des changements au niveau de la gestion qui ont eu lieu dans votre entreprise depuis que vous avez entamé la sous-traitance internationale? Expliquez-nous comment et à quels sont des points où vos fournisseurs interviennent dans le processus de développement de nouveaux produits ou nouveaux processus?
22. Collaborez-vous avec vos fournisseurs lors du développement de nouveaux produits? Si oui, expliquez SVP vos processus de collaboration? Par exemple, au niveau de prototypes, de tooling ou autres....?
23. Quels sont des échanges que vous pratiquez avec vos fournisseurs sur les activités suivantes. (Recherche et développement, Développement des produits et des services, l'ingénierie/conception détaillée).

24. Quelles sont les autres contributions que vos fournisseurs apportent lors du développement de nouveaux produits (DNP)? Expliquez?
25. Grâce à la sous-traitance internationale, est-ce que vous avez pu augmenter la part de marché, le volume d'exportation, le revenu annuel dans le/les marchés existant(s) ou dans les nouveaux marchés? Est-ce que vous avez des clients dans les pays ou dans des pays voisins d'où viennent vos fournisseurs?

### **Thème 5: Amélioration de la flexibilité organisationnelle et le rôle des fournisseurs**

26. Comment la sous-traitance internationale affecte la configuration des activités et d'allocation des ressources de votre entreprise?
27. Est-ce que la sous-traitance internationale aide votre entreprise à améliorer la configuration de vos processus de production? Les rend-elle plus flexibles? Réduit-elle le cycle de temps pour le développement (des produits ou des processus)? Expliquez?
28. Pouvez-vous SVP nous donner un scénario sur la manière dont la sous-traitance internationale contribue aux habiletés de votre entreprise d'ajuster aux changements de marchés en termes de volume, de personnalisation ou différenciations de produits?
29. Comment la sous-traitance internationale vous aide à rendre vos activités davantage plus modulaires et davantage plus mobiles et faciles à confier à vos fournisseurs pour la fabrication?
30. D'après vous, quels sont les autres façons de procéder pour que vos fournisseurs vous rendent plus flexibles et vous aident à mieux suivre les tendances du marché?

## **Thème 6: Vos commentaires finissants**

31. À quel endroit, faites-vous l'assemblage final de vos produits, dans votre entreprise ou dans le pays de vos fournisseurs? À quel endroit, livrez-vous vos produits à vos clients/distributeurs, à Québec/Canada ou dans l'un de pays où vous faites vos sous-traitances?
32. Quelles sont les avantages stratégiques de la sous-traitance internationale?
33. Quels sont les facteurs associés à la réussite ou l'échec de la stratégie de la sous-traitance internationale comme une stratégie de la croissance de votre entreprise?
34. Quelles sont des leçons que l'entreprise a appris de ses expériences de la sous-traitance internationale?
35. Quels sont les facteurs clés du succès et considérations supplémentaires qui sont liés à la sous-traitance internationale stratégique à long terme?
36. Pouvez-vous svp nous donner un portrait de la STI dans les années qui viennent?
37. Quels sont autres éléments que vous croyez importants dans le cadre de la STI qu'on n'a pas encore discuté?