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RELATIONAL CAPITAL AND ITS RELATIONSHIP WITH STRATEGIC ORIENTATIONS, INNOVATIVENESS AND PERFORMANCE: A STUDY OF SMEs IN AN EMERGING ECONOMY

ALBERTO DANIEL MALPICA ROMERO

DEPARTMENT OF BUSINESS ECONOMICS

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(*Degree of Doctor of Philosophy – Ph D.*)

RELATIONAL CAPITAL AND ITS RELATIONSHIP WITH STRATEGIC ORIENTATIONS, INNOVATIVENESS AND PERFORMANCE: A STUDY OF SMEs IN AN EMERGING ECONOMY.

by

ALBERTO DANIEL MALPICA ROMERO

under supervision of

DR. JOAN LLONCH ANDREU

DR. EDGAR ROGELIO RAMÍREZ SOLÍS

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ABSTRACT

The present doctoral dissertation address on three research essays that looks to respond to diverse research questions: (1) how a family–based SME set up competitive strategies? and how do they use and relate strategic orientations with performance enhancing? (2) does relational capital and technology orientation have an impact on SMEs innovativeness? and does innovativeness have an impact on SMEs performance? and (3) does relational capital have an impact on strategic orientations? specifically on market orientation (MO), entrepreneurial orientation (EO), learning orientation (LO) and technology orientation (TO); all of these in an emerging economy context. Diverse theoretical perspectives were used in order to develop hypotheses that address on relational capital, strategic orientations, innovativeness and performance. Several research techniques – qualitative and quantitative- have been used to test these relationships such as case research methodology and structural equation modeling. Findings confirm most of the relationships and comments and discussion are also provided. Finally, implications and future research lines are discussed.

RESUMEN

La tesis doctoral que a continuación se presenta es un conjunto de tres estudios empíricos que buscan dar respuesta a distintas preguntas de investigación: (1) ¿de qué manera una PYME familiar establece estrategias para ser competitiva? ¿de qué manera utiliza y relaciona las orientaciones estratégicas para mejorar su desempeño? (2) ¿existe impacto del capital relacional y la orientación a la tecnología en la capacidad de innovación de las PYMEs? ¿cuál es el impacto de la capacidad de innovación en el desempeño de las PYMEs? y (3) ¿cuál es el impacto del capital relacional en las orientaciones estratégicas? particularmente en la orientación al mercado (OM), La orientación al emprendimiento (OE), la orientación al aprendizaje (OA) y la orientación a la tecnología (OT); todo lo anterior en el marco de una economía emergente. Distintos marcos teóricos fueron utilizados para fundamentar el desarrollo de las hipótesis relacionadas con el capital relacional, las orientaciones estratégicas, la capacidad de innovación y el desempeño de las PYMEs. Diversas técnicas de investigación –cualitativas y cuantitativas- fueron utilizadas para probar las relaciones planteadas, tales como la metodología del estudio de caso y modelos de ecuaciones estructurales. Los resultados obtenidos son comentados y discutidos, mostrando además que la mayoría de las relaciones propuestas se confirman. Finalmente, las implicaciones de los hallazgos, así como futuras líneas de investigación son discutidas.

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CHAPTER I

INTRODUCTION OF THE DISSERTATION

1. Competitiveness and small and medium enterprises (SMEs)

In 2015, the International Trade Center –a joint agency of the World Trade Organization and the United Nations- released the SME competitiveness outlook: connect, compete and change for inclusive growth (ITC, 2015). Globally, SMEs constitute the overwhelming majority of firms representing 95% of all firms and accounting for approximately 50% of the GDP and representing between 60%-70% of total employment, when both formal and informal SMEs are taken into account. It is calculated that approximate 310 million SMEs are in emerging markets. Emerging economies are assuming an increasingly importance in the world economy (Wright et al., 2005) and research on strategy in emerging economies has been recognized as a promissory line of research (Xu and Meyer, 2013).

This dissertation is the result of a research effort that tries to advance knowledge and comprehension on how SMEs can be more competitive, particularly through the relationship of relational capital with strategic orientations, innovativeness and performance in an emerging economy.

It is known that the majority of SMEs have simple systems and procedures allowing flexibility, immediate feedback, short decision-making chain and a better and quick understanding of the customer needs than a larger organization (Singh, Garg and Deshmukh, 2008); however, they experience a tremendous pressure to sustain their competitiveness in domestic and global markets. Beside this, domestic companies competing within emerging economies normally face a "rapid change" in economic, political and institutional environment that are accompanied by a relatively underdeveloped factor and product markets (Wright et al., 2005).

Defining competitiveness is complex. Feurer and Chaharbaghi (1994) define competitiveness as something relative and not absolute, depending on shareholder and customer values, financial strength which determines the ability to act and react within a competitive environment and the

potential of people and technology in implementing the necessary strategic changes. Dimensions involved in innovativeness can include time (punctual or sustainable), scale (optimal firm size), space (national or international) and scope (focus only on firm level resources or also on capabilities).

Business strategy is seen as a major determinant for enterprise success in one or several business lines. Business literature offers tools to help companies to plan and execute strategy. A prerequisite to design a successful business strategy is to be aware of the competitive forces shaping a firm´s environment (Porter, 1985). Information about consumer trends, compliance requirements, demographics, trade size and flows, trade agreements, competition intensity –among others- is highly relevant for a successful business strategy.

Considering that enhancing firm performance is one way to remain competitive in the market, scholars of diverse disciplines like management, entrepreneurship and marketing has been attracted to the strategic orientation of a business concept, even though there is no universally accepted definition of the strategic orientation of a firm (Hakala, 2011).

Gatignon and Xuereb (1997) define strategic orientations as principles that direct and influence the activities of a firm and generates the behaviors intended to ensure the viability and performance of the firm, and this is the view that remains through the dissertation.

Another identified source for competitiveness that has been researched is innovativeness. Defined as the capacity to introduce new processes, products or ideas in the organization (Hult et al., 2004), innovativeness is generally associated to a better business performance (Rubera and Kirca, 2012; Kyrgidou and Spyropoulou, 2013). However, investment in innovativeness is usually seen by SMEs as expensive because of the natural short-term performance goals of these companies. A challenge for small firms competing in low-tech industries with small advertising budgets is how to overcome this disadvantage in order to leverage innovativeness. Rubera and Kirca (2012) found that investors are will to invest in small companies despite poor revenues and profits in the marketplace if they see that innovative products or services designed by these companies have a promissory future.

Diverse antecedents has been researched for innovativeness (Drucker, 1985; Damanpour, 1991; Hult et al., 2004; Kyrgidou and Spyropoulou, 2013), all of them theoretically based in the resource based-

view and dynamic capabilities theory. Dess et al. (1997) address that in a global-knowledge market, managers have to deal with a complex changing business environment, so it is not enough to analyze one single enterprise capacity in order to better understand firm performance.

Finally, the human factor is the key factor for all of the strategies and processes to be happening and this research project looked to introduce a common concept among practitioners -but little researched in the marketing literature- related to innovativeness and strategic orientations, named relational capital.

Relational capital, in conjunction with human capital and structural capital, is one of the three basic components of intellectual capital (Martínez-Torres, 2006). Some evidence has been found regarding a positive relationship between relational capital and innovativeness (Martín-de-Castro et al., 2009; Delgado-Verde et al., 2011) and González-Bañales and Bermeo-Andrade (2011) have explored the relationship between relational capital and market orientation.

As stated before, this research effort looks to contribute in the advancement of the knowledge and comprehension on how SMEs can be more competitive, specifically on the understanding of the effects on performance of strategic orientations, relational capital and innovativeness.

2. Problem Statement

2.1 Strategy and Performance

Strategic management explanations of firm performance indicate that valuable, rare, inimitable, and non-substitutable resources may be beneficial to the firms that possess them (Morgan, 2012), but firms also require complementary capabilities in order to deploy available resources in ways that match the dynamic market conditions they face in order to drive business performance over time (e.g., Helfat and Raubitschek, 2000; Teece et al., 1997).

A firm capability is developed when individuals and groups within the organization apply their knowledge and skills to acquire, combine, and transform available resources in ways that contribute to achieving the firm's strategic goals (Mahoney and Pandian, 1992; Teece et al., 1997). Capabilities, therefore, involve complex coordinated patterns of skills and knowledge that become embedded as organizational routines over time (Grant, 1996; Winter, 2000) and are distinguished from other

organizational processes by being performed well relative to rivals (Bingham et al., 2007; Ethiraj et al., 2005).

Interest on performance measurement and management has notably increased in the last twenty years (Taticchi, 2008). It is important to note the evolution of focusing performance from a financial perspective to a non-financial perspective, and companies have emphasized the growing need of controlling production business processes. Firms have also understood that for competing in continuously changing environments it is necessary to monitor and understand firm performance. Measurement has been recognized as a crucial element to improve business performance (Sharma et al., 2005). A performance measurement and management system is a balanced and dynamic system that enables support of decision-making processes by gathering, elaborating and analyzing information (Neely et al., 2002).

At the beginning of 2000s, the research on performance measurement in relation to SMEs takes two directions: the first one was the application/adaptation of the models developed for large companies, and the second was the development of specific models for SMEs (Taticchi et al., 2010). By following the first direction, it is possible to find cases of implementation of the well-known Balanced Scorecard (BSC) and application of quality models like the Business Excellence Model (BEM). By the other hand, it was possible to find in the literature just three frameworks proposing an integrated approach to performance measurement. The second approach is followed in this dissertation.

2.2 Innovativeness and Performance

Given the global competition in modern business environments, innovation is critical to a firm's competitive advantage (Chen et al., 2009; Prajogo and Ahmed, 2006), and firm innovativeness is a critical antecedent of innovation (Hurley and Hult, 1998; Marcati et al., 2008; Nasution et al., 2011). Stimulating innovation in SMEs is an important matter for any economy. A number of studies have been conducted with the goal to discover which factors contribute to innovation efforts by SMEs (Keizer et al., 2002).

Hurley and Hult (1998) introduced firm innovativeness into the framework of market-driven innovation and suggested that innovativeness facilitates a firm's innovative capacity, which leads to superior performance.

Firms that demonstrate innovativeness tend to engage in experimentation and creative processes (Lumpkin and Dess, 1996; Wiklund and Shepherd, 2005). Furthermore, innovative firms exhibit innovative behaviors consistently over time (Subramanian and Nilakanta, 1996; Wang, 2008) and may create new products or services (Lumpkin and Dess, 1996) that ultimately create competitive advantage and improve performance (Hurley and Hult, 1998), and some studies had been conducted in order to examine the relationship between innovativeness and business performance (e.g., Hult et al., 2004; Olavarrieta and Friedmann, 2008; Rhee et al., 2010).

The key element of innovativeness is an organizational culture that encourages the introduction of new processes, products, and ideas (Hult et al., 2004; Hurley and Hult, 1998), and such propensity to innovate is arguably associated with organizational effectiveness and performance (Tajeddini, 2011). However, inconsistencies in the conceptualization and measurement of organizational innovativeness have led to conflicting and non-comparable results from past research.

Strategy is another factor that is shown to have impact on innovation in SMEs. Particularly, Birchall et al. (1996) and Carrier (1994) mention explicit strategies to increase and stimulate internal creativity and risk taking behavior. As long as conditions evolve, firms must adopt innovations over time and the most important innovations are those that allow the firm to achieve competitive advantage, thereby contributing to its performance (e.g., Damanpour, 1991; Henard and Szymanski, 2001).

2.3 The importance of Intellectual Capital and Relational Capital

As global competition moves from the industrial age into the information age, knowledge is becoming a key driver for the competitive success of firms, and must be managed effectively over people and organizations to ensure that wealth-creating capacity is maintained (Bohn, 1994), and the capacity to manage knowledge is a critical skill (Lee et al., 2005). Thus, organizations accumulate, codify, and store individual knowledge in manuals, databases, and patents for collective current and

future use (Garud and Nayyar, 1994) and establish robust structures, systems, and processes (such as new product development teams and formal product-planning processes) to streamline individual inputs into steady streams of innovative outcomes.

Intellectual capital can be defined as the sum of all knowledge firms utilize for competitive advantage (Nahapiet and Ghoshal, 1998; Youndt, Subramaniam and Snell, 2004). More importantly is the conceptualization of different aspects of intellectual capital that offers researchers a means to synthesize the approaches by which knowledge is accumulated and used in organizations (Subramaniam and Youndt, 2005).

Relational capital, along with human capital and structural capital is one of the three basic components of intellectual capital (Martínez-Torres, 2006). Relational capital can be defined as the knowledge embedded in relationships with customers, suppliers, industry associations or any other stakeholder that influence the organization's life (Cabrita and Bontis, 2008). Bontis (1999) expanded the concept of client capital to be including all external relationships (e.g., suppliers, trade associations and joint-ventures), and comment that relational capital can be measured as a function of longevity and defends that its conceptualization emerges from the "market orientation" (Kohli and Jaworski, 1990; Narver and Slater, 1990).

Based on a survey of firms located in the UK's West Midlands, De Propris (2000) finds that firms that cooperate with buyers and suppliers tend to increase their ability to innovate. Given the importance of external cooperation, two related research streams have emerged, the "dynamic capability" perspective, and "innovation and network" research.

First, the "dynamic capability" school (Teece, 1986; Teece and Pisano, 1994) claims that firms need different capabilities ranging from research and design, manufacturing, marketing to after-sale service in order to profit from their innovations.

The stream studying on cooperation can be called the "innovation network" school. Inter organizational cooperation can be viewed as innovation networks (DeBresson and Amesse, 1991; Pisano, 1991; Powell et al., 1996) and social networks (Gulati, 1998; Gulati et al., 2000).

Relational capital may enhance efficiency in the organization. The knowledge derived from employees, customers and suppliers and other business agents may result in process innovations that eliminate bottlenecks, increase output and reduce variations. It is also shown that the higher level of relational capital, the better planning, problem solving and troubleshooting, all of which most likely increase production and service delivery efficiencies and thereby, reduce organizational costs (Youndt et al., 2004)

Despite the relevance of all the existing literature, the role of relational capital and firm performance in SMEs remains unclear. As pointed out by Kaufmann and Schneider (2004), more empirical research is needed to investigate the influence of relational capital in organizations.

2.4 Emerging Economies

Emerging economies are characterized by an increasing market orientation and an expanding economic foundation. They are rapidly becoming major economic forces in the world and the success of many of these economies is such that they have attracted interest from diverse researchers (Bruton, Ahlstrom and Obloj, 2008). Emerging economies are "low-income, rapid-growth countries using economic liberalization as their primary engine of growth" (Hoskisson et al., 2000, p. 249).

Emerging economies provide a unique setting for testing existing theories; however, too often, emerging economies are treated like a uniform bloc. They may share many similarities, but they also have distinctive characteristics. There is a need to develop an understanding of these differences and their impacts.

Emerging economies provide a different experimental space for investigate the interaction between firm strategies and local contexts (Xu and Meyer, 2012). Companies in this context are normally exposed to inefficient markets, active government involvement, extensive business networking and, high uncertainty. Hence, scholars have been reassessing and extending their theories to examine the strategic challenges business face in emerging economy contexts (Hoskisson et al., 2000; Meyer and Peng, 2005).

The term "emerging economies" encompasses a broad range of countries and has not consistently defined in the literature (Xu and Meyer, 2012). Two elements can be identified in most of the

definitions. First, emerging economies have institutional contexts that are less market-supporting than those of North America and Europe, but are becoming more market-oriented. Second, the level of income falls into the middle income category, or gross domestic product growth has been high, providing rapid economic advancement.

Hoskisson et al. (2000) identified 64 emerging economies and Xu and Meyer (2012) reported a total of 161 emerging economy-related papers that were published during 2006-2010 in eight top management journals. In comparison with the 99 published in the 2001-2005 period, it represents an increase of 63 per cent overall. These numbers address the importance and legitimacy of this type of studies.

Diverse theoretical frameworks were identified in the studies mentioned above. Inside an economic perspective it can be found that agency theory, transaction cost theory, spillover perspective and real options perspective are used. From strategy and organization theories studies has rooted on institutional perspectives, institutional economics, sociology-based IT, learning perspectives, relational perspective and resource-based theory.

There is a need to contextualize the research in emerging economies. Recent studies have utilized good theory extensions of existing theory, but studies are still based on existing theories from the mature Western economies (such as institutional theory and the resource-based view). There is a need to focus more on the context of emerging economies and develop new theories that will help to shift the research paradigm.

There is also the need to understand what the future looks like for such economies. It is argued by some (Friedman, 2006) that the differences between countries and between mature and emerging economies will decline over time as globalization, information technology, and other improved, lower end innovations become widely available to the developing world.

2.5 Research Gaps

Literature review provides the mechanism to properly identify research gaps. A systematic review method was used in the dissertation to address on research gaps. The purpose of a systematic review method is to identify the key scientific contributions in a given field and construct an evidence base

that would be beyond the parameters of a single study (Tranfield et al., 2003). Any interpretation of a certain number of studies will contain inevitably subjective components, but the degree of transparency does make it more rigorous compared with traditional narrative literature reviews (Pittaway & Cope 2007; Tranfield et al. 2003).

Literature review process is a key tool in management research used to manage the diversity of knowledge for a specific academic research question. The goal of conducting a literature review is to allow to the researcher be familiar with the actual knowledge in a specific field, trying to advance this body of knowledge through a specific research question. Management reviews are usually narrative and had been widely criticized for being singular descriptive accounts of the contributions made by writers in the field (Tranfield et al. 2003), and complement: "*Systematic reviews differ from traditional narrative reviews by adopting a replicable, scientific and transparent process, in other words a detailed technology, that aims to minimize bias through exhaustive literature searches of published and unpublished studies and by providing an audit trail of the reviewers decisions, procedures and conclusions*." (p. 209).

The process started with keyword searches in the ISI Web of Knowledge, Proquest ABI/INFORM Global and EBSCO Business Source Premier Databases. Keywords were chosen by prior experience and include: family business, family firm, family enterprise, market orientation, customer orientation, marketing orientation, entrepreneurial orientation, entrepreneurship orientation, technology orientation, product orientation, strategic orientations, innovation orientation, learning orientation, innovativeness, SMEs, emerging economies, performance and firm performance.

Although systematic literature review is renowned by its strengths, it has some recognized limitations (Pittaway & Cope 2007). One way to attenuate these limitations are the use of more than one database and perform a full text review rather than relying on abstracts. The approach used in this study is an adaptation of the method.

Following the adapted methodology described above, a summary of the findings is provided. Gnizy et al. (2014) found that the most of prior literature focuses on a particular strategic orientation and

its effect on firm performance, detecting that the less studied orientation is technology orientation. Chapter III includes a special literature review regarding technology orientation.

Focusing on the other three main orientations studied on the literature, market orientation (MO), learning orientation (LO) and entrepreneurial orientation (EO), a review of the studies is provided.

Following Deutscher et al. (2016), three broad groups of studies can be devised. The first group of studies investigates parallel direct effects of EO, MO, and LO on firm performance. As an example, Laukkanen et al. (2013) examine the effects of EO, MO, and LO on business growth across several countries and find significant positive effects for EO and MO. Diverse studies in this category emphasize the importance to rely on multiple strategic orientations (e.g., Kropp, Lindsay, and Shoham, 2006), but it remains unclear how the orientations interact.

A second type of studies analyze mediating relationships between EO, MO, and LO. In this case, a particular orientation mediates the effect of other orientations on firm performance. Diverse studies suggest that particularly LO acts as a mediator for EO and MO on different performance dimensions (e.g., Liu et al., 2002; Mu and Di Benedetto, 2011) and innovativeness (an immediate antecedent of performance) respectively (Rhee et al., 2010; Zhou, Yim, & Tse, 2005).

A third group of studies aggregates EO, MO, and LO as higher-order factors influencing firm performance. Hult and Ketchen (2001) says that EO, MO, and LO along with with innovativeness form the higher-order factor that positively influences several performance indicators. Additionally, Gnizy et al. (2014) advance that EO, MO, and LO build a higher-order dynamic capability labeled "proactive learning culture" (Deutscher et al., 2016). This dynamic capability positively contributes to successful foreign market launches of SMEs.

In sum, prior literature accomplished considerable contributions regarding the effects of EO, MO, and LO on firm performance. The findings support the notion that firms pursue different strategic orientations simultaneously in order to be successful (Cadogan, 2012). However, a comprehensive configurational approach analyzing the effect of different configurations of EO, MO, and LO on firm performance is yet missing.

There exists a plethora of academic literature that has been published on the subject of strategic orientations. Hakala (2011) report a total of 67 scholarly articles published between 1987 and 2010 which investigates multiple orientations. However, just 7 out of the 67 were purely conceptual or case research approached and even fewer regarding SME context, so a research gap appears about this type of studies. Researchers agree that literature on orientations is voluminous and far to be complete and that is largely based on quantitative work (Hakala, 2011), recommending that more qualitative work should be done. Essay 1 looks to contribute in this research stream.

Literature review also showed that market and technology orientation had been one of the combinations more researched by scholars (Appia-Adu and Sing, 1998; Berry, 1996; Berthon et al., 1999, 2004, 2008; Fritz, 1996; Gao et al., 2007; Izquierdo and Samaniego, 2007; Jeong et al., 2006; Knotts et al., 2008; Marinov et al., 1993; Paladino, 2009; Pearson, 1993; Shaw, 2000; Shipley at al., 1995; Suh, 2005; Voss and Voss, 2000; Zaharieva et al., 2004). However, as the number of combinations of strategic orientations in study increases, the fewer of articles founded in the literature (Hakala, 2011); even combinations like technology-learning orientations combination weren't found in the study. Considering that strategic orientations can be seen as high level dynamic capabilities, also little research producing empirical data studying relational capital as an antecedent of strategic orientations were found (González-Bañales and Bermeo-Andrade, 2011). Essay 2 looks to contribute in this direction.

Regarding studies relating more than three strategic orientations, only one were reported (Hakala, 2011; Zhou et al., 2005), and despite decades of research conducted in the different streams of orientation literature, little is known about the relationship between market orientation, technology orientation, learning orientation and entrepreneurial orientation (Grinstein, 2008a). The evidence for relationships between orientations is fragmented and, there is a need for studies investigating the way these multiple orientations interact. Beside this, no articles were found that investigates the relationship between relational capital and multiple strategic orientations neither in large corporations or SME literature. Essay 3 looks to contribute in this research line.

3. Objective of the Dissertation and Research Questions

Having provided the general overview of the dissertation, the main objectives of the research project are presented:

- To investigate how a family-based SME set up competitive strategies and how do they use and relate strategic orientations with performance enhancing.
- To examine and evaluate the impact of technology orientation (TO) and relational capital (RC) on SMEs innovativeness and to examine and evaluate the impact of innovativeness on SMEs performance.
- To examine and evaluate the impact of relational capital (RC) on strategic orientations (market orientation (MO), entrepreneurial orientation (EO), learning orientation (LO) and technology orientation (TO)) and evaluate the impact of strategic orientations on innovativeness and innovativeness on SMEs performance.

Derived from these objectives, several specific objectives appear in the form of research questions. Table 1 shows these specific objectives as well as the theoretical framework, research methodology, and key findings.

The structure of the doctoral dissertation is organized as follows: chapter two presents the theoretical frameworks and key concepts related to the dissertation. Next, chapters three, four and five presents each of the essays in accordance with the objectives of the dissertation. Chapter three (essay 1) is an exploratory case study that intends to advance the comprehension on how a family-based SME set up a competitive strategy. It also looks to figure it out how top management contributes in the configuration of this competitive strategy and how a firm relates strategic orientations in order to enhance its performance, with an emphasis on technology orientation. Chapter four (essay 2) investigates the relationships between relational capital and technology orientation with innovativeness and firm performance and, exploring relational capital as an antecedent of technology orientation. Evidence of a positive relationship were found. Chapter five (essay 3) examine the relationship between relational capital and strategic orientations, and the relationships of strategic

orientations with innovativeness and firm performance; findings show mixed results. For each of the essays, research gap, literature review and hypotheses, research design, findings, results and discussion and conclusions are presented.

A final chapter (chapter six) presents the conclusions, contributions and implications of the dissertation, including limitations and possible future research directions.

Table 1. **Dissertation approach**

Essay	One	Two	Three
Research Questions	❖ Which are the key factors for a family-based SME to be competitive? ❖ What does this type of SME require to become more competitive? ❖ How does this firm set up a competitive strategy based on strategic orientations?	❖ Is there a positive relationship between innovativeness and performance? ❖ Does relational capital contribute to innovativeness enhancing? ❖ Does technology orientation contribute to innovativeness enhancing?	❖ Does relational capital have a positive impact on strategic orientations? ❖ Do strategic orientations have a positive impact on innovativeness? ❖ Does innovativeness contribute to firm performance?
Theoretical Framework	❖ Resource-based view ❖ Contingency theory	❖ Resource-based view ❖ Contingency theory ❖ Intelectual Capital/Relational Capital	❖ Resource-based view ❖ Contingency theory ❖ Intelectual Capital/Relational Capital
Research Design	❖ Qualitative study ❖ Exploratory case study in a family-based SME located in Guadalajara, Jalisco, México	❖ Quantitative study ❖ Survey from 360 Mexican SMEs ❖ Structural Equation Modeling (SEM)	❖ Quantitative study ❖ Survey from 360 Mexican SMEs ❖ Structural Equation Modeling (SEM)
Key Findings	❖ Use of strategic orientations were identified through a model. ❖ It was identified that a lack of key performance indicators impedes a good "tracking" of the strategy. ❖ It is important to use leadership and communication to anticipate problems within the family and inside the enterprise.	❖ A strong positive effect of relational capital over innovativeness but not so strong in firm performance. ❖ A positive effect of relational capital over technology orientation. ❖ A positive effect of technology orientation over innovativeness. ❖ A positive effect of innovativeness over performance.	❖ A strong positive effect of relational capital over strategic orientations. ❖ Mixed results regarding the influence of strategic orientations over innovativeness. ❖ A positive effect of innovativeness over performance.

Source: Self-elaborated

CHAPTER II

MAIN THEORIES AND CONSTRUCTS USED

1. Resource-Based View

Resource-based theory (RBT) has been acknowledge as one of the most prominent and powerful theories for describing, explaining and predicting organizational relationships (Barney et al., 2011). It is recognized that Penrose (1959) is the seminal work that introduce resources as key elements for the growth of the firm, but it is not until the 1980s and 1990s that the resource-based view theory of the firm (RBV) begin to take shape (Wernerfelt, 1984; Barney, 1991; Barney et al., 2011).

Kozlenkova et al. (2013) address on if it is more appropriate to use the term resource-based view or resource-based theory because confusion still persist among scholars. According to their study, they suggest that it exist enough evidence that this view has evolved into a theory. Despite this, relevant authors still use resource-based view as theory term, particularly in the marketing field (Wernerfelt, 2014; Ketchen et al., 2007).

RBV claims that firm's resources influence performance and hence, provide a competitive advantage for the firms. Resources are defined as physical assets, intangible assets, and organizational capabilities that are tied semi-permanently to the firm (Wernerfelt, 1984), but if these resources can provide a competitive advantage in a short term, a sustainable competitive advantage is required for these resources to be heterogeneous in nature (Peteraf, 1993). When resources become neither perfectly imitable nor substitutable without great effort, they are considered resources that can be labeled like valuable, rare, in-imitable and non-substitutable (Barney, 1991).

It can be said that a firm has achieved a sustained competitive advantage (SCA) "when it is creating more economic value than the marginal firm in its industry and when other firms are unable to duplicate the benefits of this strategy" (Barney and Clark, 2007 p. 52). Two fundamental assumptions sustain the resource-based logic: first, firms possess different assortment of resources, even if they operate within the same industry; second, these differences in resources may persist, due to the

difficulty of trading resources across firms, which allows the benefits from heterogeneous resources to persist over time as well (Kozlenkova et al., 2013).

Barney et al. (2011) describe that like many theories, RBT have had an evolution that mirrors the first three stages of the product life cycle: introduction, growth and maturity. The introduction stage can be thought from the 1959 study of Penrose until 1991 year. Growth stage expand from 1992 until 1999 and finally, maturity stage spread from 2000 up to day.

RBV has received some critics along its development. Priem and Butler (2001) address that RBV is: (1) a tautological theory; (2) it underdeveloped the role of product market; (3) many different resource configurations can generate the same value for firms (no competitive advantage); and (4) limited managerial prescription. Barney (2001), in response to Priem and Butler (2001), disagrees with most of the authors' criticisms, but acknowledge that they provide a service by creating a forum for discussion and debate of future resource-based models.

One of the most challenging parts of RBV research is the measurement of unobservable constructs, because in many of the cases to be measuring firm capabilities and core competencies is a difficult task (Brahma and Chakraborty, 2011), but measuring latent constructs using indicator variables and structural equation modeling seems promising for researchers.

Resources and capabilities are central constructs in RBT. Therefore, it is important to understand the conceptual differences between these constructs and distinguish them from dynamic capabilities, which have entered RBT research more recently (Kozlenkova et al., 2013).

Resources refer to tangible and intangible assets that firms use to conceive of and implement its strategies. The word "resource" refers to something an organization can draw on to accomplish its goals; Barney and Hesterly (2012) suggest four main resource categories: physical, financial, human, and organizational.

Capabilities are subsets of the firm's resources, which represent "an organizationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm" (Makadok, 2000 p. 389). They are generally information-based, tangible or intangible processes that enable a firm to deploy its resources more efficiently and

therefore enhance the productivity of those resources. Thus, capabilities are special types of resources whose purpose is to improve the productivity of other resources possessed by the firm (Makadok, 2001).

The concept of dynamic capabilities was introduced by Teece et al. (1997). They are particularly relevant in "high-velocity" or turbulent markets (Eisenhardt and Martin, 2000 p. 1106). Similar to capabilities, dynamic capabilities are resources that can be used to modify other resources and create value. Examples include product development routines, transfer processes, resource allocation routines, alliance and acquisition capabilities, and knowledge creation processes (Kozlenkova et al., 2013). Some researchers argue that dynamic capabilities require their own stand-alone theory (Teece, 2007; Teece et al., 1997), while others view them as a means to extend RBT to dynamic environments (Peteraf and Barney, 2003).

The view that dynamic capabilities are fundamentally different is rooted from the notion that sustainable competitive advantages attained from deploying "typical resources" may be achieved only infrequently in dynamic markets, because the rapid change renders many resources obsolete as firms quickly and constantly reconfigure, gain, and dispose of their resources to meet the demands of a shifting market (Eisenhardt and Martin, 2000). In practice though, RBT can deal with resources with short-term benefits and capabilities that are more valuable in specific environments (e.g., high-velocity markets) to explain their influence on sustainable competitive advantage. Following Peteraf and Barney's (2003, p. 321) arguments that "dynamic capabilities literature is entirely consistent with RBT and should not be viewed as a separate theory," it is considered that dynamic capabilities is another type of resource that can be evaluated within an RBT framework.

Researchers in both, management and marketing, suggest that RBT has potential as a unifying paradigm for integrating other theories and providing a parsimonious foundation for multiple theoretical perspectives (Palmatier et al., 2007; Peteraf, 1993). As Mahoney and Pandian (1992, p. 375) suggest, the "resource-based model has the potential to coalesce these research streams to provide a rich and rigorous theory of the strategic firm".

2. Contingency Theory

Classified as a class of behavioral theory, contingency theory asserts that there is no best way to organize a corporation, to lead a company, or to make decisions under all conditions (Ginsberg and Venkatraman, 1985); "It is perhaps a truism that any theory of corporate or business strategy must be, by definition, contingency-based" (Ginsberg and Venkatraman, 1985 p. 421). Hakala (2011) suggests that research on orientations configuration can be performed both, universal and contingency-dependent.

Contingency theory comes from isolated empirical research, conducted with the aim of verifying the models of effective organizational structures and management decisions (Lawrence and Lorsch, 1967). In its most rudimentary form, this theory argues that organizations adapt their structures to be maintained in accordance with their contexts and thus have better performance (Donaldson, 2001).

The primary focus of contingency theory, has traditionally been on the relationship between organizational factors, environmental characteristics, and the organization's strategic response (Ginsberg and Venkatraman, 1985). For example, studies looking at organizational factors such as firm size or firm technology or environmental factors such as environmental uncertainty have tended to dominate the field (Birkinshaw, Nobel and Ridderstråle, 2002).

Early literature on organizational design examined the relationships between organizational design and performance empirically (Burns and Stalker, 1961; Lawrence and Lorsch, 1967; Reimann, 1974). These works introduced the notion of contingency theory, according to which the effectiveness of organizational design arises from a correspondence (or fit) between the context (contingent factors) and the organizational structure. Thus, when it comes to designing an organization's structure, contingency factors will determine the characteristics of organizational design. This idea of the contingency approach prevailed among the studies on organizational design throughout the 1960s and 1970s (Negandhi and Reimann, 1972; Pennings, 1975; Tushman, 1979).

Although the contingency perspective is less prominent today than during the earlier stages of organization theory, researchers have recently begun to reintroduce this important idea (Heiens and Pleshko, 2011). For instance, Solberg (2008) investigated the contingency factors influencing

international distributor relationships, Teasley and Robinson (2005) analyzed the contingency factors influencing technology transfer, and Birkinshaw et al. (2002) examined the validity of knowledge as a contingency variable influencing organizational structure.

3. Relational Capital

Relational capital, human capital and structural are the three basic components of intellectual capital (Martínez-Torres, 2006). Relational capital can be defined as the knowledge embedded in relationships with customers, suppliers, industry associations or any other stakeholder that influence the organization's life (Cabrita and Bontis, 2008).

Capello and Faggian (2005) defines relational capital as the set of all relationships – market relationships, power relationships and cooperation – established between firms, institutions and people that stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions.

The concept of relational capital has been associated with the concept of "social capital". Social capital is intended as all social networks, collective and institutional rules that through the development of trust and sense of belonging to a local community guarantee to overcome more easily market failures in the coordination of decision processes and gives rise to a community governance (Capello and Faggian, 2005).

The approach used in this dissertation refers to "relational" capital rather than to "social" capital, and the reason why this approach is used, is because social capital exists anywhere a local society exists. Relational capital refers to the –rare- capability of exchanging different skills, interacting among different actors, trusting with each other and cooperating even at a distance with other complementary organizations.

Relational capital is path dependent, so firms are constrained by the boundaries of their network in the sense that they may not be able to take advantage of some opportunities because their relationships do not provide access to the appropriate resources (Welbourne and Pardo-del-Val, 2008).

It is generally accepted that there exists a significant positive relationship between intangible assets and business performance, being human capital a highly valuable one (Carmeli and Schaubroeck, 2005; Hitt et al., 2001). But human capital does not just include the human beings, their backgrounds, education, knowledge or abilities. Far more important are the relationships employees develop in the name of the organization (Nahapiet and Ghoshal, 1998). Relational capital is a fundamental asset for firms, but especially for SMEs, and high performing companies are those that are able to negotiate with others and develop collaborative agreements, thus placing a high value in relational capital (Welbourne and Pardo-del-Val, 2008).

4. Strategic Orientations

Based on the quest of a superior performance, businesses have been looking how to conduct their business activities. This has led to one of the core topics of the strategic management research field: strategy formation (Slater et al., 2006). One pertinent question is, how can the strategy formation process lead to superior performance for businesses that have adopted different strategic orientations?

Strategic orientations have been discussed in both marketing and strategic management (Grinstein, 2008a). Strategic orientations are the strategic directions implemented by a firm to create the proper behaviors for the continuous superior performance of the business (Gatignon and Xuereb, 1997). They often reflect the beliefs and mental models of the senior executives (Hitt et al., 1997). Previous research has suggested various typologies of strategic orientations. Two well-known typologies are Miles and Snow's (1978) (e.g., prospectors vs defenders) and Porter's (1980) (e.g., a differentiation strategy vs a low-cost one).

In the context of market orientation, a number of central strategic orientations that contribute to firms' competitive advantage and performance beyond market orientation are discussed. These include innovation, learning, entrepreneurial, and employee orientations (Grinstein, 2008a).

Innovation orientation (often labeled technological or product orientation) is present when organizations implement new ideas, products or processes (Damanpour, 1991; Hult and Ketchen, 2001; Lukas and Ferrell, 2000). It is associated with investments in technological leadership and with high quality products (Fritz, 1996; Gatignon and Xuereb, 1997). Innovation positively affects firms' long-term success as it enhances organizational flexibility, willingness to change, and the introduction of new products while decreasing organizational inertia (Damanpour, 1991; Gatignon and Xuereb, 1997; Hult et al., 2004).

Learning orientation has to deal with the development of knowledge in the organization. It is an organizational characteristic that affects a firm's tendency to value learning that leads to a change in basic organizational norms and values, and is the result of a proactive organizational behavior (Baker and Sinkula, 1999b; Hult et al., 2004). The use of a learning orientation is associated with better organizational performance as it leads firms to constantly question long-held assumptions about fundamental operating philosophies, examining firms' "mental model" and "dominant logic" (Grinstein, 2008a). This, in turn, enables firms to create knowledge and competencies, and better respond to their environment (Baker and Sinkula, 1999b; Liu et al., 2002; Slater and Narver, 1995).

Entrepreneurial orientation reflects the firm's degree of risk taking, proactiveness and aggressiveness with respect to innovation (Atuahene-Gima and Ko, 2001; Becherer and Maurer, 1997; Bhuian et al., 2005). Entrepreneurial values enhance organizational transformation, can help build new competencies, and create new businesses within the existing business. They allow firms to capitalize on emerging opportunities, and therefore are an important driver of new products and organizational growth (Bhuian et al., 2005; Hult et al., 2004; Slater and Narver, 1995).

Employee orientation relates to firms' internal focus on human resources, putting employees' well-being and satisfaction before other stakeholders (Fritz, 1996; Harris and Ogbonna, 2001). Employee-oriented firms are characterized by de-centralized decision-making processes, investments in employees' development, and delegation of responsibility. These are likely to increase organizational members' satisfaction, motivation, and organizational commitment (Fritz, 1996; Ruekert, 1992). Previous research has demonstrated the positive effect of employee orientation on performance,

suggesting that satisfied, motivated and committed employees create satisfied and loyal customers, which, in turn, are likely to increase the firm's stream of revenues (Fritz, 1996; Harris and Ogbonna, 2001; Pfeffer and Veiga, 1999; Ruekert, 1992).

Deshpandé et al. (2013), mention that the marketing literature has significantly contributed to the identification of diverse strategic orientations that firms can pursue in order to achieve competitive advantage. Prior studies have suggested that certain relationships between these strategic orientations may provide organizations with this sustained competitive advantage (Hult et al., 2004) and that firms balancing several orientations perform better (Atuahene-Gima and Ko 2001; Bhuian et al., 2005; Grinstein, 2008a).

5. Innovativeness

In the business literature, few issues have been characterized by as much agreement as the importance of firm innovativeness to organizational survival and prosperity (Rubera and Kirca, 2012). Innovativeness refers to the degree of innovation developed within organizations, leading to a differentiation advantage and higher performance (Porter, 1985; Hansen and Birkinshaw, 2007). Organizational innovation is pertinent to creating or improving new elements in products/services in order to add greater values and respond better to customer needs (West, 1992; Luuk and George, 2001). It is also conceived as one of the avenues to gain a competitive advantage (Clemons and Row, 1991; Deshpandé et al., 1993; Hult et al., 2003; Hurley and Hult, 1998; Martins and Terblanche, 2003; Nieto and Quevedo, 2005; Salaman and Storey, 2002; Sandvik and Sandvik, 2003; Tajeddini et al., 2006).

In general, innovativeness has been defined as an organizational culture that encourages the introduction of new processes, products, and ideas (Hult et al., 2003, 2004; Hurley and Hult, 1998), and the creation of new products, services, and technologies (Antoncic and Hisrich, 2001).

The findings related to the performance implications of firm innovativeness vary substantially across studies (Sorescu and Spanjol, 2008; Wolfe, 1994). For example, while the predominant view is that innovativeness is positively associated with performance (Tellis, Prabhu and Chandy, 2009),

researchers have reported nonsignificant or even negative effects for this association (e.g., Baum, Calabrese and Silverman, 2000; Mengüç and Auh, 2006). The dominant approach to reconcile these divergent results has been through the use of methodological refinements and a variety of innovativeness and performance measures, as well as different sets of control variables in separate studies.

Despite the perceived role of innovativeness in enhancing performance, knowledge remains limited and offers little insight into firms' efforts with regard to innovativeness enhancement (Kyrgidou and Spyropoulou, 2013). Literature address three particular problems that limit existing research.

First, despite the number of studies on innovativeness, research on the consequences of innovativeness remains inconclusive in the empirical literature (Droge, Calantone and Harmancioglu, 2008). Although several examples in the literature demonstrate innovativeness's contribution to business success, case studies have not been enriched with large-scale data; thus, the exact nature of the link between innovativeness and performance is not yet clear (Cho and Pucik, 2005).

Second, knowledge about the drivers of and their simultaneous effects on innovativeness is scarce (Hult, Hurley and Knight, 2004), which restraint understanding of the mechanisms through which innovativeness can be enhanced and facilitate improved performance outcomes.

Third, extant research has employed diverse performance measures; however, most have focused on perceived success or are unidimensional or narrow in scope, failing to tap key business performance aspects (Robson, Katsikeas and Bello, 2008). In contrast, the general literature suggests that business performance is a multi-component construct and calls for the use of multidimensional conceptualizations and measurements (e.g., Morgan, Kaleka and Katsikeas, 2004).

6. Performance

Business performance is a widely debated topic in the literature and various definitions have been proposed. Two perspectives, namely financial and operational, have been used to describe the different (yet interrelated) domains of business performance (Venkatraman and Ramanujam, 1986). Evaluation methods found in the literature may also be divided into two broad groups: one that uses objective financial criteria, and other that uses non-financial, mostly qualitative criteria. In addition, some studies use a mix of objective and subjective criteria; the measures may include: market share, sales of new products and services, return rates on investment, in addition to the evaluation of internal factors such as process enhancements and reduction of response times to changes in the market.

Marshall et al. (1999) describe performance measurement as the "…development of indicators and collection of data to describe, report on and analyze performance. Other authors see performance measurement as the process of quantifying action, and specifically define it as "the process of quantifying the efficiency and effectiveness of action" (Neely et al., 1995).

A performance measure can be defined as a metric used to quantify the efficiency and/or effectiveness of an action. While these definitions are representative of a considerable body of knowledge, they fail to develop performance measurement as a complex and dynamic phenomenon that can be used to interact with business strategy (McAdam and Bailie, 2002)

CHAPTER III

INTRODUCTION

It is the intention of this chapter to explore and provide answers to specific research questions like: which are the key factors for a family-based SME to become more competitive? And how does this type of firms can set up a competitive strategy based on strategic orientations?

Explanation of business competitiveness is a recurring theme examined by academics, consultants and practitioners, and economy globalization have set up a greater competition among companies fostering the need of continuous innovation. This challenge is greater for small and medium enterprises (SMEs) because of their economies of scale and its often lack of resources, and particularly in an emergent economy context.

There is an increasing number of studies focusing on the main competitive factors of SMEs (Aragón-Sánchez and Sánchez-Marín, 2005; Terziovski, 2010) but few of them use qualitative research techniques. The analytical research paradigm is not sufficient for investigating complex real life issues, involving humans and their interaction with technology; this is the reason why it is used a case study research to approach the complex phenomenon of competitiveness in a family-based SME, and also in accordance for the call of researchers to develop this type of studies.

One research stream that has flourished over time is the one related with strategic orientations and its relationship with performance. Strategic orientations are seen as guiding principles that influence a firm´s marketing and strategy making activities (Noble et al., 2002) and several efforts has been made trying to understand how diverse strategic orientations relates between them and how do they impact performance (Grinstein, 2008a; Hakala, 2011).

Finally, technology and innovativeness has been acknowledged as relevant factors for a company to better compete in the market (Zhou et al., 2005), so based in all of the stated before, this research essay looks to advance knowledge and enhance the comprehension on how a family-based SME in an emerging economy looks for improvement in its performance and –in consequence- its competitive position.

ESSAY 1 – STRATEGIC ORIENTATIONS AND THEIR RELATIONSHIP WITH PERFORMANCE: A CASE OF A MEXICAN FAMILY FIRM

Abstract

Despite abundant literature on strategic orientations, little has been done regarding qualitative studies that investigate on the nature of the relationships between strategic orientations (i.e. production orientation, selling orientation, employee orientation and innovation orientation, among others) and their linkage with business performance in a family-based SME. Based on Hakala's (2011) framework for organizing the different approaches to analyze multiple strategic orientations studies and, using the resource-based view (RBV) and contingency theory (CT) as theoretical frameworks, this research presents an exploratory case study that intends to advance the comprehension on how a family-based SME set a competitive strategy; how top management contributes to set up this competitive strategy and how this company relates strategic orientations in order to enhance its performance, with an emphasis on technology orientation. A discussion of the findings as well as conclusions and managerial implications are provided.

1. Introduction

Strategic orientations in a firm have attracted the attention of scholars in diverse disciplines like marketing, entrepreneurship and management. They are seen as principles that direct and influence the activities of a business organization in their effort to achieve a better performance in the marketplace and ensure its viability (Noble, Sinha and Kumar, 2002; Hakala, 2011). Having their roots in the strategy research field, the concept of Strategic Orientation of a Business Enterprises (STROBE) has been studied as a multidimensional construct trying to advance in the operationalization of measures that test theoretical relationships proposed by researchers (Venkatraman, 1989; Morgan and Strong, 2003).

Strategy –as an academic field- has been considered as fragmented and lacked of coherence identity (Nag, Hambrick and Chen, 2007); however, strategic management is undoubtedly a successful emerging field producing a rich research line for scholars.

There is a tacit agreement that argues that the strategic management concept can be categorized in a three-level mode: business, corporate and functional (Venkatraman, 1989). According to this, business strategy can be characterized as the manner in which a firm decides to compete (Morgan and Strong, 2003). Several approaches have been used in order to develop a strategy measurement (narrative, classificatory and comparative). For the comparative approach, Venkatraman (1989) specifies six *a priori* dimensions: aggressiveness, analysis, defensiveness, futurity, proactiveness and riskiness. As an example of the use of this approach, Morgan and Strong (2003) found that firms' emphasis upon analysis, defensiveness and futurity are related to business performance. For a more detailed description of each of the six dimensions, see Venkatraman (1989).

One typology of strategic orientations used in strategy research-that is widely adopted- is suggested by Miles and Snow (1978; cited by Morgan and Strong, 2003):

1. Prospector: firms that conduct externally oriented business.
2. Defender: organizations internally oriented, focusing on efficiency and low cost operations.
3. Analyzer: firms that have the characteristics of prospector as well as defender, depending on the market environment.
4. Reactor: firms that respond to competitive circumstances when they are forced.

Another typology of strategic orientations mainly used in the marketing research area, was proposed by Narver and Slater's (1990) and Slater and Narver's (1994) articles that are considered pioneer studies of the impact of market orientation (MO) on firm performance; Lumpkin and Dess (1996) pioneering entrepreneurial orientation (EO); Gatignon and Xuereb's (1997) technology orientation (TO) and Sinkula, Baker and Noordewier (1997) studying learning orientation. Other strategic orientations have been acknowledged, such as employee orientation, customer orientation,

competitor orientation, and production orientation or selling orientation (Grinstein, 2008a; Calantone, Cavusgil and Zhao, 2002; Noble et al., 2002; Gatignon and Xuereb, 1997). However, for the purposes of this study, only market orientation, entrepreneurial orientation, learning orientation and technology orientation are considered.

Research in marketing has focused almost exclusively on maintaining a market orientation emphasis, based on the adoption and implementation of the marketing concept (Noble et al., 2002; Hult, Ketchen and Slater, 2005); however, some scholars have addressed a caution point about relying only on market orientation because customers do not necessarily know what they really want, due to the lack of information about the latest market trends or technologies (Zhou, Yim and Tse, 2005). Little is reported about multiple orientations studies and how strategic orientations are related between them and its relationship with performance (Lee, 2011; Hakala, 2011). For instance, Hakala (2011) reports that he did not find studies relating entrepreneurial and technology orientation or entrepreneurial, technology and learning orientation and their relationship with firm performance, declaring that a window is open for future research, not only through empirical studies, but also through the use of qualitative research.

Many authors have researched the relationship between market orientation and performance with the purpose of contradicting or fortifying the paradigm in marketing research about the superior contribution of market orientation to performance (Grinstein, 2008a). However, empirical studies have shown mixed results about the linkage between market orientation and performance, several studies have tried to assess how alternative strategic orientations are related to market orientation and how these relationships have an impact on the firm performance (Noble et al., 2002; Grinstein, 2008a). These studies suggest that research should be shifted from the binomial relationship of market orientation-performance toward the multiple orientations-performance form. However, few studies have used more than one strategic orientation (Grinstein, 2008a; Hakala, 2011), so this field remains open and researchers are encouraged to deepen in this research field.

Even though a significant amount of literature has been developed over the last two decades regarding strategic orientations, few qualitative studies can be founded. The present case study has

the purpose of collaborating to the understanding of how managers set up a competitive strategy for the firm; how top management contributes to set up this competitive strategy and how a firm relates strategic orientations in order to enhance its performance. Interlub was selected for the case study by two main reasons; on April of 2012, they received from Endeavor Global -an international organization devoted to catalyze long-term economic growth by selecting, mentoring and accelerating the best high-impact entrepreneurs around the world (Endeavor, 2013)-the International Endeavor Entrepreneur Certificate, which is an international distinction for innovative enterprises around the world. Second, this company received the highest number of mentions when it was asked what firm was considered an extraordinary example of success in the metropolitan area of Guadalajara, considering the opinion of several local businessmen.

The study is organized as follows: section two describes the theoretical framework for the case study, setting the knowledge background. In section three, the methodology is presented and the results are presented in section four. The discussion, theoretical and practical implications are presented in the final section.

2. Theoretical Framework

2.1 Resource-based view

Businesses are always trying to advance in their competitive advantage in order to survive and thrive. The resource-based view theory (RBV) claims that firm's resources influence performance and hence, provide a competitive advantage for the firms. Resources are defined as physical assets, intangible assets, and organizational capabilities that are tied semi-permanently to the firm (Wernerfelt, 1984), but if these resources can provide a competitive advantage in a short term, a sustainable competitive advantage is required for these resources to be heterogeneous in nature (Peteraf, 1993). When resources become neither perfectly imitable nor substitutable without great effort, they are considered resources that can be labeled like valuable, rare, in-imitable and non-substitutable (Barney, 1991).

From the RBV perspective, the strategic orientation of the firm has been considered an important business capacity (Zhou et al., 2005; Hult and Ketchen, 2001), and if this capacity can be translated

into a rare, valuable and in-imitable resource, it is possible for the firm to acquire a competitive advantage (Hult and Ketchen, 2001). Four strategic orientations have been acknowledging to provide a significant impact on firm performance: market orientation (MO), entrepreneurial orientation (EO), learning orientation (LO) and technology orientation (TO) (Calantone et al., 2002; Hakala, 2011).

2.2 Family firms

Family businesses can be tracked through ancient economies and civilizations; Bird et al. (2002) describes that "the economic activities of Greek civilization were largely family controlled and household based" (p. 337), and even in our live time we can associate family last names to successful enterprises (e.g., Rockefeller, Ford or Vanderbilt in the United States).

The study of family firms has faced considerable disagreement, including the way researchers define a family business. Some provide a wide definition as a family business is that one in which the control of strategic decisions relies in a family and there exists an explicit desire that this control remains over the time. An intermediate definition can be stated as a family business is that one in which the control of strategic decisions relies in a family and the family participates in the execution of these decisions. A third definition can be considered as restrictive and can be described as a family business is that one in which several family generations have the control over strategic decisions and are actively involved in the management of the firm as well as an intense and sustainable participation on the board of directors (Astrachan and Shanker, 2003).

Prior 1975, research in the area of family business was relatively limited and the field will be recognized as a separate academic field until the 1990s (Bird et al., 2002) trying to define its boundaries and source of distinctiveness; one of the milestones in the establishment of family business research was the creation of the Family Business Review (FBR) journal in march 1988, as the journal of the Family Firm Institute (FFI) recently born in late 1986.

At the beginning, family businesses had a negative connotation carrying labels like "ma' and pa'" images or "buying a job" (Bird et al., 2002); even they were considered as a negative factor in the economic development of countries due to a comparative analysis about growing models between

USA, Japan and Germany (as one block) and England and France (as the other block). Because the analysis revealed that the first block had the greater growth, and this was associated to less family businesses, the inference was done. However, the field was advancing in its road of its identity looking for (a) professional associations, (b) occupational career and (c) systematic theory (Bird et al., 2002).

Kellermanns et al. (2012) address about the need of a distinct definition in order to unify the field of family business and elucidate what is meant by "family business" but, despite the definition used, without a means to quantify or operationalize a definition, it is difficult to draw comparisons across studies and integrate theory.

However, and besides this "endless" debate about a family business definition, the field has increasingly gained its own identity. Bird et al. (2002) states that it wasn´t until the 1990s that family business research was viewed as a separate academic discipline, and not under the umbrella of small business or entrepreneurship analysis, and since then, several attempts has been done in order to summarize the advance in the field (Bird et al., 2002; Zahra and Sharma, 2004; Chrisman et al., 2008; Craig et al., 2009).

Six key trends were identified by 2004 in family business research: (a) regular stocktaking; (b) domain of the field; (c) topics studied; (d) methods used; (e) borrow but not give back and (f) talk to ourselves (Zahra and Sharma, 2004). Historically, succession is the topic that has dominated the field, followed by performance and firm governance and -in small scale- entrepreneurship/innovation, culture, goal/strategy formulation and internationalization.

As long as empirical studies have emerged, different variables have been used to perform different analysis; person, firm/organization, succession and family business status (compared to nonfamily) has been used as independent variables, while person, firm/organization, succession and family had also been used as dependent variables (Bird et al., 2002). Some authors suggest that the acceptance of family business research in top-tier journals is the outlet for a wider researcher audience, attracting the attention of other areas to the field (Craig et al., 2009).

As it was stated before, one of the main issues that have been researched in the family business field is about performance and the different factors that can lead a family firm to be a competitive and sustainable business; e.g., Craig et al. (2008) investigate if the promotion of family-based brand identity influences competitive orientation and firm performance in family business while Sciascia and Mazzola (2008) explore if family involvement in ownership and management have a nonlinear effect on performance.

2.3 Strategic orientations

Market orientation

Market orientation can be viewed as the activities of the organization that effectively create the behaviors required for superior performance (Kohli and Jaworsky, 1990; Narver and Slater, 1990). Two different approaches have been identified by scholars regarding market orientation. The first one appreciates market orientation related to the organization-wide generation and dissemination of market information and the response to that information. The second one splits market orientation into elements of customer and competitor orientation (Kohli and Jaworsky, 1990; Narver and Slater, 1990). Market orientation may be perceived as a hybrid construct containing elements of exploration, but emphasizing exploitation of market opportunities. There is evidence of a positive link between market orientation and firm performance, although it is a link that may require the support of entrepreneurial behavior in high-technology industries (Renko, Casrud and Brännback, 2009).

Entrepreneurial orientation

Entrepreneurial orientation is a strategic orientation which captures the specific entrepreneurial aspects of a firm's strategy (Covin and Slevin, 1989; Lumpkin and Dess, 1996). The entrepreneurial tendencies toward risk-taking, innovativeness and proactiveness are considered central to entrepreneurial orientation. The main proposition of entrepreneurial orientation is that organizations acting entrepreneurially are more able to adjust their operations to dynamic competitive environments (Covin and Slevin, 1989). Entrepreneurial oriented organizations shape the environment and are willing to commit resources to exploit uncertain opportunities. They explore

new and creative ideas which may lead to changes in the market place, and do so proactively ahead of the competition in anticipation of future demand.

Learning orientation

Learning may be viewed as the development or acquisition of new knowledge which has the potential to influence behavior; a more rigorous view states that learning results in new behaviors or value creation (Hakala, 2011). Learning orientation is viewed as the organization's propensity to create and use knowledge in order to attain competitive advantage. Sinkula, Baker and Noordewier (1997) conceptualize organizational learning orientation in the dimensions of shared vision, open-mindedness and a commitment to learn. It is possible to understand learning orientation as the intersection between technology orientation and marketing knowledge. The development of new technologies can be seen as specific forms of learning; however, the commonly used measures of learning orientation do not deal with the aspects of customers, competitors or technologies (Hakala, 2011).

Technology orientation

Technology orientation or the closely related terms of innovation and product orientation (Grinstein, 2008a), refers to a firm's inclination to introduce or use new technologies, products or innovations. A technology orientation is said to improve business or new product performance, but studies have not always identified positive effects (Hakala, 2011). At the heart of technology orientation is the interest in new solutions that create superior customer value, and some authors tried to incorporate this on the view of market orientation (Hakala, 2011); however, the commonly used scales for measuring market orientation do not incorporate any new technology, product or innovation dimensions, thus technology orientation is viewed separately from market orientation. Gatignon and Xuereb (1997) state that a technology oriented firm can be defined as a firm with the ability and will to acquire a substantial technological background and use it in the development of new products, meaning also to build new technical solutions for new needs of clients.

2.4 Contingency Theory

As was stated before, contingency theory is rooted in the notion that there is no best way to organize a corporation, to lead a company, or to make decisions under all conditions (Ginsberg and Venkatraman, 1985). As an example, if a firm sees strategic orientations as alternatives to choose from, it is because they think that there is a best orientation depending on the contingency (competitive intensity, technology turbulence, demand uncertainty, etc.). Another example is what Gao, Zhou and Yim (2007) found regarding the wide notion that customer orientation represents the most critical component of market orientation, and in consequence it always has a positive impact on the firm performance. In China, it improves performance when demand uncertainty is low, but harms performance when demand uncertainty is high.

In an attempt to better understand the interaction between multiple strategic orientations, Hakala (2011) proposed three approaches to understand market, entrepreneurial, learning and technology orientations (see figure 1). 67 scholarly articles that were published between 1987 and 2010 (Tranfield, Denyer and Smart, 2003) were reviewed using a systematic review method. It tries to identify the key scientific contributions by the construction of an evidence base that would be beyond the parameters of a single study.

Orientations as sequences in development

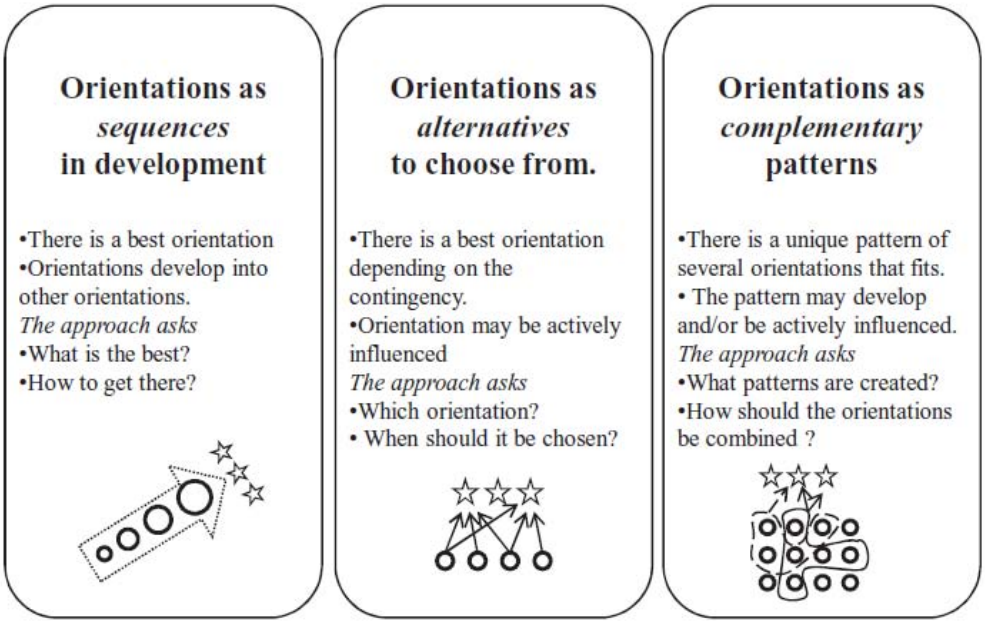
The orientation of the firm evolves over time or through its life cycle; orientations develop into other orientations and it is thought as an evolution from an internal orientation towards an external strategic orientation. Technology-based firms can be the best representation of this because of its initial entrepreneurial orientation (Renko et al., 2009).

Orientations as alternatives to choose from

Some orientations work better than others in certain contingencies, depending on the effects they produce; there is a number of effective orientation alternatives.

External environmental factors can be thought as one of the major reasons why a company decides to choose among different orientations (Gao et al., 2007).

Figure 1. **Framework for organizing different approaches to analyzing multiple strategic orientations**



Source: Hakala (2011)

Orientations as complementary patterns

Orientations are different but work together in configuration; different configurations may suit different contingencies; the orientation configuration evolves. Different strategy topologies can be devised using different dimensions of the overall strategic orientation (Berthon, Hulbert and Pit, 1999).

The contingency approach appears in two of the three options of the framework proposed, suggesting that this theoretical framework could better explain the relationships between the different strategic orientations. Hakala (2011) suggests that orientations as complementary patterns would be the most productive way to enhance understanding of orientations as principles and activities of adaptation that support the performance of a firm.

Finally, the three options proposed are just one way to better understand the different purposes of the strategy defined by the firm.

2.5 Technology orientation and alternative strategic orientations

As one of the latest strategic orientations to be formally considered in the research field, technology orientation and its association with related terms such as innovation has been increasing its relevance in the research field because of its importance as a potential source of competitive advantage (Gatignon and Xuereb, 1997; Zhou et al., 2005).

Table 2 shows the articles where technology orientation is related with alternative strategic orientations. Appendix 3 shows a summary of the articles of table 2 containing: title, author, objective, theoretical framework, data/analysis and results. The first interesting finding when analyzing articles in table 2 is that more than a half of the articles (62.5%) do not have an explicitly theoretical framework. Contingency theory (16.6%) and Resource-Based View (12.5%) appear as the most frequent theories used to support the hypothesis proposed. This can lead to an intuitive conclusion; that more theoretical research is needed in order to robust the research field.

Table 2. **Studies relating technology orientation and alternative strategic orientations**

Investigated Orientations	**Number of articles**	**Articles**
Market and technology orientations	18	Appiah-Adu and Singh 1998; Berry 1996; Berthon et al. 1999, 2004, 2008; Fritz 1996; Gao et al. 2007; Izquierdo and Samaniego 2007; Jeong et al. 2006; Knotts et al. 2008; Marinov et al. 1993; Paladino 2009; Pearson 1993; Shaw 2000; Shipley et al. 1995; Suh 2005; Voss and Voss 2000; Zaharieva et al. 2004.
Market, technology and entrepreneurial orientations	3	Aloulou and Fayolle 2005; Kaya and Seyrek 2005; Li 2005.
Market, technology and learning orientations	2	Noble et al. 2002; Salavou 2005.
Market, technology, entrepreneurial and learning orientations	1	Zhou et al. 2005.

Total	**24**	

Source: adapted from Hakala (2011)

Although performance-orientations appears in 45.8% of the articles, it is clear that strategic orientations open a new window of research for scholars, particularly in untraditional research areas like non-profit or social organizations (Voss and Voss, 2000; Izquierdo and Samaniego, 2007). Another interesting group of studies are related with the relationship between innovation-new product development (Berthon, Hulbert and Pitt, 2004; Jeong, Pae and Zhou, 2006; Zhou, Yim and Tse, 2005). Particularly Berthon et al. (2004) with the development of the scale to measure the innovation-customer orientation (ICON); this represented an advance management research. Regarding empirical analysis techniques, an evolution over time can be seen from a linear regression analysis through structural equation modeling, and the number of studies relating more than two strategic orientations is scarce, with market orientation leading the mainstream.

Finally, nine out of the twenty-four articles demonstrate some type of diagram or graphic that illustrates the relationships among strategic orientations. Some empirical studies state implicitly that the relationships are one to one, so there is no need of any conceptual model.

2.6 Leadership and business performance in family firms

Recently, researchers using the strategic management approach have begun to rely more and more on two theoretical perspectives that represent a confluence of insights from the fields of strategic management, finance, and economics: the RBV of the firm and agency theory. We believe that this focus is both appropriate and entirely consistent with a strategic management view of the field because RBV and agency theory potentially assist in explaining important strategic management issues such as the formulation and content of goals and strategies, strategy implementation and control, leadership, and succession in family firms. Furthermore, both theoretical perspectives have a performance orientation.

The agency theory approach to explain the distinctiveness of family firms is based on altruism and entrenchment. Of the two, altruism is a credible attribute for distinguishing family and nonfamily

firms because it is easier to accept its possible existence among family owners and family managers than its existence among nonfamily owners and managers. The strong indications that there are contingencies that might influence the relationship between altruism, paternalism and performance are also important because it implies that the variations are not random (Chrisman, Chua and Sharma, 2005).

One of the biggest issues with agency theory is the managerial opportunism which can be presented within the members of the family; this can cause a major managerial problem. When a family member is seen by other employees and the rest of the family as an impediment for business success, a phenomenon that has been denominated "Fredo Effect" appear (Kidwell et al., 2012). For this reason, it is very important the preparation of future leaders in the family.

One of the greatest family challenges is to understand that the next generation of leaders will be leading a different company within a distinct environment than their predecessors had. This means that we cannot prepare the children in the same way that our parents prepared us.

The leading styles that were successful in the past are not good enough to face a competitive and global environment, new employee values and radical technological changes.

Carlock and Ward (2001) argue that the following are important abilities that the family leaders must have:

1. Good communicator
2. Conciliator between family's needs
3. Abilities to plan fun and amusement activities
4. Conflict mediator
5. Organized
6. Committed with ethics and family business

3. Empirical Study

3.1 Methods and sample

As the purpose of the study is to identify how a firm relates strategic orientations in order to construct a competitive strategy that produce an improved performance using the example of Interlub, an

exploratory single case study is highly recommended, as long as the question "how" deals with the operational links needed to be traced over time, rather than mere frequencies or incidence. The case study is suitable to provide in-depth information from managers regarding the main motivations behind strategic orientations arrangements (Yin, 2009). The time period of analysis will cover from 2004 to 2013, a reasonable amount of time to look for changes in a competitive strategy and the reasons behind it. Finally, this case study is a great opportunity to research in a so-called "emerging economy" like Mexico; none study was found in the literature review that addressed a research project that included Latin American countries. A profile of Interlub is in appendix 2.

The first step was to design the exploratory case study emphasizing on construct validity and reliability (Ying, 2009). An in-depth semi-structured interview was designed and performed between May 23rd and May 30th, 2013 (see appendix 4). These interviews were performed on top management (president and CEO) as well as five direct reports to top management. It took an average of about 90 minutes, trying to get as much information as possible about the competitive strategy of Interlub. Because of the interview method was semi-structured, three main open questions were asked:

1. In your experience, which are the key factors for the company to be competitive?
2. In your experience, what does the company require to become more competitive?
3. Describe –in a general way- the competitive strategy that the company uses in terms of: market, human resource, technology and innovation, new products or services to the market.

Along with the in-depth semi-structured interview, it was also applied a strategic orientations and firm performance questionnaire to complement the interview information. Additional information was collected from public information like Interlub's web page and some other web based information like Youtube interviews and online news. It is also important to mention enquires were tried for media databases (like Factiva), but not significant results were retrieved. Finally, internal documents relating strategic planning and business model documentation were provided.

A manual content analysis was performed for different printed material of Interlub in order to deepen in information. It is important to consider that many of the documents provided by Interlub do not have the expected temporal sequence (e.g., strategic planning documents). All of this material was used in combination with interviews in order to construct a robust body of evidence that could support the findings from different sources of information (triangulation).

The case study analysis considers three aspects: what elements determine the competitive strategy for Interlub; how top management and first line of executives support the competitive strategy and how strategic orientations are interrelated in order to execute the strategy devised by Interlub.

3.2 Interviews analysis

All of the interviews were digital recorded and transcript in order to be processed with *Atlas TI v.6*. Eight transcript documents were loaded as primary documents along with the codes identified with the interview protocol. Then, each document was coded according the code map loaded in the software.

With the previous part performed, the co-occurrence toll was used. The co-occurrence explorer allows to show all codes that co-occur across all of the primary documents. The result is a cross-tabulation of all codes, and using this information a semantic network was constructed. Figure 2 shows this semantic network.

Codes in capital letters show codes that were considered as main codes for the purpose of the study: strategy, competitiveness, performance and technology were chosen as these main codes. Then, based on the identified quotes of each code, a relationship line between codes was assigned. As an example, let's explore one of the quotes associated between marketing and competitiveness: Roberto Iberri;

"*There is something that we have not completely done; as a niche company that target a very specialized industry, a business to business marketing has to be fully developed*"

This illustrate the type of codes that allow us to say that marketing "is associated" with competitiveness.

Another type of relationship is between technology and innovation. This relationship was labeled "is cause of". Rene Freudenberg:

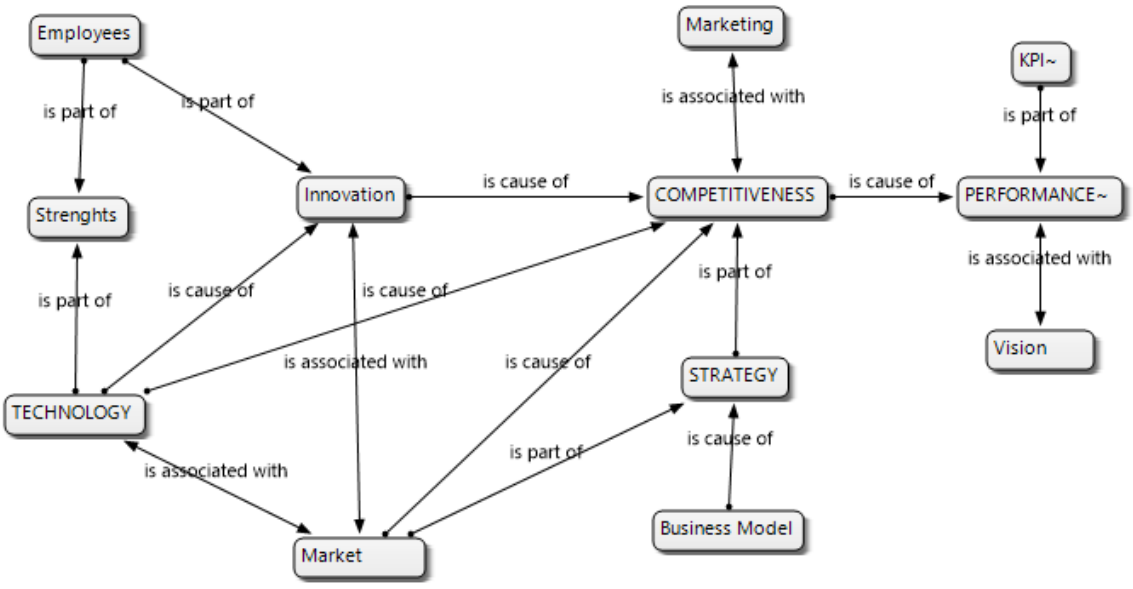
"*We took developments from other companies to study them and then we improved them with our technology in order to satisfy a specific requirement of our client*"

A third type of relationship is "is part of". Let's illustrate this with the relationship between key performance indicators (KPIs) and performance. Jesus Garza:

"*We need to improve our key performance indicators; sometimes it is not clear how our research and development investments have the desired impact on the profit of the company*"

The semantic network allows us to see how top management at Interlub collectively sees the company through the protocol codes used in the interviews, providing some insights about some possible answers for the research questions.

Figure 2. **Semantic network**



Source: Self-elaborated using Atlas TI software

Derived from this analysis, some starting points can be thought for empirical studies; i.e., Craig et al. (2008) explore competitiveness enhancement and performance in family based SMEs.

3.3 The case of Interlub

The history of Interlub could be similar to many family firms around the world. By this time, the company could be considered a second generation family business but in a process of professionalization and institutionalization. The following piece of history includes the actual president of Interlub, Rene Freudenberg and the actual CEO, Roberto Iberri:

> *"In the early 1980s, the Mexican petrochemical industry operated under a system of import substitution, but no company was filling the void in specialized lubricants. In 1984 Rene's father, Peter Freudenberg, decided to fill that niche. Peter did not know much about lubricants, so a few months after founding Interlub, Peter met Roberto who was working in a larger lubricants company in Mexico. A chemical engineer from Guadalajara with a strong technical background and extensive experience in quality control. Roberto served as an advisor to Interlub before joining fulltime in 1986. In 1994, a crisis was turned into an opportunity when within a week the Mexican peso lost nearly half its value. Interlub confronted the situation and started testing their products internationally. Today its lubricants can be found in over 30 countries, most of them in their initial sales stage."*

While Roberto Iberri joined Interlub in 1986, Rene Freudenberg did it in 2003, and by 2004 the following were the mission and vision of the company:

> *"Mission: to provide solutions and specialized services for lubrication, manufacturing processes and maintenance to improve the competitive and ecological situation of our customers.*
>
> *Vision: to become a world class company that adapts to our clients' necessities."*

In 2012, Interlub received the Endeavor Global Entrepreneur award, and Endeavor Global posted the following company snapshot:

"Interlub seeks to be the world's leader in developing and providing customized, environmentally oriented solutions for critical industrial processes and machinery, where friction and wear are involved. For large manufacturers in Mexico, Interlub is smoothing out the road to success. Entrepreneurs Rene Freudenberg and Roberto Iberri improve the efficiency and longevity of their clients' expensive industrial machinery by replacing conventional industrial lubricants with specialized solutions. Interlub has been able to gain market share by avoiding the saturated conventional lubricants market, focusing instead on the minority of lubricant applications that demand high-touch service and specialized – often made-to-order – products. By helping customers to identify their needs through a high-touch customer service and consulting model, Interlub has won over nine of the ten largest manufacturing companies in Mexico. With the support of these high profile clients, Interlub's brand recognition has spiked and sales have increased substantially since 2006.

Interlub has a history of seizing opportunities in challenging markets. In the early 1980s, the Mexican petrochemical industry operated under a system of import substitution, and specialized lubricants were not available. In 1984, Rene's father, Peter Freudenberg, decided to fill that niche. Peter didn't know much about lubricants, so a few months after founding Interlub, Peter sought out Roberto, who was working in a larger lubricants company in Mexico at the time. A chemical engineer from Guadalajara with a strong technical background and extensive experience in quality control, Roberto served as an advisor to Interlub before joining fulltime in 1986. In 1994, the Mexican crisis turned the market on its head, and in just a week the peso lost nearly half its value. Interlub was able to pivot, maintain profitability, and begin exporting products, serving clients as far away as Japan.

Peter's son and current president of Interlub, Rene, has built a fast-growing business on this resilient foundation. Raised in Guadalajara, Rene studied business administration in Germany before earning an MBA from Tias Nimbas in the Netherlands. He then went to work for the multinational tire company Continental AG. Rene gained valuable international

experience working in Germany, Belgium, England, and Spain after graduation, but returned to Guadalajara in 2004 to rejoin the family business. Soon thereafter, he moved to Brazil to launch Interlub's Brazilian subsidiary and distributor. In 2006, Peter retired and Rene returned to Mexico to take over as president of Interlub."

By 2013, Interlub´s competitive strategy is based on three main concepts:

1. Market contact (labeled C); that determines direction and rhythm
2. Technology (labeled T); taking advantage of experience and R&D
3. Production and Processes (labeled P); complex but flexible

The most operative part of the strategy is performed through a very specialized salesman-consultant; a leader that is identified with the following characteristics:

- Reliable
- Creative
- Aspirational
- Charismatic
- Service oriented
- Systemic thinker
- Analytical
- Technically strong
- Empathic
- Ambassador of the Interlub culture
- Self drived

According to Interlub´s data, it takes approximately two years to train this type of sales force. See appendix 1 for a summary of the research case.

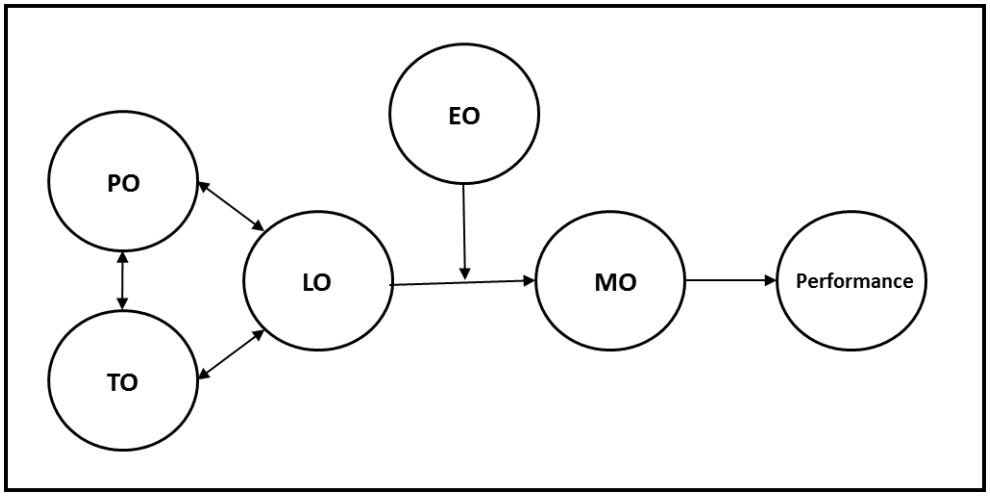
4. Results

Identified model

The first significant result in the Interlub case was the identification of a model corresponding to the strategy devise by the company. Figure 3 shows the model identified. This configuration of strategic orientations seems to agree with Hakala's (2011) evidence that suggest that the complementary pattern is the most productive way to enhance understanding of orientations as principles and activities of adaptation that support the performance of a firm.

The model was constructed by interpreting the information gathered from different information sources. It is interesting that *production orientation* appears in the model like a "virtuous" loop with technology orientation and learning orientation. This finding also strengths the contingent nature of a firm addressed by Ginsberg and Venkatraman (1985), because Interlub heavily relies on its technological experience and its sales force specially trained to detect and design an *ad hoc* solution for their customers.

Figure 3. **Strategic orientations model identified for Interlub**



Source: Self-elaborated

Questionnaires results

Two sources of information were used to present the following results: the in-depth semi-structured interview and the strategic orientations and performance scales. Table 3 shows some descriptive data

that provides context of Interlub executives. It is interesting to observe that the period of time defined for the case study (9 years) is almost the same that the average of the number of years that an executive holds a position. One possible conclusion of this data is that Interlub is experiencing a consolidation about the performance of the first line of executives. Table 4 presents the results for the strategic orientations questionnaire.

Table 3. **Descriptive statistics for the executives interviewed (n=8)**

Age (average in years)	Years in the company (average)	Years in the position (average)
43	16.41	9.41

Source: Self-elaborated

Table 4. **Descriptive statistics for strategic orientations and performance (mean values; n=8)**

MO	EO	LO	TO	PERFORMANCE
5.36	4.86	6.28	3.8	5.41

Source: Self-elaborated

Scales are seven-point Likert with anchors “strongly disagree” (=1) and “strongly agree” (=7) except for performance that anchors “inferior” (=1) and “superior” (=7). For technology orientation a five-point Likert scale was used with anchors “strongly disagree” (=1) and “strongly agree” (=5) (see appendix 4). It is interesting to observe that this data is consistent with the proposed model in the sense that learning (6.28/7) and technology (3.8/5) scores are high (“virtuous” loop) along with the high score of market orientation (5.36/7). In contrast, the subjective low score for entrepreneurial orientation (4.86/7) could be interpreted as the mediating effect of this orientation in the model. It is also remarkable the high score for the performance item (5.41/7).

Interviewers were also asked to evaluate how competitive they thought the company was, using a one to ten scale where 1 stands for no competitive at all and 10 stands for fully competitive.

The average of the respondents (n=8) was: 8.38 for the lower limit and 8.69 for the upper limit. And when they were asked (in their experience) about what factors they thought that could improve the company competitiveness, diverse responses were provided: to expand to different markets; to

professionalize the company; to better use the technical experience (new product development); to better use the actual business model; to look for different applications with the same base product.

In the same way, interviewers were also asked to evaluate the company performance, using a one to ten scale where 1 stands for very poor performance and 10 stands an outstanding performance. The average of the respondents (n=8) was: 7.44 for the lower limit and 7.63 for the upper limit. And when they were asked (in their experience) about what factors could improve the company performance, also two characteristics appeared: a better internal communication and a clear definition of key performance indicators (KPIs).

5. Discussion and conclusions

The exploratory case study performed at Interlub was designed to better understand: how a firm devises a competitive strategy, how leaders contribute to this competitive strategy and how strategic orientations interact in order to enhance the company performance.

The identified model tries to capture Interlub's competitive strategy, based on what Rene Freudenberg labels as market contact. One possible alternative in the identified model is changing market orientation for more specific customer orientation. The concept of market contact is grounded through the specialized technical consultant and currently is the key resource for the company to enhance its performance. Under the RBV theory, the market contact concept can be seen as a source of competitive advantage.

Regarding the question: how competitive is your company in the market? The average number can be considered high (8.69/10) however, the top management is not completely clear on how the competitiveness of the company can be enhanced. This is not the case for the question: how do you evaluate your company performance? The average number reflects a wider opportunity area (7.63/10), but executives have a clearest landscape on how performance can be improved: better internal communication and clearest KPIs. They also detected a lack of role definition that could be improved.

Regarding strategic orientations, the evidence shows an agreement with Hakala's (2011) framework and strategic orientations appear as complementary patterns in consistency with the contingency paradigm.

Implications for theory

As we saw in the case of Interlub, the lack of leadership and a good internal communication can cause problems in the family and in the company. For this reason, preventive measures must be taken to avoid or minimize these problems.

The problem in the family business is that many things can be assumed; there are many rules that are not written and many ideas that the founder has but they are never shared.

For example, when one of the second generation members lets the family know about going to work for a different company, as in Interlub, the father reacts saying: "And why don't you join our company?" and the answer is: "Because you never told me that you wanted me to work there".

For this reason, it is important to have an "employment agreement". This is a document that establishes the conditions for the entry and exit of the family in the company. First at all, the founder must make clear his intention of offering employment to his children in the company, but without forcing the option; at the end the participation is voluntary (a very attractive career must be designed in order to attract the youngest members without being forced). It must also be cleared that the fact of being accepted in the company does not guarantee an executive position in the future, this will depend on the performance. This is a basic part if the company wants to be professionalized: avoid nepotism in any decision. The family can define the professional requirements that the members need in order to be part of the business or be promoted once they are part of the company. For example; one of the requirements is that the family members must have external experience or a bachelor degree. All these specifications are covered in the employment agreement.

The employment agreement must be redacted before the youngest family members join the company and the opportunities must be described clearly in a way that even the children can understand. Not

all the children and cousins can be directors; thus it must be clear that the highest positions will be assigned by performance, and not by last name.

This agreement is as important as a contract; it is the tranquility between the current and future employees of the family business. And like any other agreement, it can be modified before the corresponding corporate governance and always under the family consensus. The "employment agreement" can be included in a family protocol, which highlights the rules and minimum requirements to participate in the company.

Implications for practice

Considering the results of this case analysis, some conclusions can be derived for management practice. As we noticed in the results of the interviews, Interlub suffers a lack of role definition which can be an opportunity to improve its competitiveness and performance if this problem is solved.

The definition of roles is a process more than an isolated activity. The definition of profiles goes along with the description of positions; they are two processes that we prefer calling "living processes", they will allow the constant renewal and updating of the family business. These "living processes" are connected naturally with the creation of organizational charts during different stages of the family business. For example, the first organizational charts will be the ones that integrate the first family members to the company, however, when they integrate the family members it is very common not to describe each one of them, thus it is recommended that before incorporating family members or not family members to the next stage of the family business it is important to make an organizational chart and delimitate the functions that these new members will have in the business.

One of the main and potential benefits of the definition of roles is the prevention of conflicts that can damage the company and the family.

The company must be presented as a place with many challenges and growth opportunities; the children must know about the business possibilities in a globalized world. At home the family must talk about the joy and achievements in the company. This is important and sometimes we read that several authors "forbid" the company owners to talk about business issues at home, but this is not

appropriate; what it cannot be done is to take problems to home, this must be restricted to the labor space, but definitely the successes must be shared during family meals and toast for them (non-alcoholic beverages) with the purpose of sharing that energy and plenitude that will help the family communication.

6. Limitations and implications for future research

Several limitations and future research lines should be acknowledged for this essay. First, it is based in a single case study. Yin (2009) recommend that at least two case studies should be performed in order to compare results, however he is not against a single case research if the case is well developed. Future research recommendation address on a multi case research design.

Another limitation of the study is the lack of generalization about results. This is a restriction that is normally thought for the case study research methodology however, Flyvbjerg (2006) says that this is a misunderstanding and provide arguments for it. Findings in the study remains for it; however, ideas and insights can be used to design similar future case studies.

Other limitation of the study is that it was designed to explore four of the main strategic orientations found in the literature: market orientation (MO), entrepreneurial orientation (EO), learning orientation (LO) and technology orientation (TO), but other strategic orientations can be used to explore future research, i.e., selling orientation, employee orientation, production orientation, among others (Grinstein, 2008a).

Other aspect that limits the study is the lack of a formal questionnaire to research in the family part of the business. This aspect was covered with an open anecdotal conversation because of the culture that México has regarding this topic, however, a call to researchers is made to encourage them to design and use better research instruments about case study research in family businesses.

Even though that the study covers a nine-year time span (2004-2013), a more detailed by year analysis is suggested for an explanatory case research.

Another uncovered aspect of the study is that it does not explore one of the main topics of research in family firms that has to deal with succession. Undoubtedly a future research line is to deepen in

the understanding of the particularities of family firms like family council and family influence (Kellermans et al. 2012) and its relationships with business strategic orientations.

Another research opportunity is to look for organizational SME theory and design theory building research cases to perform robust qualitative research.

CHAPTER IV

INTRODUCTION

Based on the previous chapter findings, the intention of this chapter is to investigate –quantitatively- the relationships between relational capital and technology orientation with innovativeness and small and medium enterprises (SMEs) performance.

Innovative capacity of firms has traditionally been explained through intra-firm characteristics (Capello and Faggian, 2005), but recent literature has been putting more emphasis on determinants that are external to the firm. As we found in the previous chapter, much of the product innovation for the company studied comes from the interaction between technical-sales person and their clients, but this interaction is just one of the many that can be identified because once that the company have understood the client requirements, the company looks for other external actors like specialized suppliers and scientific researchers that can participate in product development acquiring in this way a competitive advantage.

Literature review has revealed that relational capital –understood as the market relationships, power relationships and cooperation between firms, institutions and people- has been under-researched in the strategic orientations literature and much more in the context of SMEs in emerging economies, so this study can be considered as an original contribution as far as we understand.

Technology orientation (Gatignon and Xuereb, 1997) and innovativeness (Hult et al., 2004) are the other concepts used in the study because as it was mention before, technology and innovativeness are acknowledged as relevant factors for a company to enhance its performance and in consequence to better compete in the market (Zhou et al., 2005).

Based in the previous context and based also in the literature review, a set of hypotheses were developed and tested using structural equation modelling over a sample of 360 SMEs surveyed in four main cities in México.

ESSAY 2 – TECHNOLOGY ORIENTATION, RELATIONAL CAPITAL, INNOVATIVENESS AND PERFORMANCE: FINDINGS IN MEXICAN SMES

Abstract

This essay investigates the relationships between relational capital and technology orientation with innovativeness and firm performance. Thought as a source of innovativeness, relational capital has been under-researched, so this study looks to contribute to advance in this research stream and also in the debate of technology as a source of competitive advantage for SMEs. Another significant contribution is the investigation of the relationship between relational capital and technology orientation. A total of 360 respondents completed a survey conducted at four main cities in México. Using structural equation modeling (SEM) technique, the results reveal a strong positive effect of relational capital over innovativeness but not so strong in firm performance. Findings also show a similar result for technology orientation, but with less intensity. Finally, a strong positive effect of relational capital over technology orientation was also found. Implications and areas for future research are discussed.

1. Introduction

Enterprises seek –almost in a daily basis- how to face change in the current socio-economic context in order to get a better performance and in consequence to obtain a better business result. The competitiveness challenges that persist in emerging and developing economies are partly a result of conditions –determined by a mix of market and policy factors- which are external to the companies operating in them (OECD, 2014). Because of this, major scholarly attention have been developed to strategic orientations that are seen as principles that direct and influence the activities of enterprises in order to generate the behaviors that ensure their viability and performance (Hakala, 2011; Gristein, 2008). The resource-based view (RVB) of a firm is the theoretical framework of much of the work attempting to understand the forces that drive business performance (Kyrgidou and Spyropoulou,

2013) and has served as a primary theoretical foundation in understand how resource heterogeneity can explain inter-firm performance variations (Barney, 1991).

Another key component that has been studied and recognized in the business success of organizations is innovation. There exist several definitions of innovation like the generation, acceptance and implementation of new ideas, processes, products or services or the successful implementation of creative ideas within an organization, (Calantone, Cavusgil and Zhao, 2002). However, researchers have not found agreement in the definitions of innovation and innovativeness (Calantone and Garcia, 2002). Innovativeness is most frequently used as a measure of the degree of "newness" of an innovation (Calantone and Garcia, 2002) and the majority of research takes a firm's perspective toward newness, although others take different points of view. The concept of innovativeness has received considerable attention in the business and management literature, but knowledge remains limited and offers little insight into the efforts that organizations perform to enhance innovativeness (Kyrgidou and Spyropoulou, 2013). Efforts has been carried out trying to understand how firm innovativeness affects firm value (Rubera and Kirca, 2012), but an exact nature of the link between innovativeness and performance is not yet clear (Cho and Pucik, 2005), despite the perceived role of innovativeness in enhancing performance (Deshpandé and Farley, 2004).

A significant number of SMEs still fail to introduce product innovations successfully or to adjust their product portfolio to changing customer demands and competitive conditions. Traditionally, investments in R&D, customer orientation and planning are regarded as crucial for successful innovation. However, scholars increasingly argue that innovation is a knowledge creating process and the capability to be innovative is hence closely related to a firm's intellectual capital (Nelson, 1991; Nonaka, 1994; Subramaniam and Youndt, 2005). Therefore, companies have to invest in human resources, relationships and organizational procedures in order to raise their innovation capabilities and build up important complementary assets which assure the success of innovation activities.

The nature of the relationship between innovation and intellectual capital is still fragmented, and only a few studies have investigated its linkage empirically (Leitner, 2011). Most studies have

investigated the role of various forms of intellectual capital, such as human capital (Thornhill, 2006) in isolation. This study contributes to research by examining the role of relational capital on innovativeness and technology orientation with the aim of understand its impact on firm performance.

2. Theoretical framework

2.1 Technology orientation and innovativeness

Technology orientation, or the closely related terms of innovation and product orientation (Grinstein, 2008a), refers to a firm's inclination to introduce or use new technologies, products or innovations. A technology orientation is said to improve business or new product performance, but studies have not always identified positive effects (Hakala, 2011). In a technology-oriented firm, creativity and invention are the organizational norm and values that guide its activities and strategies (Zhou, Yim and Tse, 2005), and if this activity derives in new products or new services it is thought that the firm will be having better results.

It is seen that firms that technology-oriented firms heavily invest in R&D and normally accept state of the art technology, encouraging employees with new radical ideas creating a "breakthrough innovation" culture. A similar perspective was suggested by Lumpkin and Dess (1996), who asserted that in order to renew stagnant companies, an entrepreneurial spirit of creating new businesses and breakthrough innovations can be encouraged.

Then can be hypothesized:

H1: Technology orientation is positively related to innovativeness.

2.2 Relational capital and innovativeness

It is known that enterprises need to stablish effective innovative networks with clients, suppliers, competitors, universities and research institutions if they want to become more competitive (Chang, 2003). Some authors found that an increase in the number of innovations is due to the complementary external competencies shared with clients and suppliers (Wu, Lin and Hsu, 2007). In this way, Stuart

(2000) propose that because innovative companies pose a better technological capacity, it is expected that the know-how acquired from the more innovative allies stimulate the development of new technology. There exist also evidence that for those companies performing at intensive high-tech environments, one way to enhance their innovative capacity is to develop external strategic technological alliances (Hagedoorn and Duysters, 2002).

Collaborative research networks are especially important in high technology sectors, as these are industries where a single organization is unlikely to have all the resources and capabilities necessary to develop and implement a significant innovation. This reality has encouraged the creation of technological clusters (Schilling, 2005). Collaboration that arises from these networks can occur through joint associations, licenses, investigation societies, networks of added value, scientific interchange, research programs supported by the government and even through informal networks (Schilling, 2005; Pittaway et al., 2004).

Then can be hypothesized:

H2: Relational capital is positively related to innovativeness.

2.3 Innovativeness and firm performance

The traditional explanation for the positive relationship between firm innovativeness and performance is supported on Schumpeter's theory of profit extraction that sustain that through innovation companies gain a temporary quasi-monopoly, enabling them to extract rents (Rubera and Kirca, 2012) and the adoption of innovation is generally intended to contribute to firm performance (Damanpour, 1991).

Then, firms want to maintain their market power over time through a continuous stream of innovations, trying to sustain a superior performance with multiple product introductions and innovativeness positively contributes by attenuating the natural forces of competition or changes the consumption patterns that tend to dissipate superior returns over time (Sharma and Lacey, 2004).

Innovative firms are more likely to continually improve their operations, production methods, and product development processes. Through continual improvement, these companies can increase the efficiency and effectiveness of various functions inside the firm (Tsai and Yang, 2014).

It is also known that highly innovative firms are more capable of developing creative solutions that undermine those of their competitors (Hughes and Morgan, 2007). In addition, managers at such firms tend to devise new ways of resolving business problems that "provide the basis for the survival and success of the firm well into the future" (Hult et al., 2004 p. 429).

Then can be hypothesize:

H3: Innovativeness is positively related to firm performance.

2.4 Technology orientation and firm performance

Empirical evidence suggest that a technology orientation has a positive relationship with new product innovativeness and firm performance (Gatignon and Xuereb, 1997; Voss and Voss, 2000; Hult et al., 2004). As the importance of technological strategies is being increasingly accepted, technology is seen as a decisive factor to create new business opportunities and secure a competitive advantage.

Zahra and Bogner (2000) argue that using technology development strategies sustained on the change of external environment –technical innovativeness- and strategies for upgrading product and external resources, play a key role in business performance.

When assessing the concept of technology orientation, the dimensions of technology orientation should be investigated first. Innovative companies tend to be research-development oriented as well as aggressive and future-oriented in learning new technology. They also tend to use sophisticated technologies to create new products (Cooper, 2000). It is also found that those companies that employ as many technology experts as possible are more likely to manufacture innovatively.

It is therefore suggested that for an organization to out-perform their competitors by using technology capabilities, technology orientation is the recommended strategic orientation (Gatignon and Xuereb, 1997).

Then can be hypothesized:

H4: Technology orientation is positively related to firm performance.

2.5 Relational capital and firm performance

Intellectual capital has recently increased it recognition as a driver of firm value and competitive advantage (Ming-Chin, Shu-Ju and Yuhchang, 2005). Although intellectual capital –and then, relational capital- may be a source of competitive advantage, most organizations still do not understand its nature and value (Abdel-Aziz and Shawki, 2010; Bontis, Chua and Richardson, 2000). Knowledge derived from employees, customers and suppliers and other business agents may result in process innovations that increase output and reduce variations; moreover, the higher level of relational capital, the better planning, problem solving and troubleshooting, all of which most likely increase production and service delivery efficiencies and thereby, reduce organizational costs (Youndt et al., 2004).

Additionally, relational capital could reduce organizational costs by increasing an organization's information processing capacity. Thus trust in relationships among employees and with suppliers and customers facilitates both, efficient exchange of information by reducing the need for time consuming and costly monitoring and the effective exchange of information by removing the perceived need to veil or hide sensitive information (De Clercq and Sapienza, 2006).

Finally, Firer and Williams (2003) argued that in some industries and some countries, relational capital may play a more relevant role than other intangible assets in enhancing firm performance.

Then can be hypothesized:

H5: Relational capital is positively related to firm performance.

2.6 Relational capital and technology orientation

One fundamental idea of technology orientation is that long term success is best created through new technological solutions, products and services (Hakala and Kohtamäki, 2011). In a technology-oriented firm, creativity and invention are the organizational norm and values that guide its activities and strategies (Zhou et al., 2005).

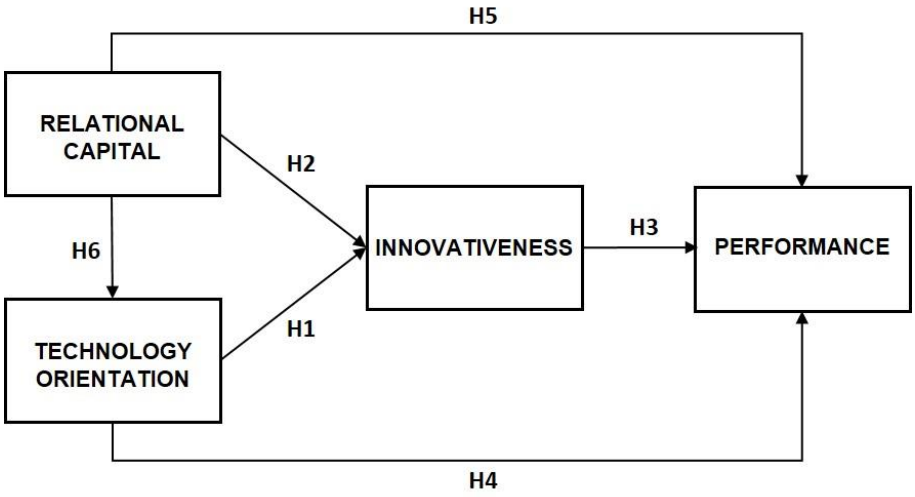
Jeong et al. (2006) indicated that a firm's technical skills, R&D resources and technological base can be central in bringing innovative, better-designed products into the market. Therefore, such a technology-oriented firm is proactive in acquiring new technologies and applying the latest technologies to develop its new products/services or supporting applications (Gatignon and Xuereb, 1997). Accordingly, it is proposed that a company's technology orientation should lead to the development of more innovative, technologically superior products compared to those offered by competitors.

Then can be hypothesized:

H6: Relational capital is positively related to technology orientation.

Figure 4 shows the model proposed for the study.

Figure 4. **Model proposed**



Source: Self-elaborated

3. Research Methodology

3.1 Research context and sample

A random sample of small and medium enterprises (SMEs) in México provide the empirical setting for this research. A total of 360 companies from service, industry and commerce sectors were interviewed in four main cities: México City, Guadalajara, Monterrey and Puebla. Table 5 shows the official classification in México regarding SMEs.

Table 5. **Official classification of SMEs in México**

Classification by Number of Employees			
Sector/Size	**Industry**	**Commerce**	**Services**
Micro	0-10	0-10	0-10
Small	11-50	11-30	11-50
Medium	51-250	31-100	51-100

Source: DOF (2015)

Data collection

Professional interviewers of a renowned Mexican-polling firm applied one by one questionnaires to firm directors, business owners and business responsible during February 2014.

Questionnaire design.

A questionnaire was design using adapted scales for each of the constructs proposed in the study. After that, a group of experienced academics at ITESM University, Guadalajara Campus reviewed the questionnaire and provided feedback. Finally, the polling firm tested the questionnaire before it was applied.

3.2 Measures and variables

All constructs were measured using Likert-type scales with a five-point response format anchored by “strongly disagree” to “strongly agree” unless otherwise noted. Independent variables will be

discussed first, followed by the description of the dependent variables and the control. All α values are reported in Appendix 5 and showed acceptable values with $\alpha > 0.769$.

Independent variables

Technology orientation.

To measure technology orientation an adapted five item scale based on Gatignon and Xuereb (1997) were used. The scale represents the ability and willingness of an organization to develop new technologies and the usage of sophisticated technologies (Gao, Zhou and Yim, 2007).

Relational capital.

To measure relational capital an adapted six item scale based on Delgado-Verde et al. (2011) were used. The scale represents the ability to measure the relationships between clients and suppliers.

Innovativeness.

To measure innovativeness an adapted three item scale based on Baker and Sinkula (1999a) were used. The scale considers three basic concepts: new products launching, degree of differentiation of innovations and degree of success of new products.

Dependent variable

Performance.

To measure performance an adapted six item scale were used. It was based on Jaworski and Kohli (1993) and Narver and Slater (1990). It includes financial, customer satisfaction, employee satisfaction and operations aspects. Subjective measures of performance have been shown reliable and valid when objective data is not available, like SMEs case (Dess and Robinson, 1984).

Control variables

Firm size and firm age were used as control variables.

4. Analysis and Results

The first step was to evaluate scale reliability. Appendix 5 shows the items of each scale, including its Cronbach´s alpha. Then, an exploratory factor analysis using IBM SPSS Statistics 21 were performed in order to validate each construct proposed; results are shown in Appendix 6. Table 6 shows a summary of these analyses and table 7 shows the correlations values.

Table 6. **Summary of scale reliability and exploratory factor analysis**

Constructs/Measures	Cronbach's alpha (>0.7)	KMO (>0.5)
Relational Capital	0.805	0.840
Technology Orientation	0.839	0.847
Innovativeness	0.769	0.685
Performance	0.841	0.863

Source: Self-elaborated

After the exploratory analyses, Structural Equation Modelling (SEM) technique were used. This technique is widely used by marketing researchers (Saavedra, Criado and Andreu, 2013 p. 217), and is a combination of the Confirmatory Factor Analysis (CFA) and multiple regressions. It allows researchers to analyze relationships between observed and no observed variables (constructs) (Schreiber et al., 2006).

Table 7. **Correlation values**

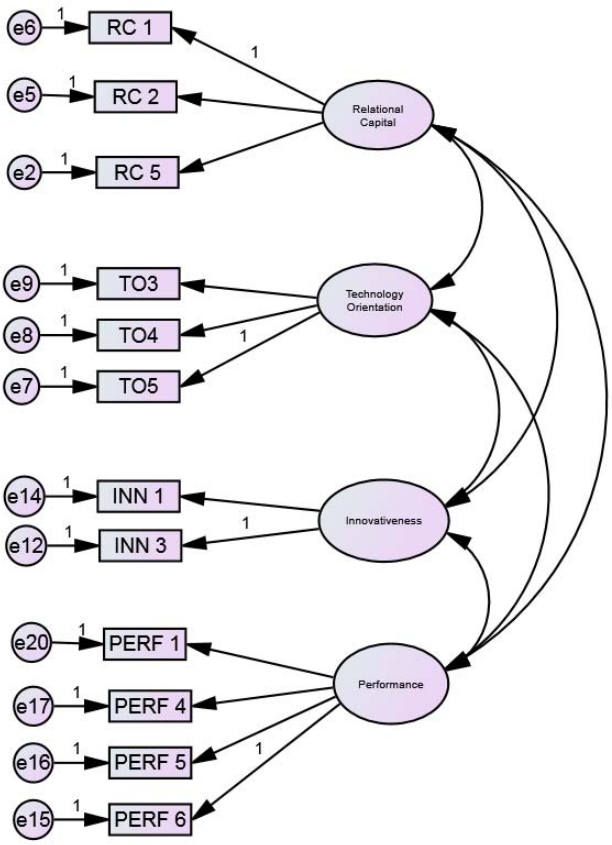
	1.	2.	3.	4.	5.
1. Size	1				
2. Firm age	.108*	1			
3. Technology Orientation	.124**	.036	1		
4. Relational Capital	.080	-.122*	.494**	1	
5. Innovativeness	.157**	-.095*	.331**	.507**	1
6. Performance	.110*	-.128**	.356**	.484**	.608**

Notes: N=360, *p < 0.05; **p < 0.01
Source: Self-elaborated

The structural model shows the relationships between the different latent variables (constructs) and the measurement model shows the relationships between latent variables and the observed variables used to measure latent variables. Figure 6 shows the structural model proposed that includes relational capital, technology orientation, innovativeness and performance as constructs.

Table 8 shows the main indexes values of model fit and Figure 5 shows the CFA analysis for the model proposed. AMOS 21 were used to conduct CFA analysis.

Figure 5. **Confirmatory Factor Analysis for the proposed model**



Source: Self-elaborated

Table 8. **Fit indexes for the SEM model proposed**

Model Fit	Criteria	Index value
χ^2 / df	< 3	1.783
CFI	> 0.9	0.975
GFI	> 0.9	0.963
RMSEA	< 0.07	0.047

Source: Self-elaborated

Validity refers to the degree to which a measure actually assesses the theoretical model it is supposed to assess. Convergent validity refers to how well the latent factor is well explained by its observed variables, then your variables correlate well with each other within their parent construct. Discriminant validity measures if your variables correlate more highly with variables outside their parent factor than with the variables within their parent factor; i.e., the construct is better explained by some other variables (from a different factor), than by its own observed variables. Table 9 shows that the model fulfills for validity parameters.

Table 9. **Reliability, convergent and discriminant validity (CR > 0.7, AVE > 0.5; CR > AVE, MSV < AVE)**

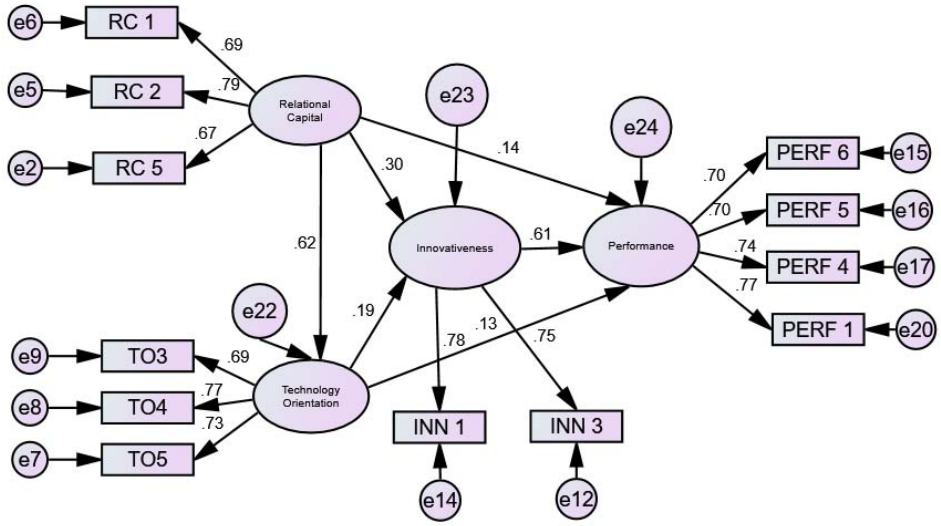
	CR	**AVE**	**MSV**	TO	RC	INN	PERF
TO	0.770	0.528	0.378	**0.726**			
RC	0.760	0.515	0.378	0.615	**0.717**		
INN	0.744	0.592	0.510	0.380	0.424	**0.770**	
PERF	0.819	0.531	0.510	0.447	0.474	0.714	**0.729**

Source: Self-elaborated

As table 8 shows, the model fit satisfies all the indexes conditions, and it can be inferred that SEM results would be reliable.

Figure 6 shows the SEM analysis result and table 10 shows the relationship between variables in the proposed model. From table 10 it can be seen that: i) there exist a direct and positive effect of technology orientation over innovativeness, in accordance with Zhou, Yim and Tse (2005), supporting hypothesis 1; ii) there exist a direct and positive effect of relational capital over innovativeness, supporting hypothesis 2; iii) there exist a direct and positive effect of innovativeness over performance, supporting hypothesis 3: iv) there exist a direct and positive effect of technology orientation over performance, supporting hypothesis 4: v) there exist a direct and positive effect of relational capital over performance.

Figure 6. **SEM model showing standardized coefficients**



Source: Self-elaborated

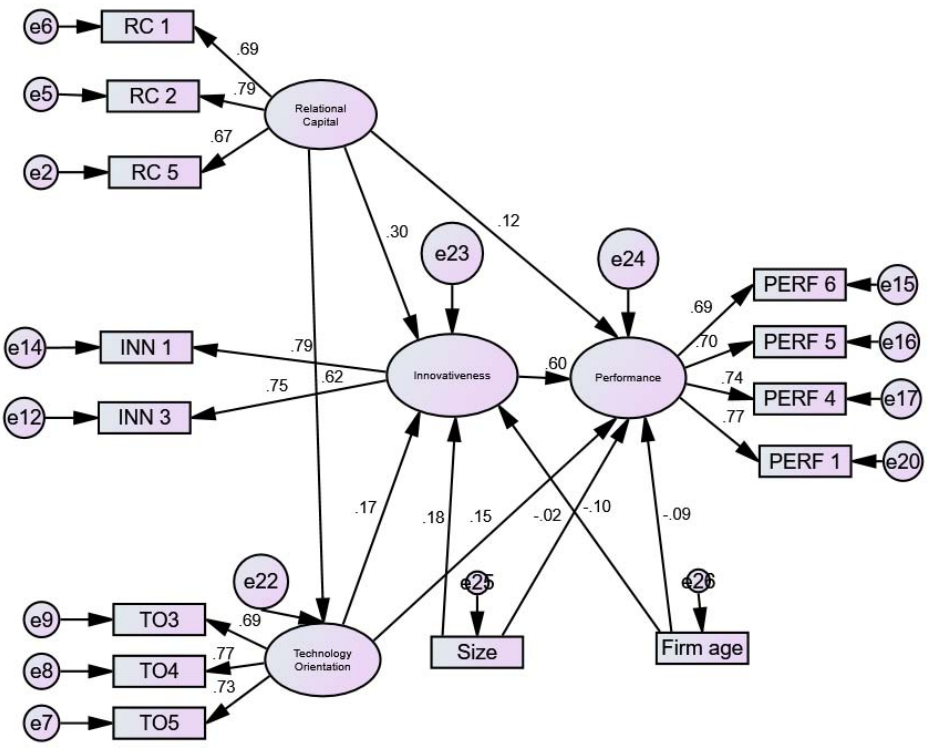
Table 10. **Relationship between variables in the proposed model**

Relationships			Estimate	Std. Estimate	S.E.	P	Hypothesis
INN	<---	TO	.178	.193	.087	*	H1 is supported
INN	<---	RC	.365	.305	.116	**	H2 is supported
PERF	<---	INN	.559	.606	.074	***	H3 is supported
PERF	<---	TO	.113	.133	.067	*	H4 is supported
PERF	<---	RC	.150	.135	.090	*	H5 is supported
TO	<---	RC	.799	.615	.102	***	H6 is supported

Notes: N=360, *p < 0.05; **p < 0.01; ***p < 0.001
Source: Self-elaborated

Figure 7 shows the SEM model, introducing the control variables size and firm age. As it is shown in table 11, all of the hypotheses remained supported except H5. Slight changes can be seen in the standardized coefficients and changes in p values.

Figure 7. **SEM model showing standardized coefficients including control variables**



Source: Self-elaborated

What it is noticeable is the significant positive relationship between size and innovativeness. This is counterintuitive based on Acs and Audretsch (1987). They found empirical evidence that large firms are not more innovative than smaller ones. They stated that if it is true that large firms have proven to be more innovative in a number of industries, the opposite is true in others.

On the other side, relationships between size and performance, firm age and innovativeness and firm age and performance were not significant as it was expected.

Table 11. **Relationship between variables in the proposed model (including control variables)**

Relationships			Estimate	Std. Estimate	S.E.	P	Hypothesis
INN	<---	TO	.158	.173	.085	*	H1 is supported
INN	<---	RC	.356	.300	.114	**	H2 is supported
PERF	<---	INN	.553	.601	.076	***	H3 is supported
PERF	<---	TO	.127	.151	.066	*	H4 is supported
PERF	<---	RC	.130	.119	.089	ns	H5 is not supported
TO	<---	RC	.800	.615	.102	***	H6 is supported
INN	<---	Size	.185	.178	.060	**	Is significant
PERF	<---	Size	-.018	-.019	.047	ns	
INN	<---	Firm age	-.005	-.099	.003	ns	
PERF	<---	Firm age	-.004	-.088	.002	ns	

Notes: N=360, *p < 0.05; **p < 0.01; ***p < 0.001; ns: non significant.
Source: Self-elaborated

5. Discussion and Conclusions

The hypothesized model proposed were widely support, suggesting that theories normally applied to developed economies can be applied to emerging economies and in SMEs context. Several conclusions can be derived from this essay.

Specifically, a positive relationship between innovativeness and performance was confirmed in accordance with previous research (Hult et al., 2004; Rubera and Kirca, 2012; Kyrgidou and

Spyropoulou, 2013). The adoption of innovation is generally intended to contribute to firm performance (Damanpour, 1991) however, Woodside (2005) address on Hult et al. (2004) arguing that analyses should advance from the one-directional structural equation modeling of innovativeness and business performance to a systems dynamic modeling that includes more real feedback looped models. An example of this is the use of inertia as a variable that provides the possibility of balance a loop. Strategic management literature demonstrates that business performance leads positively to inertia, with a subsequent decay of innovativeness (Christensen, 2003).

Regarding technology orientation and innovativeness our results are in concordance with Salavou (2005), that founds a positive relationship between technology orientation and innovativeness in a sample of Greek SMEs. A first suggestion for this positive relationship is provided by Gatignon and Xuereb (1997). Hult et al. (2004) use market orientation, learning orientation and entrepreneurial orientation as antecedents of innovativeness, but did not use technology orientation. This study shows that technology orientation can be seen as an antecedent of innovativeness, however technology orientation is not used in conjunction with strategic orientations used by Hult et al. (2004).

One of the main contribution of this essay, is the strong and positive relationship between relational capital and innovativeness. As it was stated previously, little research can be found regarding these relationship and SMEs can be benefited if they take conscious of the importance of the relational capital concept. This research idea came from essay one, where clients and suppliers were identified as key partners for new product development. However, these relationship weaknesses when control variables are introduced. One possible explanation is that when firms grow and get older, it becomes more difficult to foster innovativeness due to the bureaucracy of the company.

Another significant finding is the strong and positive relationship between relational capital and technology orientation. González-Bañales and Bermeo-Andrade (2011) describes the relationship between relational capital and market orientation, but not empirical study was found about relational capital and technology orientation. Hopefully this finding could open a new research stream regarding strategic orientations and relational capital that conduct to a better understanding and capitalization of these two concepts.

A result that can be discussed and need a better understanding is the relationship between relational capital and firm performance. It appears positive related in the absence of control variables but it becomes none significant when control variables are introduced, even that it remains positive related. This may suggest that when firms are small and young, founders can easily construct its relational capital (Peña, 2002).

One unexpected result was the positive and significant relationship between size and innovativeness. Some comments were expressed in the previous section, however Damanpour (1992) found a positive relationship between organizational size and innovation and also found different levels of positive intensity depending on sector and industry contrary what Acs and Audretsch (1987) found. It is pretty intuitive that more research should be performed in order to better understand this result.

This study provides several managerial implications for SMEs to enhance their performance. Empirical findings confirm innovativeness as a determinant of business performance; this implies that innovative activities are generally important for business success. Consequently, managers are advised to improve innovativeness in their businesses with the correct investments and efforts in order to achieve superior business performance. An example of how companies put innovation as a company high-light is Nissan´s slogan "innovation that excites" or Apple's "think different".

Results also show a positive relationship between relational capital and technology orientation, and a positive relationship between technology orientation and innovativeness. Advice to managers is to promote internal interaction with people and external interaction with people and institutions. External interaction with people can include customers, suppliers and other stakeholders of the company. People's company can be benefitted from these interactions as a potential source of new products and services.

6. Limitations and implications for future research

Any effort to address on a complicated phenomenon have implicit some initial limitations as well as research opportunities; some of these can be identified for this essay. One of them has to deal with the cross-sectional nature of the study. Relational capital and technology orientation are not static,

but rather evolving over time so this may not reflect the dynamics of changes as well as their potentially lagged influence on performance. The natural recommendation for future research related with this limitation is to encourage researchers to perform longitudinal studies. This type of studies could capture the changing nature of strategic orientations and its effect on firm performance.

Technology orientation and innovativeness can be sometimes considered as closely related terms (Grinstein, 2008a), an even that statistical evidence show that both constructs are well identified, these two phenomenon are difficult to distinguish in practice. This open a new window to researchers in the development of more differentiated measurements for technology orientation and innovativeness for future studies in order to capture the complexity of these two constructs.

Other significant limitation is that findings in the study are based on a single country data –México- and, although México shares many characteristics with other emerging economies, results cannot be generalized. A call to research in other emerging economies is made in order to contrast the findings of the study.

Another aspect that limit the study is the behavioral aspect of the members of the organization if strategic orientations are seen as the culture of the organization. At the end, it is thought these behaviors ultimately influence performance. Researches can design future studies including individual behaviors in order to contrast results without these variables.

The sample used for this study includes companies from commerce, industry and service sectors and the methodology used for the study address on them in a general sense, impeding to draw conclusions for a specific sector. This open the door to explore alternative analysis like multiple group analysis.

Another limitation of the study is the single respondent bias effect. Different points of view regarding this can be find in the literature; Snow and Hrebiniak (1980) affirm that top managers have the best view of the entire organization, while Hambrick (1981) strongly advises to use only the CEO for responses. Bowman and Ambrosini (1997) found that data collected by only one respondent may not be reliable, then we can suggest that future research could use more than one respondent in order to contrast results.

Globalization have set-up a much more complex scenario for SMEs, so one single capacity it is not enough to understand firm performance (Dess et al, 1997). Suggestion for a more enriched model that includes more strategic orientations is made.

A future research line that can be derived from the significant relationship between firm size and innovativeness; future studies can contribute to the debate between Acs and Audretsch (1987) and Damanpour (1992) regarding if size is related or not to innovativeness.

Another interesting future research line is to deepen in the finding about the relationship between relational capital and firm performance. One possible starting point can be found in Peña (2002) with the hypothesis that small and young enterprises can easily access relational capital and in consequence be benefited of this in firm performance.

CHAPTER IV

INTRODUCTION

This chapter encompass the final empirical study of the dissertation and aim to contribute to knowledge advancement in the strategic orientations literature through the investigation of the relationship between relational capital and strategic orientations, and the relationships of strategic orientations with innovativeness and SMEs performance in an emerging economy context.

Few studies have address on the effect of multiple strategic orientations over innovativeness and performance (Zhou, 2005; Hakala, 2011) and even fewer studies includes relational capital as part of a model. Using resource-based theory (RBT) as the theoretical framework for the study, a theoretical model of the relationships in between them was proposed.

Four of the frequently strategic orientations that are used in studies relating them to performance were chosen for this essay: market orientation (MO), technology orientation (TO), entrepreneurial orientation (EO) and learning orientation (LO). It is considered that MO and TO cover the adaptive process relating to the competitive environment (market, customers and competitor) and the product, services and technology that the company chooses to offer. Regarding LO and EO they are thought as the process of matching resources with the environment.

Considering that strategic orientations can be seen as firm capacities, Dess et al. (1997) address that in a global-knowledge market, enterprise managers has to deal with a complex changing business environment, so it is not enough to analyze one single capacity in order to better understand firm innovativeness and performance.

Based on these antecedents and based in the literature review, a set of hypotheses were developed and tested using structural equation modelling over a sample of 360 SMEs surveyed in four main cities in México. Finally, based on the literature review we consider this study as a pioneering study for the strategic orientations literature at least in one way; as far as we now, there are not studies of this type for SMEs in the emerging economy context, so it is also our intention to encourage other researchers to deepen over this reach research stream.

ESSAY 3 – RELATIONAL CAPITAL, STRATEGIC ORIENTATIONS, INNOVATIVENESS AND PERFORMANCE: FINDINGS IN MEXICAN SMES

Abstract

This essay examines the relationship between relational capital and strategic orientations, and the relationships of strategic orientations with innovativeness and firm performance. Few have been researched about relational capital as a source of competitiveness for SMEs through strategic orientations, so this study looks to contribute to advance knowledge in this research stream. A total of 360 respondents completed a survey conducted at four main cities in México. Using structural equation modeling (SEM) technique, the results reveal a strong positive effect of the relational capital over strategic orientations. Mixed findings about strategic orientations and innovativeness are presented. Implications and areas for future research are also discussed.

1. Introduction

Strategic orientations are principles that direct and influence the activities of the firm and generate the behaviors that are essential for the performance of the firm (Gatignon and Xuereb, 1997). There exist different streams of literature that have developed their own orientation constructs, such as customer orientation, entrepreneurial orientation and technology orientation, approaching the dilemma from their respective angles, but little research has been done about the combinations of these orientations together.

As an example, the marketing literature claims that the concept of customer orientation is of huge importance, reflecting the culture of the organization that creates the behavior which provides companies with continuous superior performance (Deshpandé et al., 1993; Kohli and Jaworski, 1990; Narver and Slater, 1990; Slater and Narver, 1995, 2000). While the positive effects of customer orientation on firm performance have been firmly established (e.g., Shoham et al., 2005; Cano et al., 2004; Kirca et al., 2005), it is not the only viable strategic orientation (Noble et al., 2002). The fundamental idea of technology orientation is that long term success is best created through new technological solutions, products and services (Gatignon and Xuereb, 1997; Grinstein, 2008a; Hamel

and Prahalad, 1991). Furthermore, the proponents of entrepreneurial orientation suggest that organizations acting entrepreneurially are better able to adjust their operation in dynamic competitive environments (Covin and Slevin, 1989), resulting in positive effects on firm performance (e.g., Hult et al., 2004; Wiklund, 1999; Wiklund and Shepherd, 2005). Recent research has suggested that the interplay between these strategic orientations may provide organizations with sustained competitive advantages (Hult et al., 2004). Companies that balance several orientations perform better (Atuahene-Gima and Ko, 2001; Bhuian et al., 2005; Noble et al., 2002).

Hult and Ketchen (2001) show that as a component of positional advantage, market orientation positively affects firm performance, but they note that the potential value of market orientation should be considered together with other important firm capabilities, such as entrepreneurship and organizational learning (Zhou et al., 2005). Matsuno, Mentzer, and Özsomer (2002) also find that entrepreneurship in combination with market orientation positively affects firm performance. They encourage additional research to inquire into the process by which firms implement strategic orientations, such as through organizational learning. Besides, Im and Workman (2004) find that a customer orientation is the driving force of new product success, despite its negative effect on new product novelty. They recommend further studies to examine innovation and its performance implications directly and together with other intangible assets, such as entrepreneurship.

Relational capital is a fundamental asset for firms, but especially for SMEs, and high performing companies are those that are able to negotiate with others and develop collaborative agreements, thus placing a high value in relational capital (Welbourne and Pardo-del-Val, 2009). From an economic point of view, a network of relationships, both strong and weak ones, enables the participants in it to work with much lower transaction costs. Through them, smaller companies can become much more efficient than larger, more formal competitors (Jarillo, 1988).

But relational capital is not just a variable that keeps constant along time. Maurer and Ebers (2006) noted that firms have to adapt the way they establish relations, because their resource needs change over time and the configuration of their relations must accommodate their business development.

Organizational performance improves when relational capital's configuration is adapted to changing resource needs. In doing so, relational capital has an impact on organizational adaptability.

2. Theoretical Framework

2.1 Relational capital and strategic orientations

Relational capital is one of the three categories of intellectual capital (IC), however IC has been defined in different ways. Relational capital can be defined as the set of all relationships, power relationships and cooperation, established between firms, institutions and people that stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions (Capello and Faggian, 2005).

Few studies are found relating strategic orientations and relational capital; i.e., González-Bañales and Bermeo-Andrade (2011) describes the relationship between relational capital and market orientation. Following Capello and Faggian (2005) definition for relational capital, we can link it to Kotler (1973) concept of marketing stated as the study of the way in which the interchange of relationships is created, stimulated, facilitated, valued and governed. The essence of marketing is in the relationship of interchange of value for the market.

According to Grönroos (1989), the aim of marketing should be the development of long-term customer relationships. Marketing research has already highlighted the importance of inter-organizational relationships and networks for firm´s survival and success (Achrol, 1991; Day, 2000). It has been argued that relationships are a firm´s most valuable resource.

As market orientation in the behavioral perspective is about action, it is needed to translate the market orientation activities into relationship management activities (Helfert et al., 2002).

Then can be hypothesized:

H1: Relational capital is positively related to market orientation

Entrepreneurial orientation is defined as the processes, structures, and behaviors of firms that are characterized by innovativeness, proactiveness and risk taking (Covin and Slevin, 1988; Miller, 1983).

Relational capital encompasses relationships built on a history of trust, respect and friendliness (Granovetter, 1992). It seems possible that such aspects would facilitate tacit knowledge sharing, thereby assisting in a greater range of prospective opportunity exploitation possibilities among entrepreneurial teams (Schenkel and Garrison, 2009).

The significant role of networks in influencing entrepreneurial process and outcomes has also been asserted by several authors (Butler et al., 2003; Hoang and Antoncic, 2003). Entrepreneurship theory implies that the essence of entrepreneurship is the ability to detect, willingness to pursue and exploit the opportunity in the marketplace (Stevenson and Jarillo, 1990, Shane and Venkataraman, 2000). Yet, not all entrepreneurs have capabilities and sufficient resources to utilize those opportunities. They need collaboration with the economic actors to enable them to carry out some activities in order to gain access to resources and markets. Clearly they need to develop networks in business to take advantage to exploit new opportunities, obtain knowledge, learn from experiences, and benefit from the synergistic effect of pooled resources.

Entrepreneurship is naturally a networking activity and relationships are considered as one of the most powerful assets since it provides access to power, information, knowledge, technologies, and capital (Elfring and Hulsink, 2003; Inkpen and Tsang, 2005).

Then can be hypothesized:

H2: Relational capital is positively related to entrepreneurial orientation.

Different definitions about learning orientation can be found in the existent literature (Chiou and Chen, 2012). Sinkula et al. (1997) address on direction or intensity of knowledge created and manipulated by one organization, and Calantone et al. (2002) refers to a comprehensive activity created by an organization using knowledge. Learning orientation contributes to an organization's

innovation capability, and innovation is nurtured from inside and outside company (Chiou and Chen, 2012).

Learning is one of the key mechanisms to generate new knowledge, and is often an express purpose of collaborative relationships (Mohr and Sengupta, 2002). In the network environment, firms' learning orientations reflect either exploration in seeking effectiveness through new business development or exploitation in seeking efficiency of operation in their current business (e.g., March, 1991).

Then can be hypothesized:

H3: Relational capital is positively related to learning orientation.

The concept of a technology-oriented firm is explicitly presented by Gatignon and Xuereb (1997) and it refers to the ability and will of a firm to acquire a strong and considerable technological background in order to develop and create new products. The fundamental idea of technology orientation is that long term success is best created through new technological solutions, products and services (Hakala and Kohtamäki, 2011).

In a technology-oriented firm, creativity and invention are the organizational norm and values that guide its activities and strategies (Zhou et al., 2005). In a SME context, firms tend to cooperate beyond their individual scope with other organizations –large and small- to exploit new technologies in networks (Širec and Bradač, 2009), understanding networks as the connections and interactions between individuals, groups and organizations.

Some studies have tried to examine and understand how collaborative networks foster research and technology development (e.g., Protogerou et al., 2013). Rooted in social network theory, managerial networking has evolved as a key concept in the understanding on how top management are linked up with buyers, suppliers, competitors and other stakeholders (Moller and Halinen, 1999), and how these relationships (relational capital) contributes to their businesses in different aspects like market, technology, production and innovation areas (Panda, 2014).

Then can be hypothesized:

H4: Relational capital is positively related to technology orientation.

2.2 Market orientation and innovativeness

Market orientation has been defined as a set of ongoing behaviors and activities related to generation, dissemination, and responsiveness to market intelligence (Kohli and Jaworski, 1993). Narver and Slater (1990) assert that market orientation refers to a culture that places a high priority on creating buyer value. Thus market orientation is an aspect of culture and is a latent construct whose indicators are values, beliefs, and symbols that demonstrate a concern for markets (Hult et al., 2004).

Innovativeness is most frequently used as a measure of the degree of "newness" of an innovation (Calantone and Garcia, 2002) and the majority of research takes a firm's perspective toward newness, although others take different points of view. Innovativeness relates to a firm capacity to engage in innovation, meaning the introduction of new processes, products, or ideas in the organization (Hult et al., 2004).

It is thought that innovativeness is one of the factors over which management has considerable control, and as an important managerial function it has been consistently linked to business performance. Market orientation have received major critiques in the context of technology ventures -that supposedly have a natural path to innovativeness- because customers of this industry express needs with no attention to long-term thinking or a desire to satisfy latent needs (Renko et al., 2009), but studies show that this is not always true (Narver et al., 2004).

A significant amount of market orientation literature has established a positive relationship between market orientation and innovativeness (Grinstein, 2008b; Renko et al., 2009). Grinstein (2008b) performed a meta-analysis in 70 studies that includes both, small and large firms while Renko et al. (2009) performed the study in a sample of 85 SMEs.

Then can be hypothesized:

H5: Market orientation is positively related to innovativeness.

2.3 Entrepreneurial orientation and innovativeness

Entrepreneurial orientation is a strategic orientation which captures the specific entrepreneurial aspects of a firm's strategy (Covin and Slevin, 1989; Lumpkin and Dess, 1996). Miller (1983) describes entrepreneurial orientation as one that emphasizes aggressive innovation, risky projects, and a proclivity to pioneer innovations.

Entrepreneurial orientation has long been associated with proactive competitive posture, management proclivity for risky projects, and the firm necessity to engage in "bold, wide-ranging acts" to achieve objectives (Covin and Slevin, 1989). It is also suggested that entrepreneurial orientation lead to new ventures-product creation, fostering new businesses inside the business or reviving inactive businesses.

Avlonitis and Salavou (2007) suggest that those entrepreneurs adopting an orientation characterized by risk taking and a proactive competitive attitude, tend to introduce new products that are highly unique. Also Zhou et al. (2005) found that entrepreneurial orientation positively affects break-through innovations.

Then can be hypothesized:

H6: Entrepreneurial orientation is positively related to innovativeness.

2.4 Learning orientation and innovativeness

Learning orientation is viewed as the organization's propensity to create and use knowledge in order to attain competitive advantage (Calantone et al., 2002). Baker and Sinkula (1999b), address that learning orientation is a mechanism that directly affects the firm´s ability to defy old assumptions about market and how a firm should be organized to deal whit it. Hult et al. (2004) argues that learning orientation occurs primarily at the culture level of the firm.

Learning in small firms is context sensitive, firm-specific, and work based producing operational efficiency in the short run (Keskin, 2006, Badger et al., 2001) indicating "reaction" more than innovation. However, Hurley and Hult (1998) mention that exploitation of each bit of information and then utilizing such information in the workplace to advance new operational practices, in essence, develop new schemata or thinking ways, and knowledge for employees.

Calantone et al. (2002) sustain that an organization committed to learning can enhance its innovativeness in three ways: 1) it is normally more committed to innovation and in consequence to have the capacity to build and market technological breakthrough; 2) it is also frequent that this organization do not miss the opportunities created by emerging market demands because they have the knowledge and ability to understand and anticipate customer needs (Damanpour, 1991); 3) it closely monitor competitors' actions and understands the strengths and weaknesses of rivals, learning not only from their success, but also from their failures (Lant and Montgomery, 1987).

Then can be hypothesized:

H7: Learning orientation is positively related to innovativeness.

2.5 Technology orientation and innovativeness

Technology orientation, or the closely related terms of innovation and product orientation (Grinstein, 2008b), refers to a firm's inclination to introduce or use new technologies, products or innovations. A technology orientation is said to improve business or new product performance, but studies have not always identified positive effects (Hakala, 2011). In a technology-oriented firm, creativity and invention are the organizational norm and values that guide its activities and strategies (Zhou, Yim and Tse, 2005), and if this activity derives in new products or new services it is thought that the firm will be having better results.

It has been found that technology-oriented firms heavily invest in research and development, and normally accept the "state of the art" of technology, encouraging employees to propose new radical ideas creating a "breakthrough innovation" culture. A similar perspective was suggested by Lumpkin

and Dess (1996), who asserted that in order to renew stagnant companies, an entrepreneurial spirit of creating new businesses and breakthrough innovations can be encouraged.

Then can be hypothesized:

H8: Technology orientation is positively related to innovativeness.

2.6 Innovativeness and performance

The traditional explanation for the positive relationship between firm innovativeness and performance is supported on Schumpeter's theory of profit extraction that sustain that through innovation companies gain a temporary quasi-monopoly, enabling them to extract rents (Rubera and Kirca, 2012).

It is also known that highly innovative firms are more capable of developing creative solutions that undermine those of their competitors (Hughes and Morgan, 2007). Then, firms want to maintain their market power over time through a continuous stream of innovations, trying to sustain a superior performance with multiple product introductions and innovativeness positively contributes by attenuating the natural forces of competition or changes the consumption patterns that tend to dissipate superior returns over time (Sharma and Lacey, 2004).

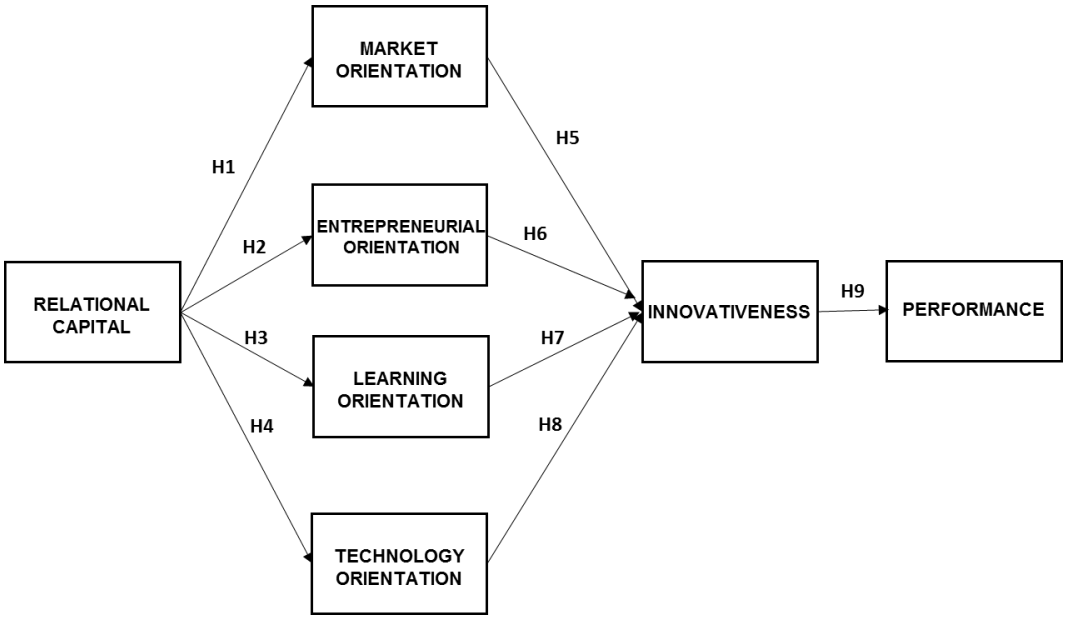
The adoption of innovation is generally intended to contribute to firm performance (Damanpour, 1991), and some studies have already examined the relationship between innovativeness and business performance (e.g., Hult et al., 2004; Olavarrieta and Friedmann, 2008; Rhee et al., 2010).

Then can be hypothesized:

H9: Innovativeness is positively related to firm performance.

Figure 8 shows the model proposed.

Figure 8. **Model proposed**



Source: Self-elaborated

3. Research Methodology

3.1 Research context and sample

A random sample of small and medium enterprises (SMEs) in México provides the empirical setting for this research. A total of 360 companies from service, industry and commerce sectors were interviewed in four main cities: México City, Guadalajara, Monterrey and Puebla. Table 12 shows the official classification in México regarding SMEs.

Table 12. **Official classification of SMEs in México**

Classification by Number of Employees			
Sector/Size	**Industry**	**Commerce**	**Services**
Micro	0-10	0-10	0-10
Small	11-50	11-30	11-50
Medium	51-250	31-100	51-100

Source: DOF (2015)

Data collection

Professional interviewers of a renowned Mexican-polling firm applied one by one questionnaires to firm directors, business owners and business responsible during February 2014.

Questionnaire design

A questionnaire was design using adapted scales for each of the constructs proposed in the study. After that, a group of experienced academics at ITESM University, Guadalajara Campus reviewed the questionnaire and provided feedback. Finally, the polling firm tested the questionnaire before it was applied.

3.2 Measures and variables

All constructs were measured using Likert-type scales with a five-point response format anchored by "strongly disagree" to "strongly agree" unless otherwise noted. Independent variables will be discussed first, followed by the description of the dependent variables and the control. All α values are reported in Appendix 5 and showed acceptable values with $\alpha > 0.769$.

Independent variables

Relational capital

To measure relational capital an adapted six item scale based on Delgado-Verde et al. (2011) was used. The scale represents the ability to measure the relationships between clients and suppliers.

Independent/Dependent variables

Market orientation

To measure market orientation a scale based on Narver and Slater (1990) was used. Extensive research –conceptual and empirical- has been done regarding market orientation, emphasizing this orientation's focus on customers (Deshpandé et al., 2013).

Entrepreneurial orientation

To measure entrepreneurial orientation, an adapted scale based on Baker and Sinkula (1999b) were used.

Learning orientation

To measure learning orientation, an adapted scale based on Sinkula et al. (1997) was used.

Technology orientation

To measure technology orientation an adapted five item scale based on Gatignon and Xuereb (1997) was used. The scale represents the ability and willingness of an organization to develop new technologies and the usage of sophisticated technologies (Gao, Zhou and Yim, 2007).

Innovativeness

To measure innovativeness an adapted three item scale based on Baker and Sinkula (1999a) was used. The scale consider three basic concepts: new products launching, degree of differentiation of innovations and degree of success of new products.

Dependent variable

Performance

To measure performance a scale based on diverse authors were used (Jaworski and Kohli, 1993; Narver and Slater, 1990). It includes financial, customer satisfaction, employee satisfaction and operations aspects. Subjective measures of performance have been shown reliable and valid when objective data is not available, like in SMEs case (Dess and Robinson, 1984)

4. Analysis and Results

The first step was to evaluate scale reliability. Appendix 5 shows the items of each scale, including its Cronbach´s alpha. Then, an exploratory factor analysis using IBM SPSS Statistics 21 were performed in order to validate each construct proposed. Results are shown in Appendix 6. Table 13 shows a summary of these analyses and table 14 shows the correlations values.

After the exploratory analyses, Structural Equation Modelling (SEM) technique was used. This technique is widely used by marketing researchers (Uribe, Rialp and Llonch, 2013 p. 217), and is a combination of the Confirmatory Factor Analysis (CFA) and multiple regressions. It allows researchers to analyze relationships between observed and no observed variables (constructs) (Schreiber et al., 2006).

The structural model shows the relationships between the different latent variables (constructs) and the measurement model shows the relationships between latent variables and the observed variables used to measure latent variables. Figure 9 shows the structural model proposed that includes relational capital, technology orientation, innovativeness and performance as constructs.

Table 15 shows the main indexes values of model fit and Figure 9 shows the CFA analysis for the model proposed. AMOS 21 was used to conduct CFA analysis.

Table 13. **Summary of scale reliability and exploratory factor analysis**

Constructs/Measures	**Cronbach's alpha (>0.7)**	**KMO (>0.5)**
Relational Capital	0.805	0.840
Technology Orientation	0.839	0.847
Market Orientation	0.794	0.848
Learning Orientation	0.835	0.887
Entrepreneurial Orientation	0.731	0.759
Innovativeness	0.769	0.685
Performance	0.841	0.863

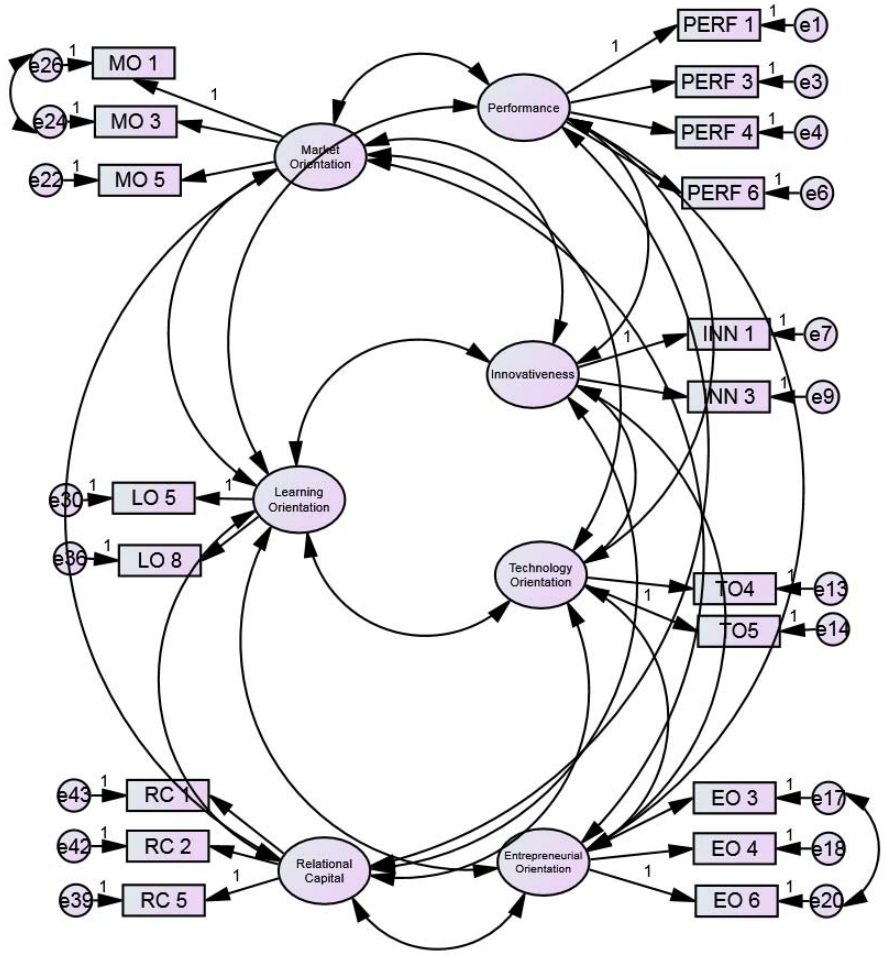
Source: Self-elaborated

Table 14. **Correlation Values**

	1.	2.	3.	4.	5.	6.
1. Relational Capital	1					
2. Market Orientation	.623**	1				
3. Entrepreneurial Or	.416**	.403**	1			
4. Learning Orientation	.610**	.699**	.448**	1		
5. Technology Orientation	.494**	.445**	.560**	.521**	1	
6. Innovativeness	.507**	.404**	.318**	.351**	.331**	1
7. Performance	.484**	.355**	.409**	.364**	.356**	.608**

Notes: N=360, *p < 0.05; **p < 0.01; ***p < 0.00
Source: Self-elaborated

Figure 9. **Confirmatory Factor Analysis for the proposed model**



Source: Self-elaborated

Validity refers to the degree to which a measure actually assesses the theoretical model it is supposed to assess. Convergent validity refers to how well the latent factor is well explained by its observed variables, then your variables correlate well with each other within their parent construct. Discriminant validity measures if your variables correlate more highly with variables outside their parent factor than with the variables within their parent factor; i.e., the construct is better explained by some other variables (from a different factor), than by its own observed variables. Table 16 shows that the model presents some values that underscore for validity parameters. Even though model fit was above parameters, this could be a limitation for SEM results.

Table 15. **Fit indexes for the SEM model proposed**

Model Fit	Criteria	Index value
χ^2 / df	< 3	1.455
CFI	> 0.9	0.974
GFI	> 0.9	0.948
RMSEA	< 0.07	0.036

Source: Self-elaborated

Table 16. **Reliability, Convergent and discriminant validity (CR > 0.7, AVE > 0.5; CR > AVE, MSV < AVE)**

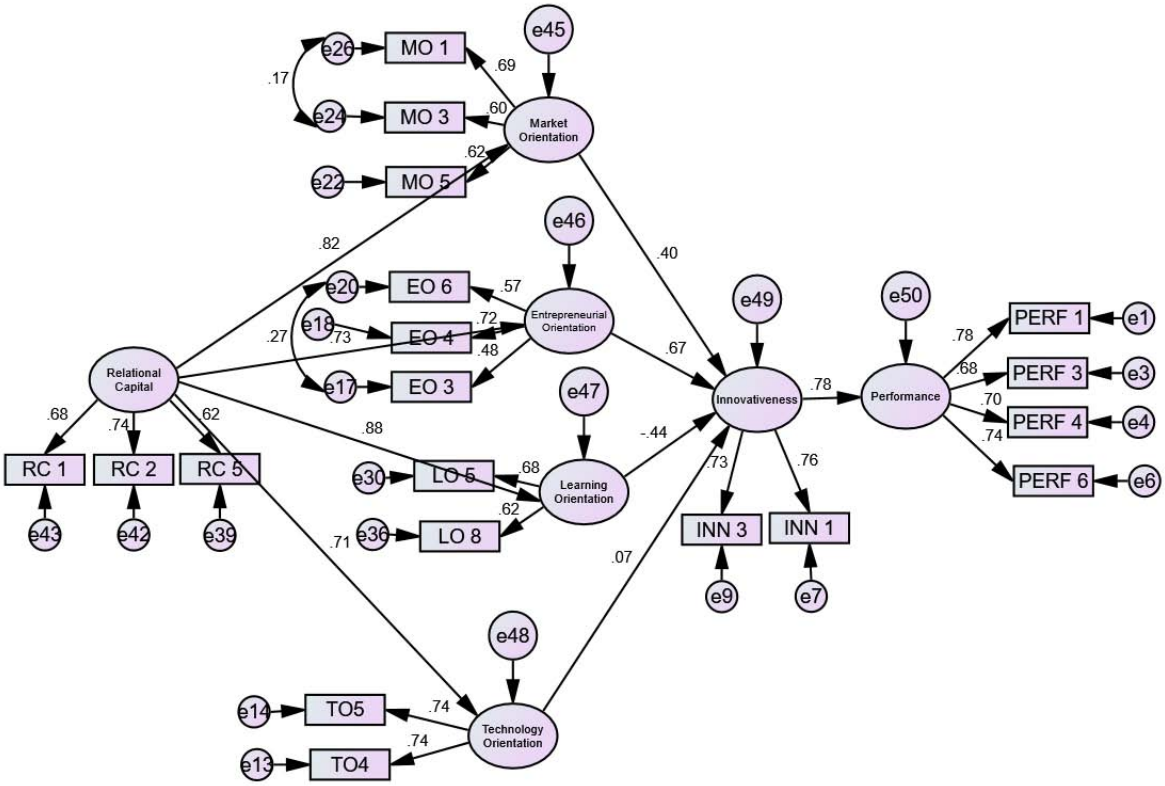
	CR	AVE	MSV	LO	PERF	INN	TO	EO	MO	RC
LO	0.576*	0.405*	0.814*	**0.636***						
PERF	0.816	0.527	0.518	0.375	**0.726**					
INN	0.744	0.592	0.518	0.297	0.720	**0.770**				
TO	0.712	0.553	0.601*	0.704	0.382	0.364	**0.744***			
EO	0.629*	0.365*	0.601*	0.751	0.662	0.535	0.775	**0.604***		
MO	0.682*	0.419*	0.814*	0.902	0.361	0.427	0.435	0.513	**0.647***	
RC	0.760	0.515	0.596*	0.772	0.414	0.422	0.638	0.590	0.744	**0.717***

Note: * Values below recommended criteria.
Source: Self-elaborated

Figure 10 shows the SEM analysis result and table 17 shows the relationship between variables in the proposed model. From table 17 it can be seen that: i) there exist a direct and positive effect of relational capital over market orientation, supporting hypothesis 1; ii) there exist a direct and positive effect of relational capital over entrepreneurial orientation, supporting hypothesis 2; iii) there exist a direct and positive effect of relational capital over learning orientation, supporting hypothesis 3; iv) there exist a direct and positive effect of relational capital over technology orientation, supporting hypothesis 4; v) there exist a direct and positive effect of market orientation over innovativeness, supporting hypothesis 5; vi) there exist a direct and positive effect of entrepreneurial orientation over innovativeness, supporting hypothesis 6; vii) there exist a direct and negative effect of learning orientation over innovativeness, not supporting hypothesis 7: viii) there is not significant relationship

between technology orientation and innovativeness, not supporting hypothesis 8 and ix) there exist a direct and positive effect of innovativeness over performance, supporting hypothesis 9.

Figure 10. **Proposed model to SEM**



Source: Self-elaborated

Table 17. **Relationship between variables in the proposed model**

Relationships			Estimate	Std. Estimate	S.E.	P	Hypothesis
MO	<--	RC	.908	.816	.102	***	H1is supported
EO	<--	RC	.771	.726	.107	***	H2 is supported
LO	<--	RC	1.057	.884	.115	***	H3 is supported
TO	<--	RC	1.089	.713	.130	***	H4 is supported
INN	<--	MO	.508	.398	.195	**	H5 is supported
INN	<--	EO	.894	.668	.198	***	H6 is supported
INN	<--	LO	-.528	-.445	.216	*	H7 is not supported
INN	<--	TO	.064	.068	.092	ns	H8 is not supported
PERF	<--	INN	.816	.780	.079	***	H9 is supported

Notes: N=360, *p < 0.05; **p < 0.01; ***p < 0.001; ns: no significant.
Source: Self-elaborated

5. Discussion and Conclusions

Like in the previous essay, the hypothesized model proposed was widely supported suggesting that theories normally applied to developed economies can be applied to emerging economies and in SMEs context. Discussion and conclusions can be derived from this essay.

Despite the different model proposed, a positive relationship between innovativeness and firm performance in SMEs were confirmed. Comments on that were addressed in the discussion and conclusions section of essay two that address on Salavou (2005) study and Hult et al. (2004). It is pertinent mention again Woodside (2005) quote regarding that analyses should advance from the one-directional structural equation modeling of innovativeness and business performance to a systems dynamic modeling that includes more real feedback looped models.

A significant finding of this essay is the direct and positive relationships between relational capital and strategic orientations. As was stated before, little research has been done regarding this type of relationship, but if Teece et al. (1997) are followed, strategic orientations can be seen as dynamic capabilities for the organization and diverse antecedents can be found for them. It is remarkable that all of the hypotheses –H1 through H4- were supported with $p < 0.01$.

Starting with market orientation, the empirical result fits Kotler's (1973) concept of marketing: the study of the way in which the interchange relationships are created, stimulated, facilitated, valued and governed. It is undoubtedly that market orientation is one of the most studied of the strategic orientations in the marketing literature (Kirca et al., 2005) however, few empirical studies had research it relationship with relational capital.

Entrepreneurial processes have been identified as a collaborative process according to Butler et al. (2003). The empirical results obtained from this study confirms this assertion. It is also in accordance with what it was stated as a support for this hypothesis: entrepreneurs need collaboration with different business actors in order to gain access to resources and markets.

Learning orientation and relational capital have been explored in specific contexts. Liu et al (2010) found a positive relationship between these two constructs in an alliance scenario. Our results show

that this finding can be extended into the SMEs context. However, still few empirical studies can be found so a need of more research is clear in order to advance in the understanding of this relationship. The relationship between technology orientation and relational capital was studied in the previous chapter, and again we found a strong positive relationship among them. This suggest that interactions with different business actors could foster technology in SMEs.

The direct but negative relationship between learning orientation and innovativeness is quite a surprising finding, but as it was stated before, learning in small firms is context sensitive, firm-specific, and work based producing operational efficiency in the short run (Keskin, 2006, Badger et al., 2001) indicating "reaction" more than innovation. This is one of the possible explanations of this finding. However, several studies found a positive relationship between learning orientation and innovativeness (Calantone et al., 2002). Another possible explanation is that in SMEs context, some other factors should be considered to understand the negative relationship. Clearly more research has to be done.

Another finding that needs to be discussed is the non-significant result of the relationship between technology orientation and innovativeness. This contradicts the findings in essay two, however Zhou and Wu (2009) comment that mixed results can be found in this relationship because of the assumption of a linear relationship between technological capability (technology orientation) and explorative innovation (innovativeness). They found that though technological capability fosters innovation exploitation at an accelerating rate, it has an inverted U-shaped relationship with innovative exploration; that is, a high level of technological capability impedes explorative innovation. It is evident that more research is needed to be performed to better understand this finding.

A lot of discussion can be found in market orientation literature regarding the contribution of this orientation to innovativeness. Much of the studies reveal a non-significant contribution or even a negative relationship due to the nature of market orientation. This study shows a positive relationship contributing to the debate.

Finally, a positive relationship between entrepreneurial orientation and innovativeness was found. This is consistent with other studies that show similar results (Tajeddini, 2010).

This study provides several managerial implications for SMEs to enhance their performance. In accordance with the previous chapter finding, empirical results confirm innovativeness as a determinant of business performance; this implies that innovative activities are generally important for business success. Consequently, managers are advised to improve innovativeness in their businesses with the correct investments and efforts in order to achieve superior business performance. Like in the previous chapter, an example of how companies put innovation as a company high-light is Nissan´s slogan "innovation that excites" or Apple's "think different".

Results also show a positive relationship between relational capital and strategic orientations. An advice to SMEs managers is to pay attention not only to their relational capital but also to the broader concept named intellectual capital.

6. Limitations and implications for future research

Some limitations can be identified for this essay as well as future research streams. One of them has to deal with the cross-sectional nature of the study. Strategic orientations are not static, but rather evolving over time so this may not reflect the dynamics of changes as well as their potentially lagged influence on performance (Wiklund and Shepherd, 2005). However, one reason can be argued against this limitation; there exists some longitudinal studies that suggest that the effect of strategic orientations on performance display rather similar results (Dawes, 2000). Nonetheless, a longitudinal research design undoubtedly will provide a more insightful result about the effects of evolving strategic orientations and their influence on SMEs performance over time. Then, one future line for research is to perform longitudinal studies that could capture the changing nature of strategic orientations and its effect on firm performance.

Another significant limitation is that findings in the study are based on a single country data –México- and, although México shares many characteristics with other emerging economies, results cannot be generalized, so a suggestion to design new research in other emerging economies is made in order to contrast the findings of this study.

The sample used for the study includes companies from commerce, industry and service sectors and the methodology used for the study address on them in a general sense, impeding to draw conclusions for a specific sector. Alternative analysis techniques like multiple group analysis can be suggested for future studies.

Other limitation of the study is the single respondent bias effect. Different points of view regarding this can be find in the literature; Snow and Hrebiniak (1980) affirm that top managers have the best view of the entire organization, while Hambrick (1981) strongly advises to use only the CEO for responses. Bowman and Ambrosini (1997) found that data collected by only one respondent may not be reliable, then we can suggest that future research could use more than one respondent in order to contrast results.

Additional research can be design to expand the proposed model including other important firm resources and capabilities such as physical assets. Environmental factors or physical location can also be taken into account.

Strategic orientations per se do not automatically lead to superior performance, consequently further research should identify the underlying action components to understand how strategic orientations work.

As it was mention before, technology orientation and innovativeness can be sometimes considered as closely related terms (Grinstein, 2008a), an even that statistical evidence show that both constructs are well identified, these two phenomenon are difficult to distinguish in practice. One result of this essay is that technology orientation doesn't have a significant relationship with innovativeness. A future research line regarding this is to encourage researches to design more differentiated measurements for technology orientation and innovativeness.

Another future research line can be derived from the negative relationship between learning orientation and innovativeness. A call to design new research studies is made in order to contrast this result. As it was stated before, there exist evidence that learning orientation is positively related to innovativeness (Calantone et al., 2002).

CHAPTER VI

CONCLUSIONS, CONTRIBUTIONS AND IMPLICATIONS OF THE DISSERTATION

This doctoral dissertation has the purpose to advance knowledge and understanding on how SMEs can become more competitive. Diverse researchers have addressed on the importance of SMEs in almost any economy. Relationships between innovativeness and performance, as well as linkages between strategic orientations and innovativeness were explored. Considering that global competition is transitioning really fast through knowledge period, organizations have to face these challenges with creativity and new capabilities. The inclusion of relational capital in this dissertation, and the way it relates with innovativeness and strategic orientations have the intention to reinforce on the importance that people have in any enterprise.

In this chapter final remarks are provided. Implications for literature and management are presented, including some future research streams, however several limitations of the study are also included. It is the intention that this dissertation contributes in different ways to the research community.

1. Summary of the Dissertation

The structure of this doctoral dissertation was design through three interdependent essays. Each essay presents its research questions, methodology of research and analysis, and empirical results.

The primary objective –understand and advance knowledge on SMEs competitiveness- was rooted in the theoretical framework of the resource-based theory and contingency theory. Based on the sustained competitive advantage concept and the contingency factors that a firm can be facing, the first research effort (essay one) had the intention to explore –using qualitative techniques- on how an enterprise -a SME family-based enterprise in this case- conceive and use constructs like strategic orientations (particularly technology orientation), innovativeness and performance.

Then, in essay two, relationships between relational capital and technology orientation with innovativeness, and the relationship between innovativeness and performance were explored. The novelty on this research was to consider relational capital and technology orientation as an antecedent

of innovativeness. It was argued that a positive relation between these two constructs can be predicted, and results confirm this prediction.

Essay three looks to contribute to the existing research stream on the relationships between strategic orientations and performance, mediated by the innovativeness construct. It was the intention of this particular essay to respond to the call of several researches in the sense to explore the effect of more than one strategic orientation in these relationships. Discrepancies between what theories predict and obtained results, provide a fertile field to re-think and reflect on the phenomenon. A particular and significant contribution in this essay was the usage of relational capital as an antecedent of strategic orientations. It is important to address that few studies have considered relational capital in this way, so it was tough that this could be a significant contribution of the dissertation. Based on the theoretical frameworks, a positive relationship between relational capital and strategic orientations was expected and results confirm this.

2. Contributions of the Dissertation

When this research project was conceived, its primary and broad goal was to contribute in the enhancement of competitiveness of SMEs. Based on the resource-based theory and its core concept about sustained competitive advantage, the strategic orientation of a firm appeared as a key element to be studied in the search of a better enterprise performance and in consequence a better competitive position. Market orientation was first identified as a strategic orientation that significantly contributed to improve business results (Kohli and Jaworsky, 1990). Derived from this, a new and rich research line appeared and as long as researchers deepen in the field, findings started to show mixed results and new strategic orientations started to be considered. Step by step, literature review revealed that even in the extant literature about strategic orientations and firm performance, research gaps appeared to be filled.

As it was stated before, Hakala (2011) performed a systematic review on the literature regarding multiple strategic orientations, finding that this literature have had received fragmented attention and making a call to continuing research efforts in the field.

The first main contribution of this dissertation is specifically the design and realization of a qualitative study regarding strategic orientations and firm performance (essay one), including family business concepts. Even though that the CEO of the family-owned company of the study was a professionally trained manager, he didn´t recognize the scholar taxonomy for strategic orientations, but as the study was on going, he realized that he had been working with these concepts. This revealed that theoretical concepts widely used by academics in their research studies remain unclear for practitioners, opening an opportunity for researchers to close this gap through this type of studies. The CEO of the family-based company also acknowledge that the model derived from the research study will be very useful to better understand his competitive advantage and in consequence leverage the firm.

This contribution was recognized by the Allied Academies organization -a not for profit US based corporation- dedicated to research and teach. Essay one was presented in the San Antonio, Texas Conference in October 2013, and it was awarded with the "Distinguished Research Award" by the Academy of Strategic Management. This essay was published in 2014 by the Academy of Strategic Management Journal.

Derived from essay one, a second main contribution is the model proposal in essay two that relates technology orientation and relational capital with innovativeness and firm performance. Previous research models have used diverse strategic orientations as antecedent of innovativeness (e.g., Hult et al., 2004), but none had tested technology orientation and relational capital. Results show that technology orientation and relational capital can be seen as antecedents of innovativeness. A significant difference regarding Hult et al. (2004) study and essay two, is that it was performed over 181 large companies; firms with sales above US$100 million per year. This could be considered as a whole new research line for SMEs in emerging economies opening opportunities to test theory adaptations from developed economies to emerging ones.

Another contribution of essay two that can be considered as an original one is the investigation of the relationship between relational capital and technology orientation. Several antecedents have been taken into account for diverse strategic orientations but rarely relational capital. Results show that

relational capital is positively related to technology orientation. Considering that relational capital can be defined as the set of all relationships – market relationships, power relationships and cooperation – established between firms, institutions and people that stem from a strong sense of belonging and a highly developed capacity of cooperation (Capello and Faggian, 2005), a natural link with networking theory can be stablished, opening again a new research field opportunity particularly to SMEs. These results can also be used to redefine and encourage government and private institutions actions that foster competitiveness through cooperation and managerial relationships.

One final contribution of essay two is the comparison of the proposed model when control variables are introduced. Results can boost new research design in order to provide a better understanding of the findings as it was explained in the discussion section of the essay.

Findings in essay two leads to the research design of essay three. Essay three contributes firstly in that empirical results concluded that relational capital can be considered as an antecedent of the four main strategic orientations reviewed in the literature. As it was commented before, few studies can be found relating strategic orientations and relational capital; in this sense, essay three can be considered as a pioneering study, particularly for SMEs in emerging economies. Natural future research can be devised because of the different intensities between each relationship, so new research can be design to better understand how relational capital relates with each strategic orientation. An obvious restriction of the study is that findings can't be generalized, but this restriction encourage new research in other emerging economies.

Another contribution is the finding about the positive relationship between market orientation and innovativeness. This result contributes to the debate about if market orientation inhibit or foster innovativeness.

Finally, the negative relationship found between learning orientation and innovativeness open a new research stream particularly in emerging markets and SMEs context. As was explained before, knowledge and learning in SMEs are less formal and structured than in large companies, and strategic

orientations can be seen more like a “survival” strategies than the principles that guide actions to a sustained competitive advantage.

3. Implications of the Dissertation

3.1 Implications for the literature

A summary of implications is listed:

- It is a contribution to strategic orientations literature.
- It is an invitation to perform qualitative research.
- New theoretical models were tested, particularly with relational capital and multiple strategic orientations.
- Empirical findings encourage new research streams, specifically in emerging economies and SME field.

3.2 Implications to management

A summary of implications is listed:

- Awareness of management leadership, particularly in family-based SMEs, looking for prevent future problems inside the firm.
- Managers should foresight the importance of human resource and empower them to build strong relationships inside and outside the organization.
- A better understanding of managers about strategic orientations and their relationships can be a source of a sustained competitive advantage.
- SMEs can be benefited of theories and adapted practices of large corporations.

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APPENDIX

Appendix 1. **Interlub Case Study Technical File**

Case Title	STRATEGIC ORIENTATIONS AND THEIR RELATIONSHIP WITH PERFORMANCE
Company	Interlub, S.A. De C.V.
Case type	Exploratory
Period of analysis	2004-2013
Information sources	• In-depth semi-structured interviews • Application of strategic orientations and firm performance questionnaires to top management • Web sources (web pages, youtube, databases, online news) • Printed and electronic materials provided by Interlub
Purpose of the case	Identify how Interlub relates strategic orientations in order to construct a competitive strategy that produce an enhanced performance.
Key words	Strategic orientations; competitive strategy; performance
Open questions	• Which are the key factors for the company to be competitive? • What does the company require to become more competitive? • Describe –in a general way- the competitive strategy that the company uses in terms of: market, human resource, technology and innovation, new products or services to the market.
Persons Interviewed	• René Freudenberg Zazatti: CEO • Roberto Ibarri Martínez: General Director • Efraín Becerra Camacho: Commercial Director • Francisco Ibañez González: Business Development Director • Ricardo Mora Nuñez: Administrative and Financial Director • David Reyes Torres: Operations Director • Denisse Rodriguez Lomelí: Human Resource Director • Jesús Garza Saucedo: Product Development Director
Summary	The study presents an exploratory case study that intends to advance the comprehension on how top management at Interlub –a family-based SME- set a competitive strategy into the market using strategic orientations concepts, emphasizing on technology orientation. After information analysis, a theoretical-practical model was identified.
Author	Alberto Daniel Malpica Romero

Appendix 2. **Interlub Profile**

INTERLUB PROFILE
(2015)

1. GENERAL DATA

Company name: Interlub, S.A. De C.V.

Country: México

State: Jalisco

City: Zapopan

Year of foundation: 1984

Industry: Chemical lubricants

Mission: "*To be the world's leader in developing and providing customized, environmentally oriented solutions for critical industrial processes and machinery, where friction and wear is involved*".

Employees: 144

Revenue México: $24.8 M USD (2015)

CEO: René Freudenberg

Website: www.interlub.com

2. VALUE PROPOSITION

Interlub produces tailor-made, high-performance products to increase productivity and efficiency of its customers by offering significant savings in:

- Downtime
- Machinery life
- Spare parts replacement
- Energy consumption
- Environmental impact

Interlub focuses on customer loyalty and long term business partnerships, mostly achieved by delivering the best value proposition.

3. PRODUCTS AND SERVICES

Product	**Description**	**% revenue (2014)**	**% Revenue (2015)**
Oil lubricants	Synthetic, biodegradable, and emulsifiable lubricants for use on hydraulic systems, compressors, gears, etc.	29.91%	28.36%
Grease lubricants	Synthetic, biodegradable, and chemically resistant lubricants for use on rowlocks, bearings, and cogwheels; Ideal for extreme	23.25%	21.89%

Third party products	Highly specialized products from International suppliers distributed by Interlub Group in Latin America	24.%	26.86%
Release agent lubricants (Interglass)	Highly specialized lubricants designed to work as release agents in glass bottle manufacturing process	9.16%	12.5%
Release agents (Intermol)	Highly specialized products designed to work as release agents in the plastics and reinforced composites industries	2.75%	0.5%
Paste lubricants	Lubricants with a high concentration of solids for use in chemically aggressive and extreme environments	2.3%	1.51 %
Coatings	Lubricants that form a solid or semi-solid protective layer.	1.25%	1.0%

Product:
Interlub produces and sells highly-specialized lubricants for industrial use. Interlub starts with 10 different product chemical bases – from these, the company has developed over 300 products.

Service:
In addition to customized products, Interlub focuses on specialized high-touch customer service. To do this, the company employs industry-specific sales teams, which work closely with their clients' production managers in order to identify each company's lubricant needs and suggest the correct product to meet those needs. Beyond addressing immediate concerns, Interlub's technicians are often involved at a more strategic level, providing innovative solutions and know-how to help client's continuous improvement by sharing. This commercial structure has resulted in notable customer loyalty – some customers have been with Interlub for more than 20 years (GrupoModelo, Cemex, Grupo México).

90% of Interlub's products initiated as tailor-made projects for large industrial clients or scalable applications, while ~30% of Interlub's sales stay as exclusive products sold to a single customer. Interlub is willing to tailor products for clients that have sizeable demand for lubricants and/or a recognizable brand name that will influence others in that industry to switch to Interlub products and strengthen it's positioning as a developer of tailor-made, specialty products. Once Interlub has customized a product for an industry leader, salespeople can make a convincing sales pitch to others

in the industry regarding the benefits of the product and can sell the same customized product to many different customers. In this way, Interlub balances niche specialization with scalability.

4. CUSTOMER BASE

Lubricants are a necessity for all manufacturing companies, but specialized lubricants are only necessary for their most critical applications that involve extreme working conditions - temperatures, overuse, high speeds, etc.-. Historically, the glass and steel industries have recognized the need for specialized lubricants and been the biggest consumers of these products, but the mining, cement, and food production industries are expected to grow most rapidly in the next ten years.

5. MARKET SIZE

Market participation for specialized lubricants is expected to increase from 5 to 10% of the total lubricant consumption in the next ten years in emerging markets. In developed economies, specialty lubricants already account 10% of the total consumption. On a global scale, the specialized lubricants market is valued at US$8 billion. In Mexico, Interlub captures ~50% of the estimated US$40 million specialized lubricants market. The size of this market, however, is grossly underestimated because many processes that require specialized lubricants are currently being supplied with conventional lubricants. A clear example would be the mining and sugar industry where transmissions of the crushing mills are still lubricated with asphalts. The entrepreneurs approximate that the actual size of the Mexican market is closer to US$100 million and will increase to US$120 million as investments continue flowing into Latin America. In order to reach this potential market, much of Interlub's sales process has to focus on educating potential customers. The same applies in Brazil, where the entrepreneurs estimate a market value of US$200 million. With a 2006-2011 CAGR of ~36% (achieving sales of US$ 4.5 M), Interlub has found success by establishing a profitable expanding operation in the Brazilian market.

The estimated value of the Latin America market for specialty lubricants is US$600 million.

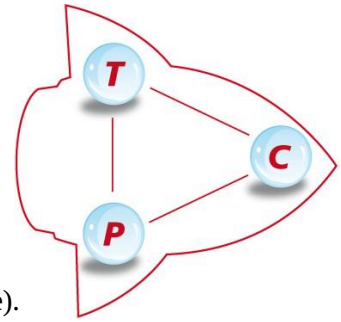
Investments in the heavy industry will continue to take place and one example is the mining industry which keeps booming. Interlub's strategies lead towards gaining customers with a strong presence in this economic activity.

6. COMPETITIVE LANDSCAPE

The companies described below compete in the market of specialty lubricants. Interlub also competes against international petroleum companies (Mobil, Shell, Texaco, etc.) that offer conventional lubricants at very low prices for applications better served by specialty lubricants. The production volume and complexity –low volume and high mix – of producing specialized lubricants means that the large conventional lubricant manufacturers have little interest in entering Interlub´s specific market. For example, the lubrication of hollow glassware forming machines, which are still lubricated with mineral-based hydrolic oils, is being replaced with environmentally oriented synthetic oils.

Competitor	Description	Strengths	Weaknesses	Revenue
Klueber	International leader in specialized lubricants (Germany)	OEM's approvals, international brand recognition, technology leader	Poor customer service	US $579 Million
Kyodo Yushi	Leader in specialized lubricants mainly focused in Japan	Technology leader and brand recongnition in Japan and Japanese	Lack of internationalization efforts outside Japanese companies	US $300 Million
Fuchs	International leader in lubricant sales to metal working industry (Germany)	Technology leader, economies of scale	Focused on machining fluids, expansion by acquisition of smaller companies of lesser quality, not specialized	US$1.87 Billion
Castrol	UK based company that began offering specialized lubricants by acquiring Optimol (Germany) and Molub Alloy (USA)	Part of a vertically integrated conglomerate including petroleum extraction, refinery, and lubricants production	Not focused on specialized markets	Very high

Brugarolas	Mid-sized company offering specialized lubricants (Spain)	Market leader in Spain and Portugal	Family business that has not been successful in LATAM	US$55 Million
Small local companies	Small sized companies with limited regional presence	Strong customer relations	Basic technology	Low



7. Business Model

The business model identifies three key factors to be successful in the specialized lubricants niche:

1. "T" stands for product technology based on chemical formulations.
2. "P" stands for production know how and complexity (high mix, low volume).
3. "C" stands for high touch customer contact which consists in a real consultancy in order to provide an optimal solution.

Competitors strongly focus on strengthening "T" or "P" to determine their competitive advantage while ***Interlub focuses on "C".*** High touch customer contact is Interlub's competitive advantage. To achieve this, the technical support team members have been divided into specific industrial segments or geographical regions. Basing its strategy on "C", Interlub can react in a more efficient way to offer a better fit for customers, while "T" and "P" have to keep up with "C".

SALES

- In most cases, companies are not aware of the benefits of specialized lubricants so active customer acquisition is always required. Customers need to be convinced through technical arguments and a cost-benefit calculation.
- Interlub is organized into business units specialized in particular industries, since in- depth knowledge is required to sell and maintain its products.

RESEARCH AND DEVELOPMENT

- 7-8% of total revenue is invested in R&D.
- Interlub's R&D team consists of three researchers with post graduate degrees in chemistry, as well as

five analysts with undergraduate degrees in chemistry.

- The R&D team is closely aligned with both the Sales and Service departments who report customer needs and feedback to the R&D team so that it can refine existing products and develop new ones.

PURCHASING

- On a daily basis according to production plan, the Purchasing team buys raw materials for the production of lubricants and other goods. Raw materials are purchased through Mexican distributors – mostly based in Guadalajara – but many of the materials are from Europe and the United States.

PRODUCTION

- Interlub's 4,000 sq. meters production and storage facility is located in Zapopan, Jalisco. The Interlub factory has 16 reactors which are chosen based on chemical compatibility.
- Interlub has 10 chemical bases from which it has developed more than 300 products.
- The production process takes from 4 hours to 5 days.
- Interlub currently manufactures 3,000 tons of specialized lubricants per year.
- At current production capacity of 60%, minor investments could significantly expand the production capacity.

INVENTORY

- 3 to 4 months of inventory is stored in the Interlub factory in Mexico and warehouses in the Netherlands, Brazil, and Italy.
- One of the competitive advantages and client-retention strategies is being able to supply our customer's orders within 24 hrs. Since the lubricant market suppliers and raw material providers usually take 2- 3 months to supply orders, inventory management and stock levels have become an important factor of our business.

DELIVERY AND SERVICE

- Interlub relies on an internal delivery team for smaller orders and an outsourced delivery service for large ones.
- Finished product inventory held in the Netherlands and Italy is delivered to end users by independent freight companies.
- After sales service is essential since performance needs to be monitored and registered. Service is also available on an as-needed basis between check-ups.

Appendix 3. **Summary of articles reviewed**

Title	Author	Objective	Theoretical Framework	Data / Analysis	Results
A conceptual approach of entrepreneurial orientation within small business context	Aloulou, W. and Fayolle, A. (2005)	The paper attempts to identify the main attributes of the EO concept and its determinants within small business context.	Opportunity-Based View and Resource-Based View	Theoretical Article	Adopting such orientation seems to reflect a needed conciliation between other strategic orientations (market-, technology- and stakeholder orientations.
Customer orientation and performance: a study of SMEs	Appiah-Adu, K. and Singh, S. (1998)	This study examined the customer orientation-performance link in small- and medium- sized business (SME) and tested for the possible effects of innovation orientation, market dynamism and competitive intensity on the degree of customer orientation among these firms.	Not explicitly	101 self-administered questionnaire to marketing executives of manufacturing and service firms in the UK. Linear regression analysis.	A firm´s level of customer orientation is positively related to its performance measured by: (a) new product success; (b) sales growth; (c) ROI
Technical entrepreneurship, strategic awareness and corporate transformation in small high-tech firms	Berry, M.M.J. (1996)	To investigate empirically the technology-strategy link and the transition from a technology-driven management toward a market-led management philosophy.	Not explicitly	257 on science parks in the UK and 30 in-depth interviews with a statistically representative sample for qualitative research. Calculation of Spearman rank-order correlation coefficient to	Strategic awareness of the technical entrepreneur is a critical determinant of the firm's viability and achievements in the long term.

				measure the level of association between variables.	
Icon and Markor: Links and Performance in South African Firms	Berthon, J., Pitt, L., Abratt, R. and Nel, D. (2008)	To investigate the apparent contradiction between market orientation and innovation orientation. Know manager's satisfaction with the strategic mode they have adopted.	Not explicitly	258 mail questionnaires to senior marketing executives in South Africa purchased form a large commercial database. ANOVA analysis.	Different modes have different effects.
To Serve or Create? Strategic Orientations toward Customers and Innovation	Berthon, P., Hulbert, J.M. and Pitt, L. (1999)	Argue that market orientation and innovation orientation are two distinct constructs which can interact in a facilitative or inhibitory fashion.	Not explicitly	Theoretical Article	Four different strategic modes may be created.
Innovation or customer orientation? An empirical investigation	Berthon, P., Hulbert, J.M. and Pitt, L. (2004)	Explore de contrast between marketing and innovation orientations and develops a model that provides an inclusive paradigm.	Implicitly Contingency theory	124 self-administered questionnaire for senior managment executives attending courses at Ivy League University in New York. Exploratory and confirmatory factor analysis, structural equation modeling and	Development of the ICON scale. Each archetype is related to organizational performance, contingent upon the context or environment in which the company operates.

				linear regression analysis.	
Market orientation and corporate success: findings from Germany	Fritz, W. (1996)	The significance of the market orientation as part of the overall corporate management.	Coalition theory of the firm	144 random industrial firms in West Germany. Structural equation modeling.	Market orientation is one of the key dimensions of corporate management, along with the production/cost orientation and the employee orientation.
On what should firms focus in transitional economies? A study of the contingent value of strategic orientations in China	Gao, G., Zhou, K. and Yim, C. (2007)	Examine the roles of strategic orientations (i.e., customer, competitor, and technology) in a transitional economy.	Contingency theory	Cross-industry sample of 408 brands in China. Hierarchical moderated regression analysis.	The effects of customer and technology orientations on business performance are contingent on the competitive environment.
How alternative marketing strategies impact the performance of Spanish museums	Izquierdo, C. and Samaniego, J. (2007)	To analyze the different effects of three alternative strategic marketing orientations –market orientation, sales orientation, and product orientation- on a non-profit organizations' effectiveness.	Not explicitly	182 Spanish musueums. Exploratory and confirmatory factor analysis and structural equation modeling	Social effectiveness relates highly to product and customer orientations, whereas economic effectiveness mainly depends on sales orientation and inter-functional coordination.

Antecedents and consequences of the strategic orientation in new product development: The case of Chinese manufacturers	Jeong, I., Pae, J.H. and Zhou, D. (2006)	To advance the understanding of the role of the strategic orientation of the firm for successful new product development in the context of Chinese manufacturing firms.	Implicitly Organizational theory and Contingency theory	232 manufacturing firms in China. Structural equation modeling	Organizational support and environmental turbulence have a positive influence on the implementation of strategic orientation. The two strategic orientations show a different pattern of performance implications.
Performance Impacts of Strategic Orientations: Evidence from Turkish Manufacturing Firms	Kaya, N. and Seyrek, I.H. (2005)	Investigate the effects of basic organizational cultural orientation, namely entrepreneurial, technological and customer orientations on firm financial performance when market dynamism is high and when it is low.	Not explicitly	91 Turkish manufacturing firms. Exploratory factor analysis and linear regression analysis	There is a positive and meaningful relation between technological orientation and financial performance when the market dynamism is low.
The effect of strategic orientation and gender on survival: a study of potential mass merchandising suppliers	Knotts, T.L., Jones, S. and Brown, K.L. (2008)	Examine whether two other orientations –production and marketing- besides market orientation influence the survival rate for small manufacturers wanting to supply the mass merchandising market place. Also investigate the impact of gender-related preferences on the continued existence of these firms.	Not explicitly	1,690 small manufacturing firms. Factor Analysis	Surviving firm owners placed more emphasis on production than marketing activities, while non-surviving firm owners did the opposite.
The Formation of Managerial Networks of Foreign Firms in China: The Effects	Li, J.J. (2005)	Investigate how firms' strategic orientations (i.e., market, technology, and entrepreneurship orientations) influence the formation of two types of managerial networks.	Not explicitly	181 manufacturing companies. Hierarchical linear regression analysis and linear regression analysis	Market orientation fosters both types of network building. Technology-oriented firms are more likely to cultivate

of Strategic Orientations					managerial ties with top managers at other firms.
Marketing Approaches in Bulgaria	Marinov, M., Cox, T., Avlonitis, G. and Kouremenos, T. (1993)	Present a study of the marketing typologies found in Bulgaria.	Not explicitly	523 random industrial firms in Bulgaria. Factor analysis, cluster analysis and ANOVA.	Identification of four distinct marketing approaches in Bulgarian companies.
Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications	Noble, C.H., Sinha, R.K. and Kumar, A. (2002)	Explore the relative performance effects of various dimensions of market orientation using a longitudinal approach based on letters to shareholders in corporate annual reports. Examine the relative effects of alternative strategic orientations that reflect different managerial priorities for the firm.	Transaction cost economics theory	Coded data from letters to shareholders in the discount sector of the retailing industry in the 1986-1997 periods. Panel data	Firms possessing higher levels of competitor orientation, national brand focus, and selling orientation exhibit superior performance.
Financial Champions and Masters of Innovation: Analyzing the Effects of Balancing Strategic Orientations	Paladino, A. (2009)	Examine whether the pursuit of both resource and market orientations is feasible and, if so, the impact of this combined effect on innovative and financial outcomes.	Not explicitly	250 senior executives in Australia. ANOVA	Emergence of four organizational types. Financial champions have the greatest impact on the financial performance of the firm.

Business Orientation: Cliché or Substance?	Pearson G.J. (1993)	Review the orthodox treatment of production, product, sales and marketing business orientations in introductory marketing texts and suggest changes.	Not explicitly	Theoretical Article	The four orientations should not be regarded as mutually exclusive, but rather that organizations need, to some extent, to be oriented to all four.
Do customer and Technology Orientations Influence Product Innovativeness in SMEs? Some new evidence from Greece	Salavou, H. (2005)	Focus on firm-specific factors that influence the innovativeness level of new products.	Resource-Based View	150 SMEs in Greece. ANOVA and path analysis	Technology orientation is more important than customer orientation in explaining product newness to customers and thus increases the chances of the firm producing a new product beyond their experiences and consumption patterns.
The successful marketing strategies of German companies in the UK	Shaw, V. (2000)	Findings of a study of the successful international marketing strategies and headquarter-subsidiary relationships of 186 German companies operating in the UK.	Not explicitly	186 German companies operating in the UK. Descriptive statistics	Strong product orientation combined with a high level of market orientation was found to characterize successful companies.
Marketing organizations in Hungarian and Polish firms: part 1	Shipley, D., Graham, H., Beracs, J., Fonfara, K. and Kolos, K. (1995)	Track the nature and development of company organization for marketing in Hungary and Poland.	Not explicitly	1,786 mail questionnaries in Hungary and Poland. Descriptive statistics	Most existing organizations are inadequate.
Exploring a Global Pattern of E-Business Activities	Suh, T. (2005)	Explore the relationship between e-business activities and strategic orientations.	Not explicitly	National firm level data across 56 countries. OLS regression	Customer orientation is associated with the level of e-customer service. Commercial concerns are

and Strategic Orientation					more important for implementing e-commerce.
Strategic Orientation and Firm Performance in an Artistic Environment	Voss, G.B. and Voss, Z.G. (2000)	Examine the impact of three alternative strategic orientations –customer orientation, competitor orientation, and product orientation- ona a variety of subjective and objective measures of performance in the nonprofit professional theater industry.	Contingency theory	101 nonprofit professional theaters. Hierarchical moderated regression analysis	Association between strategic orientation and performance varies depending on the type of performance measure used.
An evaluation of Marketing Practices and Market Orientation in the Bulgarian Wine Industry	Zaharieva, E., Gorton, M. and Lingard, J. (2004)	Analyze marketing practices and the degree of market orientation in the Bulgarian wine industry.	Not explicitly	10 in-depth semi-structured interviews with marketing managers and other relevant personnel. Case study analysis	Production orientation rather than a market focus predominantly guides the Bulgarian wine industry.
The Effects of Strategic Orientations on Technology- and Market-Based Breakthrough Innovations	Zhou, K.Z, Yim, C.K. and Tse, D.K. (2005)	Test a model that links different types of strategic orientations and market forces, through organizational learning, to breakthrough innovations and firm performance.	Resource-Based View	350 surveys of brands of commonly used consumer durable and nondurable products	Market orientation facilitates innovations that use advanced technology. Different market forces exert significant influence on technology- and market-based innovations.

Source: Self-elaborated

Appendix 4. **In-depth semi-structured interview guide**

In-depth semi-structured interview guide

Name_____ Age____

Official Position_____ Years in the company_____

Years in the official position_____ Highest study degree_____

Previous professional experience (before you come into the company and inside the company)

In a 1 to 10 scale, how competitive is your company in the market? _____

In your experience, which are the key factors for the company to be competitive?

In your experience, what does the company requires to become more competitive?

In a 1 to 10 scale, how do you evaluate your company performance? _____

Which key performance indicators do you use in order to evaluate performance?

How often do you review the key performance indicators in your company?

In your experience, which factors are those who creates a better performance for the company?

In your experience, what does the company needs to enhance its performance?

Describe –in a general way- the competitive strategy that the company use in terms of: market, human resource, technology and innovation, new products or services to the market.

Appendix 5. **Strategic orientations and performance scales (in Spanish)**

Technology orientation (Reliability[a]: 0.839)

(Five point Likert scale)

1. La política de la empresa ha sido siempre considerar las tecnologías más avanzadas en el mercado para el desarrollo de productos y/o servicios.
2. Tenemos una gran tradición y reputación en el sector por tratar de ser siempre los primeros en probar nuevos métodos y tecnología.
3. Se nos reconoce en el sector por ser la empresa que más invierte en el desarrollo de nuevos productos y/o servicios.
4. Dedicamos recursos extra para reclutar al mejor personal calificado en el área de investigación y desarrollo de productos, procesos o servicios.
5. Dedicamos recursos extra para realizar pronósticos del ciclo de vida de la tecnología.

Innovativeness (Reliability[a]: 0.769)

(Five point Likert scale)

1. La tasa de nuevos productos o servicios en la empresa en comparación con nuestros competidores directos es:
2. El grado de diferenciación entre nuestras innovaciones y las innovaciones de nuestros competidores directos es:
3. La tasa de éxito de nuevos productos en relación a la tasa de nuestros competidores directos es:

Relational Capital (Reliability[a]): 0.887)

(Five point Likert scale)

1. Obtenemos de nuestra cartera de clientes mucha de nuestra información valiosa sobre las necesidades y tendencias del mercado.

2. Los empleados de mi organización trabajan conjuntamente con los clientes para desarrollar soluciones.
3. La base de clientes de mi empresa se encuentra entre las mejores de la industria.
4. Los empleados de mi organización trabajan conjuntamente con los proveedores para desarrollar soluciones.
5. En los últimos años, mi organización está mejorando la calidad y el diseño de nuestros productos y procesos mediante las relaciones con nuestros proveedores.
6. La base de proveedores de mi empresa se encuentra entre las mejores de la industria.

Performance (Reliability[a]: 0.841)

(Five point Likert scale)

1. En relación a nuestros objetivos, el nivel de rentabilidad sobre la inversión (ROI) en el último año fue
2. En relación a nuestros objetivos, el nivel de utilidades en el último año fue
3. En relación a nuestros objetivos, el nivel de incremento en nuestras ventas en el último año fue
4. En relación a nuestros objetivos, el grado de satisfacción de nuestros clientes en el último año fue
5. En relación a nuestros objetivos, la satisfacción de los empleados en el trabajo en el último año fue
6. Los resultados globales en nuestra empresa en el último año fueron

Learning orientation (Reliability[a]: 0.835)

1. Los valores clave de este negocio incluyen al aprendizaje como un factor esencial para la mejora
2. Nosotros pensamos que el aprendizaje del empleado es una inversión y no un gasto
3. Pensamos en esta empresa que si nos quedamos pasivos en nuestro aprendizaje dañaremos nuestro futuro
4. Los altos ejecutivos creemos conveniente compartir la visión de negocio con todos los empleados
5. Todos los empleados estamos comprometidos con las metas de este negocio

6. Hay un total acuerdo con la visión del negocio a través de todos los niveles, funciones y áreas de la empresa
7. Los administradores apoyamos a los empleados a buscar nuevas maneras de hacer las cosas
8. El negocio está abierto a recibir críticas sobre la forma en que hacemos nuestro trabajo
9. El énfasis en la innovación constante forma parte de la cultura en la empresa

Entrepreneurial orientation (Reliability[a]: 0.731)

1. En general, tenemos fuerte énfasis en investigación y desarrollo de nuevos productos o servicios más que en la comercialización de productos que el mercado ya conoce (Y LAS DEL SECTOR COMERCIO?)
2. En general, en la empresa tomamos proyectos con bajo riesgo y utilidades normales en lugar de proyectos de alto riesgo con probabilidad de altos márgenes de utilidad
3. En general, nosotros preferimos cambios grandes y rápidos, más que cambios pequeños y lentos
4. Los cambios en los últimos años en las líneas de productos o servicios del negocio han sido constantes e importantes
5. La empresa, en lugar de tener acciones pioneras en el mercado, típicamente responde a acciones que los competidores han iniciado
6. La empresa típicamente adopta medidas agresivas para superar a los competidores del mercado

Market orientation (Reliability[a]: 0.794)

1. Los objetivos del negocio están orientados principalmente por la satisfacción del cliente
2. Nosotros informamos sobre las experiencias positivas o negativas con los clientes a todas las áreas funcionales de la empresa
3. La estrategia, dirigida a obtener una ventaja competitiva, está basada en la comprensión de las necesidades de los clientes
4. Medimos la satisfacción del cliente sistemática y frecuentemente
5. Medimos de forma constante el servicio al cliente
6. Estamos más orientados a los clientes que a nuestros competidores

7. Contactamos con los clientes finales, al menos una vez al año, para evaluar la calidad de nuestros productos y servicios
8. Datos sobre las expectativas del cliente son difundidos regularmente a todos los niveles en cada área de nuestro negocio

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[a]Cronbach's alpha

Appendix 6. **Exploratory factor analysis results**

Table 18. **Exploratory factor analysis for relational capital**

KMO and Bartlett test

Medida de adecuación muestral de Kaiser-Meyer-Olkin.		.840
Prueba de esfericidad de Bartlett	Chi-cuadrado aproximado	593.762
	Gl	15
	Sig.	.000

Table 19. **Exploratory factor analysis for market orientation**

KMO and Bartlett test

Medida de adecuación muestral de Kaiser-Meyer-Olkin.		.848
Prueba de esfericidad de Bartlett	Chi-cuadrado aproximado	679.114
	Gl	28
	Sig.	.000

Table 20. **Exploratory factor analysis for entrepreneurial orientation**

KMO and Bartlett test

Medida de adecuación muestral de Kaiser-Meyer-Olkin.		.759
Prueba de esfericidad de Bartlett	Chi-cuadrado aproximado	462.296
	Gl	15
	Sig.	.000

Table 21. **Exploratory factor analysis for learning orientation**

KMO and Barlett test

Medida de adecuación muestral de Kaiser-Meyer-Olkin.		.887
Prueba de esfericidad de Bartlett	Chi-cuadrado aproximado	886.822
	Gl	36
	Sig.	.000

Table 22. **Exploratory factor analysis for technology orientation**

KMO and Bartlett test

Medida Kaiser-Meyer-Olkin de adecuación de muestreo		.847
Prueba de esfericidad de Bartlett	Aprox. Chi-cuadrado	650.152
	Gl	10
	Sig.	.000

Table 23. **Exploratory factor analysis for innovativeness**

KMO and Bartlett test

Medida Kaiser-Meyer-Olkin de adecuación de muestreo		.685
Prueba de esfericidad de Bartlett	Aprox. Chi-cuadrado	290.825
	Gl	3
	Sig.	.000

Table 24. **Exploratory factor analysis for performance**

KMO and Bartlett test

Medida Kaiser-Meyer-Olkin de adecuación de muestreo		.863
Prueba de esfericidad de Bartlett	Aprox. Chi-cuadrado	776.437
	Gl	15
	Sig.	.000