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**Universitat Autònoma  
de Barcelona**

**Department of Business**

**Doctorate in Entrepreneurship and Management**

**DOCTORAL THESIS**

**Social Capital Development: A Case-based  
Qualitative Study on the Internationalization  
Process of Costa Rican Knowledge-  
intensive SMEs.**

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## **ABSTRACT**

This dissertation explored the development of social capital dimensions of SMEs, and its influence on the internationalization process; by exploring social capital at pre-founding, venture creation, pre-internationalization and post-internationalization stages. This thesis studied the influence of social capital from individual and firm level, through multilevel analysis: structural, relational and cognitive dimension of social capital, which results in a wider perspective of the phenomenon. Consequently, the adopted view of social capital is more than just a network. That is, it includes many aspects of social context; such as social interaction, social ties, trusting relationships, and value systems.

Seven qualitative case studies were conducted. The in-depth case studies of Costa Rica software industry was carried out during 2013. The data describes the processes of evolution of social capital dimensions, during the internationalization process of cases firms. The case firms' analysis proceeded from single case analysis to cross-case analysis exploring similarities and differences across the cases. A theoretical framework for social capital development of international ventures was developed based on literature review and the case studies findings.

The findings suggest that the dimensions of social capital are part of the evolution process of SMEs. Although the networks have been relevant in social capital development research, the findings also suggest a greater importance in building trust within social networks of the entrepreneur on the internationalization process (even before the creation of the firm). The results have been focusing on cognitive, structural and relational dimensions of social capital, which are present at firm level and individual level. Social capital benefits are significantly associated with the availability of network resources and hence necessitates intentional networking behaviour to make those specific resources available. Outsourcing and networking are combined to support SME business development.

## **RESUMEN**

Esta tesis explora el desarrollo del capital social de las Pymes, y su influencia en el proceso de internacionalización; mediante la exploración de las dimensiones del capital social en la etapa pre-fundacional, preliminar a la internacionalización y la posterior a la internacionalización. En esta tesis se estudió la influencia de estas dimensiones del capital social desde una perspectiva individual y una perspectiva de la empresa, a través del análisis de múltiples niveles: estructural, relacional y dimensión cognitiva, lo que se traduce en una perspectiva más amplia del fenómeno. En consecuencia, el punto de vista adoptado del capital social es algo más amplio que el que brinda una perspectiva de redes. Es decir, que incluye muchos aspectos de contexto social; tales como la interacción social, las relaciones sociales, relaciones de confianza, y los sistemas de valores.

Se llevaron a cabo siete estudios de caso cualitativos. El estudio de casos en profundidad de la industria del software Costa Rica se llevó a cabo durante el año 2013. Los datos describen los procesos de evolución de las dimensiones del capital social, durante el proceso de internacionalización de las empresas estudiadas. El análisis de las empresas estudiadas se realizó para cada caso individualmente y luego un análisis cruzado de los casos para explorar las similitudes y diferencias entre ellos. Se desarrolló un marco teórico sobre el desarrollo de las dimensiones del capital social de las empresas internacionales basado en la revisión de literatura y los hallazgos empíricos del estudio de casos.

Los resultados sugieren que las dimensiones del capital social son parte del proceso de evolución de las Pymes. A pesar de que las redes han sido relevantes en la investigación de desarrollo de capital social, los resultados también sugieren una mayor importancia en la construcción de la confianza dentro de las redes sociales de los empresarios en el proceso de internacionalización (incluso antes de la creación de la empresa). Los resultados se han centrado en las dimensiones cognitivas, relacionales y estructurales de capital social, que están presentes a nivel de empresa y a nivel individual. Los beneficios del capital social se asocian significativamente con la disponibilidad de los recursos de la red y, por lo tanto, requiere un comportamiento intencional utilización de contactos de la red para hacer disponibles esos recursos específicos. La subcontratación y utilización de contactos de la red se combinan para apoyar el desarrollo empresarial de las Pymes.

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## TABLE OF CONTENTS

ABSTRACT .....	2
RESUMEN .....	3
ACKNOWLEDGEMENTS .....	4
TABLE OF CONTENTS .....	5
LIST OF TABLES.....	9
LIST OF FIGURES.....	10
LIST OF ABBREVIATIONS .....	11
<b>CHAPTER ONE: INTRODUCTION.....</b>	<b>13</b>
1.1 BACKGROUND .....	13
1.2 RESEARCH GAPS AND RESEARCH FOCUS .....	16
1.3 RESEARCH QUESTIONS AND RESEARCH CONTRIBUTIONS .....	18
1.4 RESEARCH METHODOLOGY .....	22
1.5 CORE CONCEPTS.....	22
1.6 STRUCTURE OF THE THESIS .....	23
<b>CHAPTER TWO: LITERATURE REVIEW OF INTERNATIONALIZATION OF THE FIRMS27</b>	
2.1 INTRODUCTION .....	27
2.2 INTERNATIONALIZATION PROCESS THEORY (BEHAVIOURAL PERSPECTIVE) .....	27
2.2.1 <i>The Establishment Chain</i> .....	27
2.2.2 <i>Uppsala model</i> .....	28
2.2.3 <i>Other process models of internationalization</i> .....	30
2.2.4 <i>Criticism of the process theories</i> .....	32
2.3 KNOWLEDGE-BASED VIEW OF THE INTERNATIONALIZATION OF THE FIRM (STRATEGIC PERSPECTIVE)	
.....	33
2.3.1 <i>The Knowledge-based view</i> .....	33
2.3.1.1 Knowledge-based view and internationalization .....	34
2.3.2 <i>Criticism of knowledge perspective</i> .....	40
2.4 INTERNATIONAL ENTREPRENEURIAL PERSPECTIVE.....	40
2.4.1 <i>Domain and definitions of International Entrepreneurship</i> .....	40
2.4.2 <i>International New Ventures</i> .....	44
2.4.3 <i>The entrepreneur</i> .....	46
2.4.3.1 Theories of entrepreneurship.....	47
2.4.3.2 Opportunity definition .....	48
2.4.3.3 Views on the phenomenon of opportunities .....	49
2.4.3.4 Entrepreneurial Opportunity Identification definition .....	50
2.4.3.5 Internationalization as an entrepreneurial process.....	52
2.5.3.6 Factors and processes influencing opportunity discovery, evaluation and exploitation in international markets .....	52
2.4.4 <i>Criticism of the IE perspective</i> .....	55
2.5 SUMMARY OF INTERNATIONALIZATION LITERATURE REVIEW .....	56
<b>CHAPTER THREE: SOCIAL CAPITAL PERSPECTIVE AND THE SMES INTERNATIONALIZATION PROCESS .....</b>	<b>60</b>
3.1 INTRODUCTION .....	60
3.2 SOCIAL CAPITAL CONCEPTS .....	60
3.2.1 <i>Network relationships</i> .....	60
3.2.2 <i>Social capital definitions</i> .....	64
3.2.3 <i>Levels of Social capital</i> .....	67
3.3 SOCIAL CAPITAL AND SMES INTERNATIONALIZATION .....	68
3.3.1 <i>Social capital and pre-start up/venture creation</i> .....	73
3.3.2 <i>Social capital and pre-internationalization</i> .....	75
3.3.3 <i>Social capital and post- internationalization</i> .....	79
3.4 THE LITERATURE GAPS OF THIS RESEARCH .....	81
3.4.1 <i>Gap 1: The influence of pre-founding social capital on international business activities</i> .....	81
3.4.2 <i>Gap 2: Social capital: a resource that must be develop</i> .....	82

3.4.3 Gap 3: The dark side of social capital .....	84
3.5 SYNTHESIS: SOCIAL CAPITAL AND SMES INTERNATIONALIZATION PROCESSES .....	85
3.5.1 The conceptual framework and the main research questions .....	87
<b>CHAPTER FOUR: RESEARCH SETTINGS AND METHODOLOGY .....</b>	<b>90</b>
4.1 INTRODUCTION .....	90
4.2 RESEARCH SETTINGS .....	90
4.2.1 Costa Rica .....	91
4.2.2 Information and communication technologies industry in Costa Rica .....	92
4.2.2.1 Costa Rican software sector .....	95
4.2.2.2 Costa Rican software value chain .....	97
4.2.3 The software industry worldwide .....	100
4.2.3.1 Software industry value chain .....	102
4.2.3.2 The role of U.S.A. multinational companies .....	104
4.2.4 Inserting Costa Rican software firms in Global Value chains .....	105
4.2.4.1 Public Policy .....	108
4.2.4.2 Institutional context .....	112
4.2.5 Implications for the research .....	112
4.3 RESEARCH METHODOLOGY .....	114
4.3.1 Methodology approach overview .....	115
4.3.1.1 Scientific philosophical orientation .....	115
4.3.1.2 Scientific approach .....	116
4.3.2 Operationalization .....	119
4.3.3 Research strategies .....	121
4.3.3.1 Case study method .....	122
4.3.3.2 Selection of case study .....	125
4.3.4 The process of collecting data .....	129
4.3.4.1 The interviews .....	129
4.3.4.2 Triangulation .....	130
4.3.5 The process of analysing data .....	131
4.3.6 Validity and Reliability .....	133
4.4 SUMMARY .....	134
<b>CHAPTER FIVE: DESCRIPTION AND INDIVIDUAL WITHIN-CASE ANALYSIS .....</b>	<b>137</b>
5.1 INTRODUCTION .....	137
5.2 CASE STUDY 1: FIRM ALPHA .....	137
5.2.1 Founders' background .....	137
5.2.2 Pre-start up/venture creation/ pre-internationalization .....	138
5.2.3 Post-Internationalization .....	141
5.2.4 Analysis of case study 1: Firm Alpha .....	145
5.3 CASE STUDY 2: FIRM BETA .....	148
5.3.1 Founder background .....	148
5.3.2 Pre-start up/venture creation .....	148
5.3.3 Pre-internationalization .....	148
5.3.4 Post-Internationalization .....	152
5.3.5 Analysis of case study 2: Firm Beta .....	153
5.4 CASE STUDY 3: FIRM GAMMA .....	156
5.4.1 Founder background .....	156
5.4.2 Pre-start up/venture creation/ pre-internationalization .....	156
5.4.3 Post-internationalization .....	157
5.4.4 Analysis of case study 3: Firm Gamma .....	160
5.5 CASE STUDY 4: FIRM DELTA .....	162
5.5.1 Founders' background .....	162
5.5.2 Pre-start up/venture creation/ Pre-internationalization .....	162
5.5.3 Post-internationalization .....	164
5.5.4 Analysis of case study 4: Firm Delta .....	166
5.6 CASE STUDY 5: FIRM EPSILON .....	170
5.6.1 Founders' background .....	170
5.6.2 Pre-start up/venture creation/ pre-internationalization .....	170
5.6.3 Post-internationalization .....	171
5.6.4 Analysis of case study 5: Firm Epsilon .....	173

5.7 CASE STUDY 6: FIRM KAPPA.....	176
5.7.1 <i>Founder's background</i> .....	176
5.7.2 <i>Pre-start up/venture creation</i> .....	176
5.7.3 <i>Pre-internationalization</i> .....	176
5.7.4 <i>Post-internationalization</i> .....	177
5.7.5 <i>Analysis of case study 6: Firm Kappa</i> .....	180
5.8 CASE STUDY 7: FIRM OMEGA.....	182
5.8.1 <i>Founder's background</i> .....	182
5.8.2 <i>Pre-start up/venture creation</i> .....	182
5.8.3 <i>Pre-internationalization</i> .....	182
5.8.4 <i>Post-internationalization</i> .....	183
5.8.5 <i>Analysis of case study 7: Firm Omega</i> .....	185
5.9 SUMMARY.....	188
<b>CHAPTER SIX: CROSS-CASE ANALYSIS AND FINDINGS .....</b>	<b>190</b>
6.1 INTRODUCTION.....	190
6.2 INTERNATIONAL START-UPS.....	193
6.2.1 <i>Social capital and pre-start-up/venture creation/pre-internationalization</i> .....	193
6.2.1.1 Composition of social capital by dimensions.....	193
6.2.1.2 Influence of social capital on international opportunity identification process.....	195
6.2.1.3 Social capital and resources access.....	200
6.2.1.4 Outsourcing.....	201
6.2.2 <i>Social capital and post-internationalization</i> .....	201
6.2.2.1 Composition of social capital by dimensions.....	202
6.2.2.2 Influence of social capital on international opportunity identification process.....	205
6.2.2.3 Social capital and resources access.....	211
6.2.2.4 Outsourcing.....	212
6.3 EARLY INTERNATIONALS.....	213
6.3.1 <i>Social capital and pre-start up/venture creation</i> .....	213
6.3.1.1 Composition of social capital by dimensions.....	214
6.3.2 <i>Social capital and pre-internationalization</i> .....	215
6.3.2.1 Composition of social capital by dimensions.....	215
6.3.2.2 Influence of social capital on international opportunity identification process.....	217
6.3.2.3 Social capital and resources access.....	221
6.3.2.4 Outsourcing.....	222
6.3.3 <i>Social capital and post-internationalization</i> .....	222
6.3.3.1 Composition of social capital by dimensions.....	222
6.3.3.2 Influence of social capital on international opportunity identification process.....	224
6.3.3.3 Social capital and resources access.....	227
6.3.3.4 Outsourcing.....	228
6.4 CROSS-CASE SOCIAL CAPITAL DEVELOPMENT.....	229
6.4.1 <i>Pre-start up/venture creation/ pre-internationalization stage(s)</i> .....	230
6.4.1.1 Social capital composition by dimension.....	232
6.4.1.2 Social capital development and internationalization process.....	236
6.4.1.3 Social capital development and resources access.....	240
6.4.1.4 Social capital development and outsourcing.....	246
6.4.2 <i>Post-internationalization stage</i> .....	246
6.4.2.1 Social capital composition by dimension.....	247
6.4.2.2 Social capital development and internationalization process.....	249
6.4.2.3 Social capital development and access to resources.....	251
6.4.2.4 Social capital development and outsourcing.....	254
6.5 SUMMARY.....	255
<b>CHAPTER SEVEN: CONCLUSIONS.....</b>	<b>258</b>
7.1 INTRODUCTION.....	258
7.2 SUMMARY AND CONTRIBUTIONS.....	258
7.2.1 <i>Summary of the study</i> .....	258
7.2.2 <i>Contributions of the study</i> .....	264
7.2.2.1 Empirical contribution.....	264
7.2.2.2 Theoretical contribution.....	269
7.3 MANAGERIAL AND POLICY-MAKING IMPLICATIONS.....	271
7.3.1 <i>Managerial implications</i> .....	271
7.3.2 <i>Policy-making implications</i> .....	272



7.4 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH .....	273
7.4.1 <i>Limitations of the study</i> .....	273
7.4.2 <i>Recommendation for future research</i> .....	274
<b>REFERENCES .....</b>	<b>276</b>

## LIST OF TABLES

Table 1 Selected innovation-related internationalization taxonomies.....	31
Table 2 Some IE definitions .....	42
Table 3 Comparing the three views of entrepreneurial opportunity.....	49
Table 4 The distinction between personal and business networks .....	61
Table 5 Social Capital dimensions and descriptions .....	65
Table 6 ICT Sectors in Selected Countries (2013).....	92
Table 7 Exports of ICT goods by country: Some upper-middle income countries.....	93
Table 8 Job profiles in High-Tech firms .....	96
Table 9 A holistic perspective of ICT sector (including software) .....	99
Table 10 Software Industry Segmentation .....	101
Table 11 ICT firms established in Costa Rica in last decade .....	105
Table 12 Major differences between paradigms.....	118
Table 13 Evaluation of Commonly applied research methods.....	122
Table 14 Summary of cases in this study .....	130
Table 15 Case study analysis techniques.....	132
Table 16 Summary of research methods .....	135
Table 17 Description of the development of social capital and the internationalization process of Alpha .....	145
Table 18 Description of the development of social capital and the internationalization process of Beta .....	153
Table 19 Description of the development of social capital and the internationalization process of Gamma .....	160
Table 20 Description of the development of social capital and the internationalization process of Delta .....	166
Table 21 Description of the development of social capital and the international process of Epsilon.....	173
Table 22 Description of the development of social capital and the internationalization process of Kappa .....	180
Table 23 Description of the development of social capital and the internationalization process of Omega .....	185
Table 24 Summary of seven case studies .....	188
Table 25 Internationalization of case-study firms .....	190
Table 26 Composition of social capital at pre-start-up/venture creation/pre-internationalization .....	194
Table 27a Characteristics of relationships associated with social capital at pre-start-up/venture creation/pre-internationalization.....	194
Table 28 The role of prior ties and prior knowledge on key resources to evaluate.....	198
Table 29 Social capital and its influence on international opportunity identification process .....	200
Table 30 Social capital and access to resources .....	201
Table 31 Initial products and services of case-study firms.....	201
Table 32 Composition of social capital post-internationalization.....	203
Table 32a Characteristics of relationships associated with social capital post-internationalization.....	204
Table 33 The role of social capital on key resources to evaluate.....	208
Table 34 Social capital and its influence on international opportunity identification.....	210
Table 35 Social capital and access to resources.....	212
Table 36 Subsequent products and services of case-study firms.....	213
Table 37 Composition of social capital in pre-start up/venture creation phase.....	214

Table 37a Characteristics of relationships associated to social capital at pre-start-up/venture creation.....	215
Table 38 Composition of social capital pre-internationalization.....	216
Table 38a Characteristics of relationships associated with social capital pre-internationalization .....	216
Table 39 The role of prior knowledge and social capital on opportunity evaluation...	219
Table 40 Social capital and international opportunity identification.....	220
Table 41 Social capital and access to resources.....	221
Table 42 Initial products and services of case-study firms.....	222
Table 43 Composition of social capital post-internationalization.....	223
Table 43a Characteristics of relationships associated with social capital pre-internationalization.....	224
Table 44 The role of social capital on opportunity evaluation.....	225
Table 45 Social capital and international opportunity identification.....	226
Table 46 Social capital and access to resources.....	228
Table 47 Products and services of case-study firms.....	228
Table 48 Timing differences of international opportunity exploitation.....	230
Table 49 Resources and sources for internationalization.....	243

#### **LIST OF FIGURES**

Figure 1 The literature fields of this study .....	18
Figure 2 Flow chart overview of Thesis.....	25
Figure 3 The Basic Mechanism of internationalization.....	29
Figure 4 Market knowledge components .....	35
Figure 5 Internationalization knowledge composition .....	36
Figure 6 A model of factors influencing a fast internationalization of INVs.....	46
Figure 7 The conceptual framework.....	88
Figure 8 Classification of software providers.....	101
Figure 9 Software value chain .....	103
Figure 10 The research process .....	114
Figure 11 Model of social capital development and its influences on internationalization process of knowledge-intensive SMEs.....	263

## **LIST OF ABBREVIATIONS**

BCCR	Banco Central de Costa Rica
CAMTIC	Cámara Costarricense de Tecnologías de Información y Comunicación
CINDE	Coalición Costarricense de Iniciativas de Desarrollo
FDI	Foreign Direct Investment
FMK	Foreign Market Knowledge
INV	International New Venture
IB	International Business
IE	International Entrepreneurship
IK	Internationalization Knowledge
ICT	Information and Communication Technologies
MNE	Multinational Enterprise
KBV	Knowledge Based View
OECD	Organization for Economic Co-operation and Development
RBV	Research Based View
SME	Small and Medium Enterprise
USA	United States of America



## **CHAPTER ONE: INTRODUCTION**

This chapter provides an overview of the research presented in this dissertation. The chapter begins with the background of the research. In section 1.2, the existing literature is discussed briefly based on the gaps identified, and the focus of the research to address those gaps is defined. In section 1.3, the research questions are specified and the contribution of this research is explained. The research methodology is described in section 1.4. The chapter ends with some core concepts (1.5) and a description of the dissertation's structure (1.6).

### **1.1 BACKGROUND**

The primary aim of the present study is to investigate the development of social capital dimensions and its influence on the processes of internationalizing small and medium-sized enterprises (SMEs). Social capital lens is suitable to describe accurately the internationalization processes of firm with an early and rapid internationalization, which is often associated with high technology industries (Agndal et al., 2008; Prashantham & Dhanaraj, 2010; Lindstrand et al., 2011; Rialp et al., 2005). The increasing number of young and entrepreneurial firms that enter international markets right from their start-up has attracted the interest of several scholars (Baum et al., 2015; Gerschewski et al., 2015; Jones et al., 2011; Knight & Liesch, 2016). Although the influence of social capital on the internationalization process of SMEs is recognized in the literature of international entrepreneurship (IE) (e.g. Berg et al., 2008; Coviello, 2006; De Carolis et al., 2009; Oviatt & McDougall, 1994; Prashantham & Young, 2011; Yli-Renko et al., 2002), there is debate about how dimensions of social capital affects SMEs at different stages of their organizational development (Lindstrand et al., 2011) and how this process differs across the countries (Stam et al., 2014). So far, much of the research on social capital related to IE focuses on firms in developed economies (Musteen et al., 2013), neglecting the singularity of other regions (Kazlauskaitė et al., 2015) as the understudied Latin America region (Clarke, et al., 2016). The studies on the development of social capital dimensions in developing/emerging markets is still an emerging area of study (Prashantham & Dhanaraj, 2010) as well as internationalization of SMEs based in Latin America (Lopez et al., 2009; Ciravegna et al., 2013).

This research seeks to fill these gaps by gaining rich insights into the development of social capital dimensions through different stages to describe accurately the internationalization process of knowledge-intensive SMEs in a developing country from Latin America. Latin American firms have succeeded in expanding to international markets (Brenes et al., 2015) and SMEs have been shown to be a potentially major driving force for growth, structural change and employment (Brixiova, 2013). Achieving early and rapid internationalization is not simply a matter of optional growth in Latin America context, it is necessary to escape from resource constraints (Ciravegna et al., 2016).

There is evidence that some Latin American firms follow a gradual approach (Lopez et al., 2009). Despite the model of internationalization stages describes a gradual process of reaching foreign markets after the development of the domestic market (Johanson & Vahlne, 1977), this model may not fully explain the pattern of internationalization of other SMEs (i.e. knowledge-intensive firms). This (traditional) model has been applied to the study of both multinational enterprises (MNEs) and SMEs (Olejnik & Swoboda, 2012), but certainly the behaviour of some SMEs has challenged the stages model (Jones et al., 2011; Keupp & Gassmann, 2009; Rialp et al., 2005). These distinct SMEs follow the pattern that Oviatt and McDougall (1994) defined as international new ventures (INV). INVs are firms that target international markets at early stages of their life cycle (or from inception) and that have a significant proportion of foreign sales and involvement in multiple countries. This phenomenon began emerging from economies with large internal markets, but might be expected in countries with smaller domestic markets (Cavusgil & Knight, 2015) even in a small developing economy in Latin America (Lopez et al., 2009).

The influence of social capital on internationalization of SMEs in the context of advanced economies has been extensively examined (Chetty & Agndal, 2007; Chetty & Söderqvist, 2013; Coviello, 2006; Ellis, 2000; Kontinen & Ojala, 2012; Lindstrand et al., 2011; Yli-Renko et al., 2002). Social capital has been identified in studies across different contexts as one common (or central) feature that helps to overcome the constraints, allowing rapid and early internationalization of SMEs (Oviatt & McDougall, 1997). Social capital helps SMEs to obtain tangible and intangible resources for internationalization (Keupp & Gassmann, 2009; Yeung, 2002; Wright &

Dana, 2003), provides information, either directly or indirectly, which can be capitalised in terms of the internationalisation of the firm and therefore has the potential to improve international performance (Chandra et al., 2009; Kenny & Fahy, 2011). Also it is a useful tool for firms competing in high technology sectors that need crucial resources, i.e. knowledge (Prashantham, 2005). Social capital helps to acquire knowledge through foreign counterparts to overcome resource limitations (Zain & Ng, 2006) and facilitates the acquisition and development of other resources either (Brush et al., 2001; Coviello & Cox, 2006; Elfring & Hulsink, 2003). Thus, social capital represents the vehicle to mobilize resources from foreign markets for firms and reach superior performance (Adler & Kwon, 2002; Burt, 1997; Lin et al., 2001; Nahapiet & Goshal, 1998). However, in most of the literature on the internationalization of SMEs social capital is argued to be beneficial for business firms (Loane & Bell, 2006), disregarding its drawbacks (Prashantham & Dhanaraj, 2010).

In Latin America context, built social capital is important for SMEs internationalization. There is evidence that lack of reputation may negatively affect their activities (Ciravegna et al., 2013). However, there is not any research about dynamics of social capital dimensions in this context. Therefore, this study contributes to extend the theoretical basis of IE. A review of the existing literature relevant to an understanding of the development of social capital and its influence on the internationalization process of firms suggests three broad groups; international business theory, international entrepreneurship theory and strategic management theory.

Research of emerging/developing market SMEs in terms of country context is sparse (Clarke et al., 2016). This research provide to IE a new context and perspective on how dynamics of social capital dimensions, explored at different stages of business development, influence internationalization process of SMEs in Costa Rica. In addition, the empirical evidence is based on qualitative research of SMEs software firms. The Costa Rica software industry is characterized by a strong international orientation and has been studied from other angles (Lopez et al., 2009; Ciravegna, 2011; Ciravegna, 2012; Ciravegna et al., 2013). This country is a small, developing Latin America economy, considered as an economy in transition from efficiency driven to innovation driver (World Economic Forum, 2013).



## 1.2 RESEARCH GAPS AND RESEARCH FOCUS

The focus of this research is on development of social capital dimensions and internationalizing SMEs, to describe the dynamics of social capital through the different stages of SMEs' internationalization (pre-start-up/venture creation, pre-internationalization and post-internationalization) and its influence on each of those stages. Personal-level social capital in the pre-founding stage, and firm-level social capital once the firm is created, is analysed. The context in which social capital is developed is important for the entrepreneurial phenomena (Venkatereman & Sarasvathy, 2001; Berg et al., 2008), as well as discuss negative social capital outcomes (Inkpen & Tsang, 2005). In addition it is proposed that a firm can overcome its constraints and adapt its social capital to changing task and resource requirements over the time (Maurer & Ebers, 2006). In consequence, prior efforts to develop social capital (including at pre-founding stage) are required to support the initial internationalization process. That is, social capital outcomes are not available to every firm. Having identified, these gaps (pre-founding social capital dimensions role, how social capital dimensions are developed and used, and the negative side impact of social capital dimensions), this research defines the development (through different stages) of social capital dimensions as the focal construct in relation to the process of internationalization of SMEs.

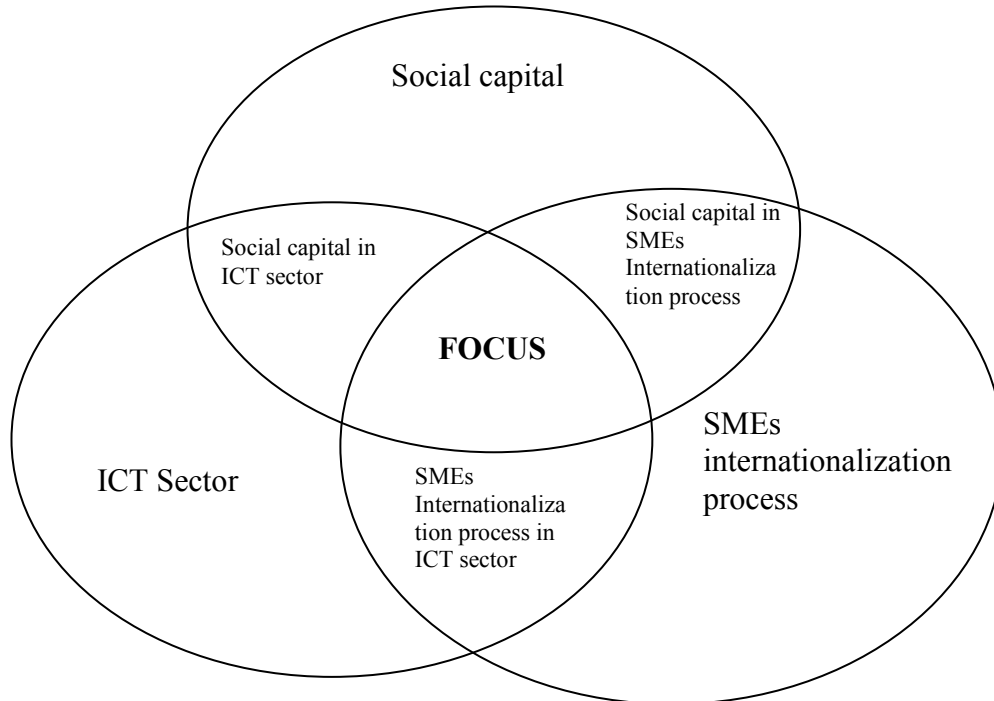
This research argues that social capital is neither a resource granted to a firm nor necessarily beneficial in supporting internationalization (Adler & Kwon, 2002; Bourdieu, 1986; Coleman, 1988; Nahapiet & Ghoshal, 1998; Prashantham & Dhanaraj, 2010) and its development starts at pre-founding stage (Laurell et al., 2016). Other presumption of this research is that social capital includes development efforts to obtain the social capital outcomes, through which competitiveness can be reached due to the firm's advantage. The causal linkage between the development of social capital and its outcomes is explicitly described. The unit of analysis is the development of social capital dimensions (personal/firm level). This research analyses and explains both the development and the outcomes of social capital in the specific context of internationalization of SMEs in the software industry (see Figure 1).

The Costa Rican software sector was identified as a sector of strong competitive advantage and thus high growth potential (Rodríguez-Clare, 2001). The economic policy has been consistent with the needs of the large firms from ICT sector promoting trade and FDI as a successful instruments associated with increasing exposure to trade (Rodríguez-Clare, 2001; Harrison & Rodríguez-Clare, 2010, Ciravegna, 2012). However the SMEs, which represents 75% of the software firms in Costa Rica have less than 20 employees (Lopez et al., 2009), have benefited poorly from those policies. The economic policy was an unsuccessful policy because the SMEs have suffered from scant support to develop their business (Paus & Gallagher 2008; Rodríguez-Clare, 2004). Even so the SMEs from ICT sector (particularly software) have reached successfully the international markets (Ciravegna et al., 2013; Rodríguez-Clare, 2001). Due to deficiencies in economic policy, the SMEs are more likely to follow tacit rules and are subject to more complex informal constraints on their behaviours (Xu & Meyer, 2005). The study, therefore, focuses on Costa Rica because this country hosts a very dynamic high technology industry – it is the leading exporter of software and information technology services in the Latin American region on a per capita basis (Ciravegna, 2012), and there has been a lack of research on entrepreneurial activities in Latin America, less than 3% of publications in the international business literature refer specifically to this geographical area (Perez-Batres et al., 2010).

This research focuses on the software industry, which is conducive to the study of early internationalization as it is a dynamic environment and small entrepreneurial ventures are common. Most of the literature on social capital in the context of the software industry has been conducted in advanced economies (Bell, 1995, Coviello & Munro 1995, 1997; Bell et al. 2003, Fernhaber & McDougall-Covin, 2009; Crick & Spence, 2005, Coviello, 2006; Loane & Bell, 2006; Agndal et al., 2008; Sigfusson & Chetty, 2013; Nummela et al., 2016), but there has been scant research on emerging/developing economies (Filatotchev et al., 2009; Prashantham, 2011; Clarke et al., 2016; Ciravegna et al., 2013). Lopez et al. (2009) provided empirical evidence that most software firms in Costa Rica follow a regional gradual approach to internationalization. According to Coviello and Munro (1997), the process of internationalization of small software firms reflects an accelerated version of the stage model perspective. Since the resources and capabilities of SMEs are evolving and the trade liberalization process has enhanced international competition, this suggests that the SMEs, which have become increasingly

active players in the global market, want to take advantage of the business potentials offered by global value chains.

**Figure 1 The literature fields of this study**



### **1.3 RESEARCH QUESTIONS AND RESEARCH CONTRIBUTIONS**

The objective of this study is to investigate the development of social capital dimensions and its influences on the process of internationalization of knowledge-intensive firms in Costa Rica. An extensive body of research exists about the impact of social capital on firms (Adler & Kwon, 2002; Nahapiet & Ghoshal, 1998). Recently the literature has highlighted the importance of social capital in the internationalization process (Coviello, 2006; Prashantham & Young, 2011; Hohenthal et al., 2014; Lindstrand et al., 2011; Laurell et al., 2016). Specifically in knowledge-intensive firms' internationalization, research has mainly focused on the process but not on the dimensions of social capital (Coviello & Cox, 2006). Sometimes it has included the social capital dimensions but focused only on the expansion at one point in time (Yli-Renko et al., 2002) even when there is evidence that social capital dimensions may influence the development of the firms (Maurer & Ebers, 2006; Lindstrand et al., 2011). This research, therefore, allows us to gain deep insight into development and influences at different phases of internationalization of SMEs. Further support for the concept of

social capital development has also been provided in studies about internationalization of INVs in different stages (Agndal et al., 2008; Chetty & Söderqvist, 2013; Coviello, 2006; Kontinen & Ojala, 2011; Prashantham & Dhanaraj, 2010; Prashantham & Young, 2011). There is a need to understand the development of social capital by INVs, looking at not only internationalization and pre-internationalization, but also the pre-founding stage (Coviello, 2006). Instant or early internationalization may be facilitated by social capital as well as post-entry speed. Thus, it seems reasonable to assume its sources emerge prior to internationalization even prior to start-up and evolve during post internationalization stage.

The emphasis of literature has been placed mainly on the need for utilization of social capital in two different forms: 1. Social capital has been shown to have a positive effect on the incidence of international entrepreneurship influencing international opportunity identification process. Individuals with more social capital—i.e. those who know more people—will be exposed to a higher potential business opportunities (Ramos-Rodriguez et al., 2010) to initiate international activities (Blomstermo et al., 2004; Ellis & Pecotich, 2001; Freeman et al., 2010; Loane & Bell, 2006; Sharma & Blomstermo, 2003). According to Ramos-Rodriguez et al. (2010) social capital allows some individuals to recognize opportunities but not others. Gradual or rapid form of internationalization reported in the literature depends on opportunity development that in turn is shaped by the domestic and international networks (Chandra et al., 2012). 2. SMEs built, use and develop social capital to overcome its constraints to facilitate their initial internationalization (Coviello & Munro, 1997; Oviatt & McDougal, 2005). One of the major constraints for small and medium-sized enterprises (SMEs) as they go through the initial internationalization process is that they lack resources (Chetty & Campbell-Hunt, 2003). Social capital also can be useful for the acquisition, mobilization and development of resources as the SMEs internationalizes (Coviello & Cox, 2006). A key resource discussed in literature is knowledge, which is a necessary driver in the successful internationalization of firms (Prashantham, 2005), other important resources are financial (Bell, 1997; Lindstrand et al., 2011) and human (Laurell et al., 2016). The SMEs of developing economies suffer from deficits in resources (amount and quality), therefore, they have to compete by resourcefulness and operate in less munificent environments in comparison with SMEs from advanced economies (Kazlauskaitė et al., 2015). Considering that their domestic resource base is

distinct, compared with the advanced economies, this may result in a bundle of resources that are valuable, rare, difficult-to-imitate and totally shaped by the context (Kazlauskaitė et al., 2015; Sarasvathy et al., 2010). Thus, the first research question is:

- RQ1: 1a. How does social capital dimensions influences the initial internationalization of Costa Rican knowledge-intensive SMEs, and  
1b. What is the role of pre-founding social capital dimensions for their initial internationalization?

The firms face different task and resources requirements in different stages of their development (Kazanjian, 1988) and they may be able (or not) to accommodate those changes, by adjusting their social capital dimensions to meet their objectives. This adjustment may involve relationships with actors based abroad as a potential source of international social capital (Prashantham, 2011; Zafarullah et al., 1997), as well as domestic social capital, which can affect the development of business abroad (Prashantham & Birkinshaw, 2015). Since social capital is a dynamic concept there will be different effects on firms during its business development (Coviello & Cox, 2006). It is acknowledged that development of social capital plays an important role for SMEs business development (Andersson et al., 2013; Lindstrand et al., 2011; Prashantham, 2011). It is important not only analysing the initial stages of firms' internationalization but also following during their internationalization processes (Morgan-Tomas & Jones, 2009; Prashantham & Young, 2011; Schwens & Kabst, 2011; Zou & Gahuri, 2010). Social capital dimensions requirements might change over the time and the optimal form of social capital differs for new and old small firms (Slotte-Kock & Coviello, 2010; Stam et al., 2014). However, during social capital development, it may turn into inhibitor rather than facilitator of firm development (Adler & Kwon, 2002; Chetty & Campell-Hunt, 2003; Prashantham & Dhanaraj, 2010). Explicit explanation of the effect of the development of social capital dimensions on some business activities (Maurer & Ebers, 2006) on emerging/developing economies (Prashantham & Dhanaraj, 2010) is limited. Particularly for the comprehension of the effects of the development of social capital on the continuous internationalization of firms (Lindstrand et al., 2011; Prashantham & Dhanaraj, 2010; Stam et al., 2014) in a country where the resources may be unusual (Kazlauskaitė et al., 2015) but important (Ciravegna et al., 2013). Thus, the second research question is

RQ2: How is the development of social capital dimensions and how does it influence the subsequent foreign business development of Costa Rican knowledge-intensive SMEs?

In seeking answers to the research questions, this study attempts to contribute to the theoretical and practical knowledge as follows:

First, this study explores the genesis and the development of social capital dimensions and how entrepreneurial firms use it to gain leverage for internationalization. To address the research questions, empirical data on social capital dynamics assessed relative to the extant literature, leading to a set of research propositions specific to the development of social capital dimensions through different stages of international knowledge-intensive firms. These propositions should contribute to the theoretical underpinning of IE, specifically to the progression of theory development.

Second, this work contributes to identifying pre-founding social capital composition and its influence in different stages of internationalization of INVs. This means that social pre-founding capital may have not only advantages but also disadvantages, and it is necessary to determine the conditions under when social capital becomes useful for the internationalization process of INVs. To the extent that the influence of social capital may play different roles, complementary (or otherwise) in the process of internationalization, will provide a better understanding of how pre-founding social capital dimensions influences the development of the firm.

Third, SMEs have an inherent scarcity of resources for development and each dimension of social capital helps these firms to find and obtain the information and necessary resources. Moreover, social capital dimensions must be adjusted to support SMEs' development. Understanding and describing the role of every dimension of social capital as an instrumental resource to obtain or facilitate the development of new resources should provide new insight into the importance of social capital dynamics on the process of internationalization.

Fourth, this research provides knowledge of the efforts required, at the personal and firm level, to leverage social capital to enable rapid internationalization and subsequent market entry, clarifying the influence of the entrepreneur in the development of SMEs.

By identifying the important aspects of the evolution of social capital, and specifying the influence that the personal level has on this process, this study describes the practical implications to encourage proactive efforts of SMEs to manage effectively the social capital that promotes international development.

Fifth, by exploring the pre-founding social capital and specifying its influence on the internationalization of firms, this study contributes to a better understanding of the processes of development of social capital, both national and international, and the importance of each in promoting the international development of SMEs.

Finally, in this study, considerations of context are presented, allowing review and improvement of our knowledge of the social capital and international development of software firms in Costa Rica, found in a particular geographic area, surrounded by emerging or/and developing countries, and very close to its most important market, the United States of America (USA).

## **1.4 RESEARCH METHODOLOGY**

This research adopts a qualitative approach to investigate the development of social capital of international SMEs. A multiple case study approach is encouraged to support the exploration and explanation of the phenomenon, which is rich in context (Saunders et al., 2009; Yin, 1994). Seven longitudinal case studies of international firms that originated in the Costa Rican software sector were selected. The case studies were analysed using within-case and cross-case methods, as recommended by Miles and Huberman (1994). Multiple case data were clustered using NVivo 10 software to categorize the case findings according to common themes.

## **1.5 CORE CONCEPTS**

This section briefly summarizes the key concepts used throughout this thesis. These key concepts are explicitly defined to ensure consistent usage of terminology.

**Knowledge-intensive firms:** Those which have a high added value of scientific knowledge embedded in both product and process (Coviello, 1994 from Bell, Crick &

Young, 2004). The term is generally used to describe knowledge based firms and has mainly been applied to ICT firms, often in the software sector (Bell et al., 2004).

**Internationalization:** The discovery, evaluation and exploitation of entrepreneurial opportunities in international markets (Chandra et al., 2009).

**Networks:** A network is about relationships between individuals, groups, organizations or societies, and describes a structure determined by such interactions. A dyadic relationship is between two parties: one person or firm with another. This person (or firm) is called the ego, so an egocentric network is built around one person or firm. Personal networks are the networks centred on a person; likewise business (or professional) networks are around business activity (coming from a business, venture or organization). Thus the type of relationship between the ego and the other(s) vary from embedded (social) to professional, and the relationship connecting the person (or firm) with the other can be strong or weak. Weak ties are defined by Granovetter (1973) as relationships which involve infrequent contact, while strong ties indicate closeness.

**Social Capital:** Nahapiet and Ghoshal (1998) defined social capital as the sum of the actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by an individual or social unit. This means that social capital is comprised of both the network and the resources that may be accessed through it; moreover, social capital may be possessed either by a person or a social unit such as a firm. Despite the literature on social capital it cannot be classified into precise categories; the various meanings attached to the concept, both as an asset and as a set of social relationships, nevertheless extend the understanding (Berg et al., 2008).

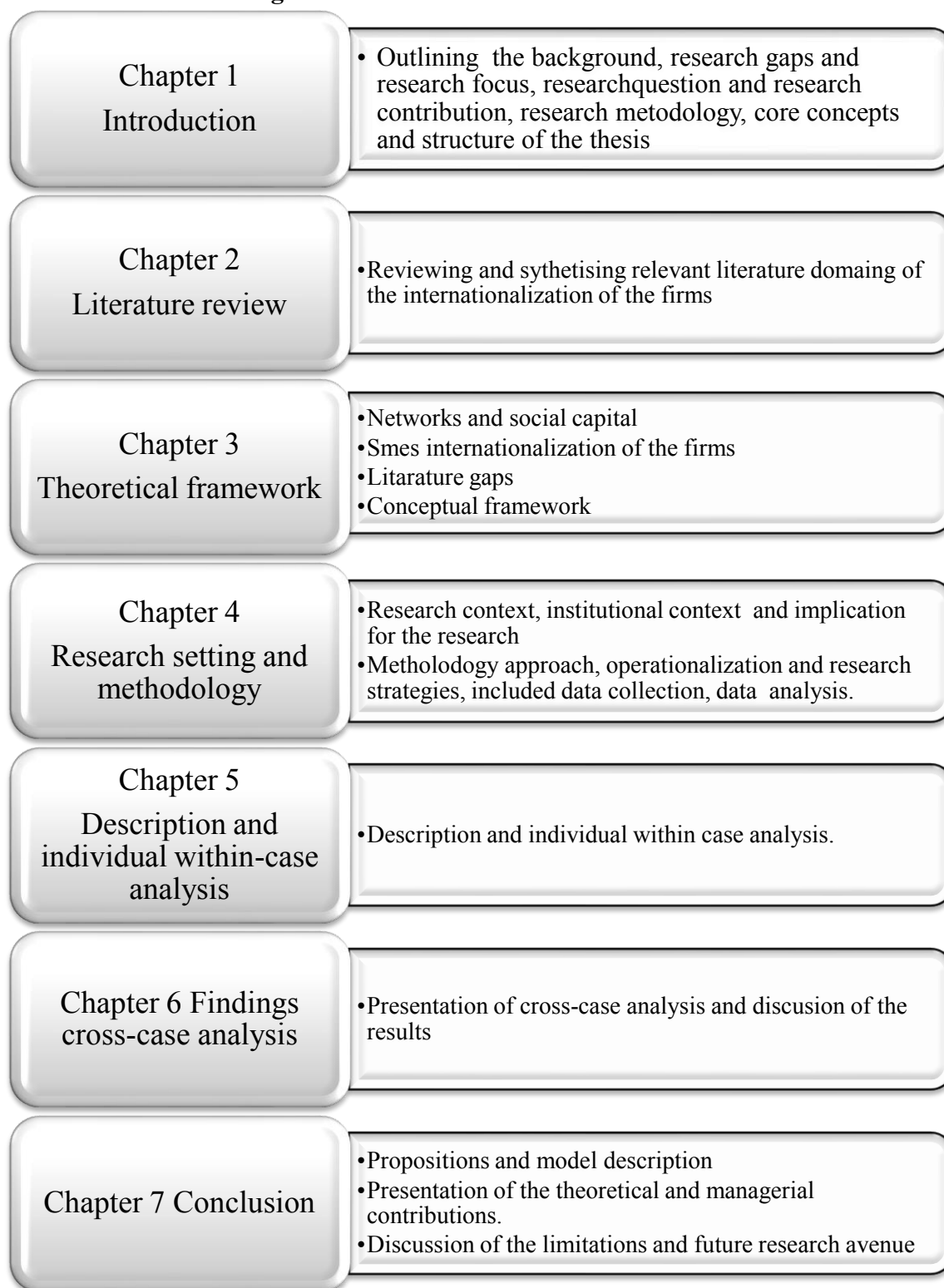
## 1.6 STRUCTURE OF THE THESIS

The main topic and content of each chapter is listed in Figure 2. The first chapter provides an overview of the background of the research. The second chapter is a review of the relevant literature on internationalization of SMEs. The study is built upon three theories of internationalization: international business, resources and capabilities, and international entrepreneurship. Chapter 3 gives an overview of existing knowledge of networks/social capital and SMEs' internationalization process. Chapter 4 introduces the research settings and methodology. The case-study firms and within-cases analysis



are introduced in Chapter 5. Chapter 6 shows the findings of the cross-case analysis providing answers to the research questions. Chapter 7 gives the conclusions and outlines the theoretical contributions and managerial implications of the findings. Finally, the limitations of the findings based on the research methodology, and recommendations for future lines of research are indicated.

**Figure 2 Flow chart overview of Thesis**





# **CHAPTER TWO: LITERATURE REVIEW OF INTERNATIONALIZATION OF THE FIRMS**

## **2.1 INTRODUCTION**

The purpose of this chapter is outline relevant theoretical perspectives of the existing literature on internationalization. The behavioural perspective, in terms of the internationalization process theory, the strategic perspective, in terms of knowledge based view and the international entrepreneurial perspective, in terms of entrepreneur and international new venture theory. A combination of those approaches is advocated by the researcher since those perspectives have been shown to be suitable for studies on SME internationalization.

## **2.2 Internationalization Process Theory (Behavioural perspective)**

In contrast to the economic school of FDI theory, the internationalization stage models focus on behavioural aspects to explain firms' cross-border expansion, taking the environment as a given. These models build on the behavioural theory of the firm, proposed by Cyert and March (1963) and the growth theory of the firm, proposed by Penrose (1959). This literature suggests that the process of internationalization is founded on an evolutionary and a sequential build-up of foreign commitments, over the time.

### **2.2.1 The Establishment Chain**

In their research, Johanson and Wiedersheim-Paul (1975) describe the establishment chain of four large Swedish multinationals. They found that the growth patterns of these firms were distinguished by a number of small incremental changes (or stages), which could be described as internationalization process. These stages connote successively higher resources commitments and the each stage lead to quite different market experiences and information (Johanson & Wiedersheim-Paul, 1975). Taking into account the empirical findings, the model describes two patters of the internationalization process: (1) a firm's development within a specific country and (2) its development across countries. This is the way that firms behave when entering one or more countries. The knowledge is the explanatory factor (Johanson & Vahlne 1990).

The sequence stages -the establishment chain-, reflects the increasing degree of involvement in terms of commitment of resources by the firm, and information channels to and from the market. The development (of establishment chain) within a specific country can be seen next:

1. No regular export activities,
2. Export via independent representatives (agents),
3. A mix of export and FDI in the form of a subsidiary,
4. Production/manufacturing.

These four stages were later extended to five including pre-export stage (Wiedersheim-Paul et al., 1978), trying to explain the whole process of firm's internationalization.

The firms may follow a gradual process of internationalization rather than the entire chain (Johanson & Wiedersheim-Paul, 1975). The firms would enter new markets with successively greater psychic distance. The concept of psychic distance is defined as, "factors (culture, economy, political or language) that prevent or disrupt the flow of information between the firm and market" (Johanson & Wiedersheim-Paul, 1975, p. 308). This psychic distance is often correlated to geographic distance. The choice of markets occurs in stages; so the firms begin exporting to a market that has a close psychic distance and they expand into markets that have increasingly greater psychic distance (Johanson & Wiedersheim-Paul, 1975). The internationalization starts only after the firms have developed the domestic market.

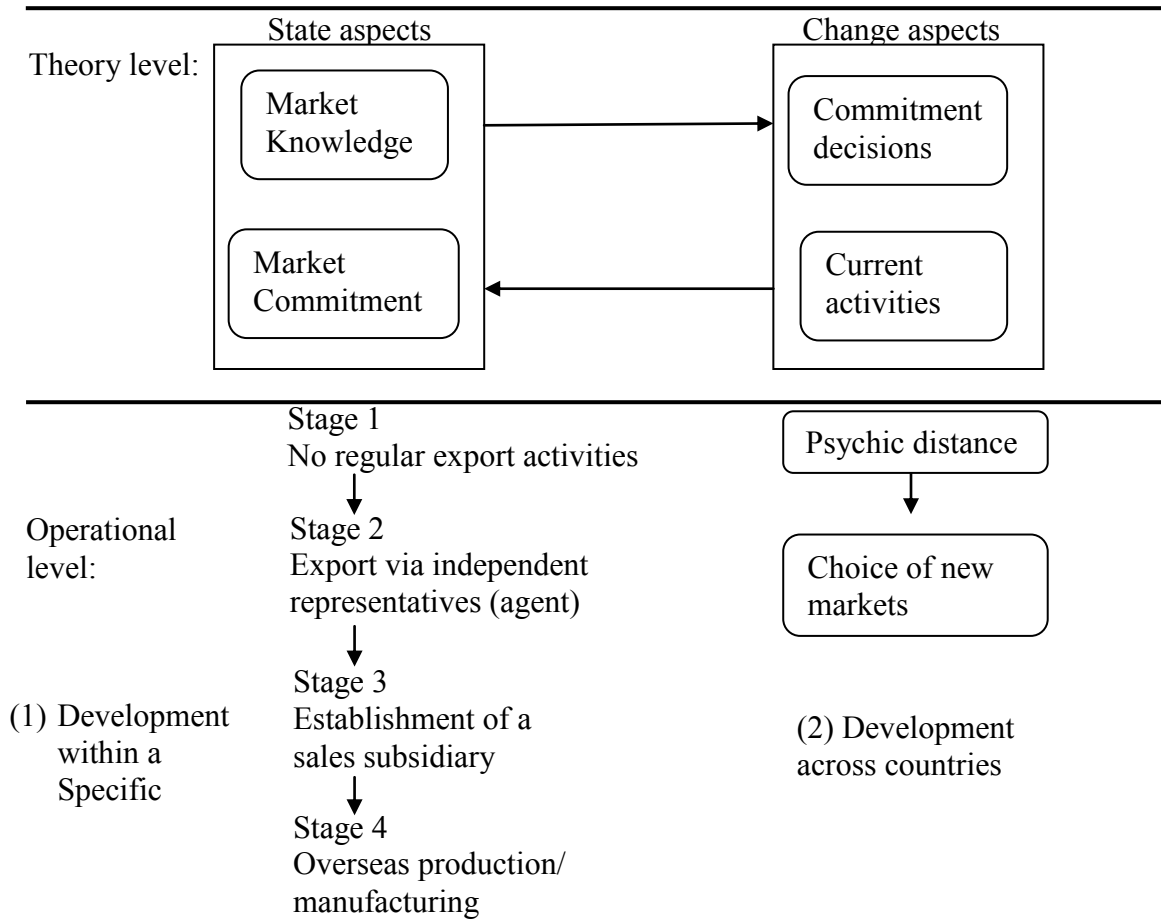
In the literature, some researchers found that firms start their international operations in countries that are culturally similar and that they do not commit additional resources until sufficient relevant knowledge is obtained (Arenius, 2005; Erramilli & Rao, 1993; Johanson & Wiedersheim-Paul, 1975).

### **2.2.2 Uppsala model**

The Uppsala model is the most influential model of the internationalization process (Coviello & McAuley, 1999). The first contribution to this theoretical strand comes from the work of Johanson and Wiedersheim-Paul (1975). Later Johanson and Vahlne

(1977) refined the previous work and draw up a dynamic model. The main structure in the refined model is given by the distinction between the state aspects and change aspects of internationalization in the decision-making (see Figure 3).

**Figure 3 The Basic Mechanism of internationalization**



Source: Johanson & Vahlne 1977, (p.26); Anderssen 1993, (p. 222).

The state aspects in the model are *market knowledge and market commitment*. The change aspects are the decisions made about the commitment of resources and the activities performed in current markets. “The market commitment and the market knowledge are assumed to affect commitment decisions and the way that current activities are performed” (Johansson & Vahlne 1977, p. 27). As a result of the interaction of these aspects there is a dynamic model of internationalization in the decision-making.

The underlying assumption of the Uppsala model is that as firms learn more about a specific market, the firms become more committed, by investing more resources into that market. This learning about international markets it is possible through the acquisition of direct market knowledge. In addition, the learning process that allows firms reach foreign markets (after the domestic market) is a cumulative process. This means that a previous stage can act as a starting point for the next phase of internationalization. Thus, the new knowledge and previous knowledge are important on the process.

In the (revisited ) Uppsala Model the learning and commitment are related to identifying and exploiting opportunities (Johanson & Vahlne, 2003) and knowledge is important because it reduces uncertainty about further commitment and enables firms to discover opportunities for further expansion (Johanson & Vahlne, 2009). This knowledge is experience-based (Hilmersson & Jansson, 2012). That is to say existing business relationships make possible to identify and exploit opportunities affecting the market selection and market entry.

### **2.2.3 Other process models of internationalization**

Other process models take an innovation-related perspective and describe the selection of innovation as the most acceptable alternative to reach international markets (see Table 1). The export development is a function of innovation adoption behaviour, at a given point in time (Andersen, 1993).

Bilkey and Tesar (1977) concluded that the process of export development was depicted by several distinct stages, and different factors affected the decision making at each stage. The authors consider the international behaviour of the firms represents their learning curve, which, in turn, is influenced by unsolicited foreign orders. Their taxonomy was composed of six export development stages with the extremes ranging from firms whose management had no interest in exporting to those whose management explores feasibility of exporting to more distant countries (Morgan & Katsikeas, 1997).

Cavusgil (1980) proposed taxonomy with five stages, which were described as firm activities: domestic marketing, pre-export involvement, experimental export involvement, active export involvement and committed export involvement. This export

development process was founded on management's successive decisions regarding exporting over a period of time (Morgan & Katsikeas, 1997).

Reid (1981) identified four levels of export innovation: export awareness, export interest, export intention and export adoption.

**Table 1 Selected innovation-related internationalization taxonomies**

Bilkey and Tesar (1977)	Cavusgil (1980)	Reid (1981)
<i>Stage 1</i> Management is not interested in exporting	Domestic marketing: the firm sells only to the home market	Export awareness: problem of opportunity recognition, arousal of need
<i>Stage 2</i> Management is willing to fill unsolicited orders, but makes no effort to explore the feasibility of active exporting	Pre-export engagement: the firm searches for information and evaluates the feasibility of undertaking exporting	Export intention: motivation, attitude, beliefs and expectancy about export
<i>Stage 3</i> Management actively explores the feasibility of active exporting	Experimental export involvement: the firm starts exporting on a limited basis to some psychologically close country	Export trial: personal experience from limited exporting
<i>Stage 4</i> The firm exports on an experimental basis to some psychologically close country	Active export involvement: exporting to more new countries – direct exporting – increase in sales volume	Export evaluation: results from engaging in exporting
<i>Stage 5</i> The firm is an experienced exporter	Committed export involvement: management constantly makes choices in allocating limited resources between domestic and foreign markets	Export acceptance: adoption of exporting/rejection of exporting
<i>Stage 6</i> Management explores the feasibility of exporting to other more psychologically distant countries		

Source: Morgan and Katsikeas, 1997, p.73.

These models argue that the perceptions and belief of managers both influence and are shaped by incremental involvement in foreign markets (Coviello & McAuley, 1999). This pattern explains internationalization in terms of innovation adoption behaviour and largely supports the stage approach as suggested by the Uppsala model. Moreover, the



differences between the stage models reflect semantic, rather than real, differences about internationalization process (Andersen, 1993).

#### **2.2.4 Criticism of the process theories**

The Uppsala model is criticized for being too deterministic and weakly underpinned theoretically (Andersen, 1993; Autio, 2005). It is less applicable when studying firms with scant resources involved in changing environments (Andersen, 1993; Bell, 1995) and therefore, the research on SME internationalization shows mixed support for traditional process models. (Coviello & McAuley, 1999; McDougall & Oviatt, 1996). The existence of many firms, which do not follow the incremental pattern of internationalization proposed by stages models, is a strong critique (McDougall, 1989).

The develop of the firm in accordance with the stage models means individual strategic choices will not be decisive for different strategic choices concerning a firms' internationalization, because these models do not focus on individual decision-making, in contrast to the later studies showing that entrepreneurs can choose the direction of internationalization (Andersson, 2011). Some researchers have also found that international firm reduces its international activities or may undergo a process of complete de-internationalization, when they encounter disadvantageous situations as part of their international operations (Benito & Welch, 1997).

The U-model emphasises the acquisition of specific market knowledge through current activities, as decisive to firm's internationalisation. However, later research have shown that firms can learn through imitative learning by observing other firms, by acquiring or hiring people with the necessary knowledge, by company acquisitions, by licensing and by conducting focused research for new information (Forsgren, 2002; Welch & Welch, 1996). Thus, critical knowledge resources for foreign market entry do not have to reside within firm. The source of the knowledge could be external, from outside of the firm, i.e. relevant alliances and networks (McDougall et al., 1994). This particular issue has been overlooked in Uppsala model (Johanson & Vahlne, 1977) as well as learning from partners through alliances and networks without going through the same experiences (Johanson & Mattson, 1988; Johanson & Vahlne, 2003).

Andersen (1997) mentioned that U-model was built on the theory of the Resource Based View (RBV). The author argued that it is weak because it uses only one explanatory variable (i.e. experiential knowledge), so it did not provide any sufficient explanation for firms' internationalization. Knowledge is central issue that influence internationalization process of firms, so it will be discussed in the following section.

## **2.3 Knowledge-based view of the internationalization of the firm (Strategic Perspective)**

Scholars have been considered different theoretical frameworks in the research of SMEs internationalization process, including the Knowledge Based View (KBV) (see Blomstermo et al., 2004; Prashantham & Young, 2011), which is an extension of the Resource-Based View of the firm (RVB) (see Hessels & Parker, 2013; Kuemmerle, 2002; Knight & Cavusgil, 2004). In attempting to describe how the competitive advantage is developed and sustained (in RBV), the firm is viewed as a unique bundle of tangible and intangible resources, based on the assumption that resources are distributed heterogeneously among the firms within an industry, and that these resources are not fully mobile across firms (Barney, 1991; Rumelt, 1984). According to KBV intangibles resources are decisive to firm's international expansion and sustainable competitive advantages, particularly the knowledge-based resources (Fernhaber & McDougall-Covin, 2009; Kuemmerle, 2002).

### **2.3.1 The Knowledge-based view**

The KBV highlights the role of knowledge as an essential resource and important source of firms' sustainable competitive advantage (Grant, 1996). Other assumptions of KBV are the variation in transferability of knowledge and the requirements of many types of knowledge in firms operation (Grant, 2002; Prashantham, 2005). Because both creation and utilization of knowledge are often a social process, transfer knowledge from external sources may be critical to achieving desirable outcomes (Kogut & Zander, 1992; Sullivan & Marvel, 2011).

The heart of the firms' competitive advantages is base on knowledge, not raw materials, and different types of knowledge give rise different types of competitiveness (Spender, 1994). Grant and Baden-Fuller (2004) defines the importance of linkage (i.e., social

capital) in obtain the resource (i.e. knowledge) and consequently supporting its business development.

### **2.3.1.1 Knowledge-based view and internationalization**

Knowledge is a necessary driver in the successful internationalization of firms (Prashantham, 2005), specifically for SMEs. It has been recognised as having influences on their internationalization (Jones & Coviello, 2005; Oviatt & McDougall, 1994). However, there are different types of knowledge that play different roles in internationalization process and it come from different sources. Additionally, it is also important to consider the knowledge acquisition process (Huber, 1991) and knowledge acquisition sources (Fletcher & Harris, 2012). According to Fletcher and Harris (2012), the main three type of knowledge for internationalization of SMEs, discussed in the literature of IB/IE are:

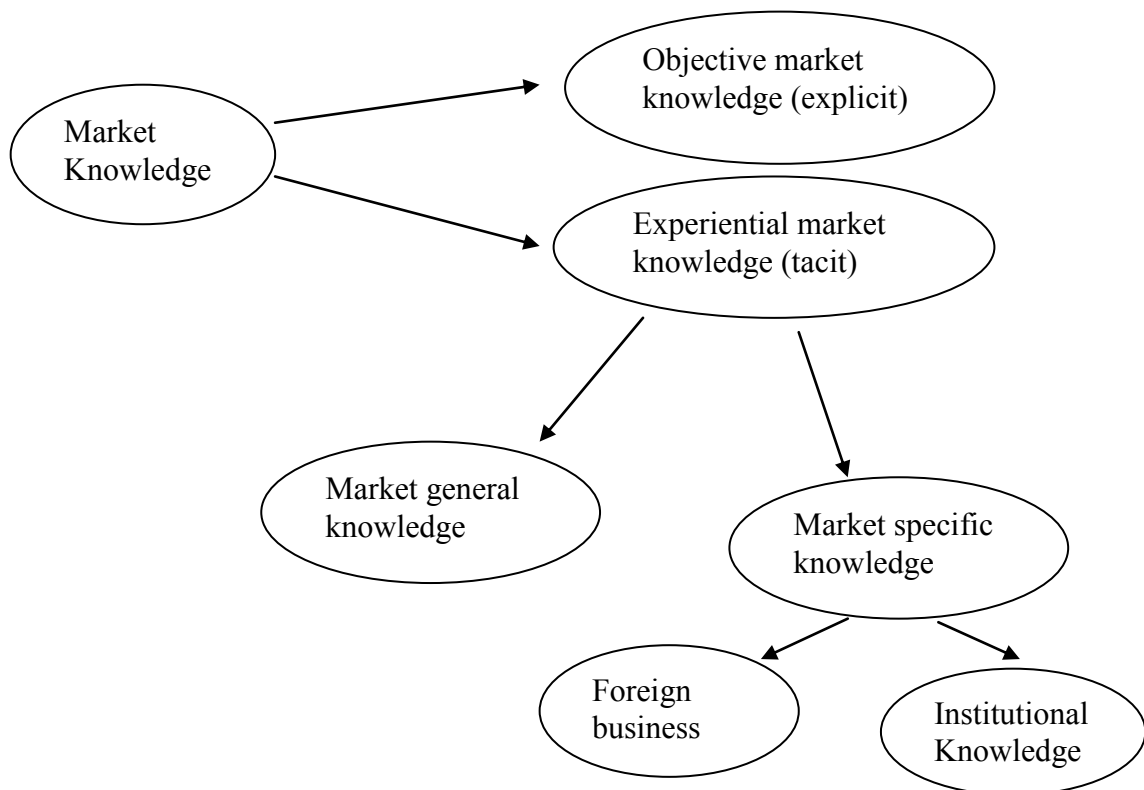
*i. Market knowledge:* which is country and market specific, and a lack of it results in uncertainty and risk to the internationalization (see Figure 4). Although the U-model (Johanson & Vahlne, 1977) describes the internationalization of the firm as a learning process based on accumulation of the experiential foreign market knowledge (Rialp & Rialp, 2001), the model supports that market knowledge can be also objective (Johanson & Vahlne, 1977). The objective knowledge is acquired through standard methods of collecting and transmitting information such as market research, whereas experiential knowledge is more costly to accumulate and cannot be transferred between firms (Eriksson et al., 1997).

“General knowledge of the operations can often be transferred from one country to another and its diffusion facilitates lateral growth into new foreign markets” (Fletcher 2007, p.17). Market specific knowledge is obtained (in U-model) mainly through experience in the market, and is related to conditions in the market while the way which general knowledge is gained is not explicitly (Forsgren, 2002). Eriksson et al. (2000) and Eriksson et al. (1997) mentioned two types of market specific knowledge: business and institutional. According to Blomstermo et al. (2004) institutional knowledge is more fundamental in knowledge development (compare to business knowledge) since lack of institutional knowledge increases the perceived cost of an additional step abroad. The

foreign business knowledge component seeks to capture experiential knowledge pertaining to clients, competitors and the market (Haydel & Wilson, 2013).

For Johanson and Vahlne (1977) market knowledge is the type of knowledge determinant to export success, and it regulates the resources committed to a foreign market. The firm itself is the main source, through its experience of foreign activities (Johanson & Vahlne, 1977). Blomstermo et al. (2004) point out the influence of market knowledge on the internationalization and performance of the SMEs, reducing uncertainties and making the business opportunities visible for them. The business relationships are the source, through the experience of work mainly with suppliers.

**Figure 4 Composition of market knowledge**



**Source:** Based on Eriksson et al., (1997) and Fletcher (2007)

*Sources of foreign market knowledge:* To analyse the sources of the knowledge this work follows the framework described in Fletcher and Harris (2012), where the objective and experiential knowledge can be acquired from internal or external source of the firms using the range of sources mentioned by Huber (1991). The experiential knowledge can be acquire from the internal source through direct experience and/or can

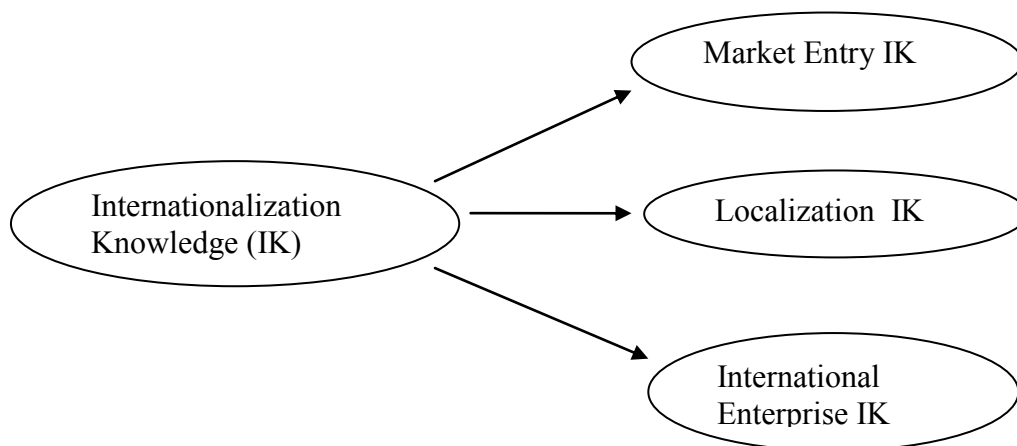
be acquire from the external source through indirect experience: vicarious learning and grafting. The objective knowledge could be obtained also from internal and/or external sources, from the internal sources through internal information and from external sources through external search (Fletcher & Harris, 2012; Huber, 1991).

In the internationalization process, the firms cannot learn from direct international experiences before they start international activities (Johanson & Vahlne, 2009). According to Fletcher and Harris (2012) the direct experience in the Uppsala model underlies the acquisition of the experiential market knowledge through current activities, but the experience also provides experiential knowledge about foreign networks. Indirect experience provides another source for experiential knowledge, in form of vicarious (i.e. knowledge through the export intermediaries, commercial and government sources), and grafting new employees or the acquisition of local units that have the required market knowledge.

The objective knowledge could be obtained in the form of external search by scanning the external environment, and conducting focused search for new information can be acquired from data sources such as market research, government statistics, bank bulletins or company reports (Nonaka, 1994). Internal information can be found within the firms, the manager and the firm can uses and develop internal sources.

ii. *Internationalization knowledge*: which is specific knowledge of the firm and it is not country specific (see Figure 5).

**Figure 5 Composition of internationalization knowledge**



Source: Adapted from: Eriksson et al. (1997, 2000) and Fletcher et al., 2013

The internationalization knowledge is about the firm's capability and resources to engage in foreign markets and is embedded in a firm's routines, procedures and structure (Eriksson et al., 2000). The firms need to know how countries, institutions, and firms operate and differ when they enter in a new international market, because firms seek to know where and what knowledge is required in different situations and different settings connected with internationalization (Eriksson et al., 1997) to develop and execute market entry strategies about appropriate mode of entry (Fletcher et al., 2013). Localization is knowledge about environments, capabilities and viable strategies; which includes knowledge of the capabilities required by the firm to compete in the foreign market. The international enterprise enables firms manage the internal organization of their enterprises effectively across multiple international territories. This knowledge represents a dynamic capability, "critical for sustaining international competitiveness" (Fletcher et al., 2013, p. 64).

Autio et al. (2000) pointed out that the rapid international expansion of SMEs firms is because of their large stocks of international knowledge. Knight and Liesch (2002) argued about the intricacy to obtain and to reproduce, the tacit internationalization knowledge, so it provides a competitive advantage for an international firm. Prashantham and Young (2011) found out the importance of international knowledge for successful internationalization. The firm looks for improve their capabilities and use their social capital to learn from foreign markets while knowledge produces a rapid growth. Blomstermo et al. (2004) mentioned that international knowledge helps to develop internationalization across countries through an internationalization strategy. The experience of developing products, doing business in foreign markets and cooperate with other firms, are the source of this knowledge.

*-Source of internationalization knowledge:* Fletcher et al. (2013) describe that the market entry internationalization knowledge is sourced, both internally and externally of the firm. The main sources of the firms for market entry IK were direct experiences of manager, internal experts and the indirect experiences of external advisors and consultants, especially people who had previous experience working in international businesses. The source of location internationalization knowledge were the internal experience, and from the experience of consultants and government advisors in the

domestic and target country. Firms must assimilate their IK by sharing it with the management team (Amit & Schoemaker 1993; Fletcher & Prashantham, 2011).

*iii. Technological knowledge:* provides specific advantages for the firm across borders. It is a unique resource that can be transferred to a foreign location, with insignificant additional costs, and sold in multiple countries (Fletcher, 2007).

The technological knowledge provides firm-specific advantages across borders (see: Denicolai et al., 2014; Fletcher & Harris, 2012; Kylaheiko et al., 2011). For Bilkey (1978) and Cavusgil and Nevin (1981) a firm's products and technology are part of a firm's unique differential advantage.

The technology may facilitate the creation of unique superior products that facilitate to the incoming firm overcomes the indigenous advantages enjoyed by local firms (Oviatt & McDougall, 1994). Knowledge intensity is defined as "the extent to which a firm depends on the knowledge inherent in its activities and outputs as a source of competitive advantage" (Autio et al., 2000, p. 913). Some scholars associated greater technological and knowledge intensity with a greater degree of internationalisation (Dhanaraj & Beamish, 2003) and with faster international growth of entrepreneurial firms (Autio et al., 2000).

The SMEs knowledge-intensive firms (and others not high-tech firms) can make use of knowledge to develop new products/service, improve or introduce, new production methods or to improve their service (Oviatt & McDougall, 2005; Rialp et al., 2005). Also the "knowledge of the founders and management team acquired before the creation of the firm and within the firm itself, as well as experiential and network knowledge" (Jones et al., 2011, p.641).

Autio et al. (2000) mention the technological knowledge as an enabling resource for early internationalization, at the same way that knowledge intensification allows the recognition of new international opportunities. The knowledge sources in this research were described as international markets and operations. Yli-Renko et al. (2002) argued about the knowledge-intensity, as the key resource for competitive advantages and

international growth that mitigates the liability of foreignness. This resource emanates through (internal and external) learning relationships.

*-Source of technological and product knowledge:* The managers proactively acquired both experiential and objective knowledge about technologies. This played an important part in their internationalization (Fletcher & Harris, 2012). The firm integrates its internal sources of experiential knowledge (direct experience) with external sources of experiential knowledge, both domestic and foreign (indirect experience). The grafted experience is obtained by employees, manager, senior director and chairman. The vicarious learning comes from industry partners, customers, suppliers, government sources, consultants and contacts. The objective knowledge is also sourced internal and external through product knowledge management system (internal information) and published reports (external search). According to Fletcher and Harris (2012) the acquisition of technology knowledge often require of develop of network relationships from which experiential knowledge could be acquired vicariously.

The firms have to change their knowledge resources over the time and persistently to sustain and develop competitive advantages (Ambrosini & Bowman, 2009). Eisenhardt and Martin (2000) mentioned that a common feature of successful knowledge creation processes is the explicit relationships between firms, and knowledge sources outside the firm. When SMEs are rapidly internationalized, there is a need to leverage networks to ensure knowledge, then, become necessary to develop new knowledge, and so knowledge acquisition becomes a key focus for international SMEs to achieve of competitive advantages and survival (Freeman et al., 2010). The firms must learn to create competitive advantages through an acquiring and integrating mechanism of knowledge process (Cohen & Levinthal, 1990). Social Capital is mentioned as a facilitator for the acquisition, integration and release of the knowledge (Ambrosini & Bowman, 2009).

In summary, research on KBV suggests that knowledge resource must be acquired and the firm must learn from it in order to gain sustainable competitive advantages. The external sources (i.e. social capital) have been identified to be important to provide new knowledge and this is tied up to prior knowledge (Autio et al., 2000; Cohen & Levinthal, 1990; Zahra & George 2002).



### **2.3.2 Criticism of knowledge perspective**

According to Kraaijenbrink, et al. (2010) the assumption that a sustainable competitive advantages is actually achievable is disputable. Fiol (2001) argued “both the skills/knowledge, and the way organizations use them, must constantly change, leading to the creation of continuously changing advantages” (p. 692). A firm must keep on innovating, as its revenue stream is constantly exposed to new competitors, substitute products, and so forth (Porter, 1980). Thus, “sustainable competitive advantages can not last forever, but, at least in the short run it remains a powerful strategic concept” (Kraaijenbrink, et al., 2010, p.354). In dynamic environment, firms cannot derive a sustainable competitive advantage from a static set of resources.

## **2.4 International Entrepreneurial perspective**

The necessary understanding of the foreign activities of SMEs has been derived from the theories of MNE and for FDI (among others), which address larger firms (Etemad, 2004; Mort & Weerawardena, 2006). But, the distinctive nature of SME entails different internationalization behaviour and patterns from those larger counterparts. This different form of internationalization of SMEs involves the discovery, evaluation and exploitation of market opportunities (Chandra et al., 2009) or increasing involvement in international operations (Welch & Luostarinen, 1988) similar to MNE. This process could be focused on the individual and organisation, with an international scope of activities. Changing forms of internationalization have demanded introduce and integrate new perspectives to explain the internationalization of firms, particularly that of SMEs (Bell et al., 2003; Coviello & McAuley, 1999; Jones, 1999; Keupp & Gassmann, 2009; Oviatt & McDougall, 2005; Rialp et al., 2005).

### **2.4.1 Domain and definitions of International Entrepreneurship**

Many SMEs, have started successfully activities beyond their home markets despite the increasingly international problems they face (Ruzzier et al., 2006). The nature of current marketplace, where globalisation, fluctuating consumer preferences, developments in technology, advances in Information and Communication Technologies (ICT) and changing competitive conditions, have provided an encouraging environment for SMEs. The "output" of this new form of

internationalization challenged the traditional perspectives and engendered a new academic field, that is, the IE.

According to Jones and Coviello (2005) the ontological roots of IE can be found at the interception of IB, Entrepreneurship and Strategic Management studies. Thus, the boundaries of IE are still discussing. The IE field still lacks consolidated frameworks and conceptualisations (Keupp & Gassman, 2009; Rialp et al., 2005), and the research has been conducted primarily on firms from developed economies (Peiris et al., 2012). In consequence, these findings may not be applicable to emerging (developing) economies (Zander & Rose, 2015). Ergo, the context in which entrepreneurial behaviour takes place referring to how to exploit an opportunity is a potential future research agenda (Alvarez et al., 2014; Autio et al., 2014). Even so, the IE has several coherent thematic areas (Jones et al., 2011).

Coviello and Jones (2004) reviewed the methodological issues in the IE, identifying gaps and future research orientations. The authors addressed that research that integrates internationalization and entrepreneurship was characterized by static, cross-sectional studies that do not incorporate time. They also argued that this methodological issue reveals the need for dynamic research designs integrating positivists methodology with interpretivists methodology, and incorporating time as a key dimension, i.e. tracking the network dynamics of international new ventures (Coviello, 2006). In conclusion IE research, draws on multiple theoretical perspectives to examine the phenomenon of entrepreneurial internationalisation and it have been showing changes to the field (see table 2).

Research on internationalization process of knowledge-intensive SMEs identifies and explores patterns identification of INVs (speed and intensity of international expansion), de-internationalization, diversity of entry modes across temporal and spatial dimensions, and sometimes identifying influences and outcomes” (Jones et al., 2011: p.638). The INV firm is a relevant topic within IE, and explain its accelerated internationalization is an important focus of research (Oviatt & McDougall, 2005). This literature (internationalization of SMEs) usually involves the contrast of traditional patterns with those characterizing different types of INVs (Bell et al., 2001; Oviatt & McDougall, 1994).

**Table 2 Some IE definitions**

Authors	Domain	Definition
Oviatt and McDougall (1994)	INV	INVs is a business organisation that, from inception, seeks to derive significant competitive advantage from the use of resources and sale of outputs in multiple countries
McDougall and Oviatt (2000)	IE	IE is a combination of innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organizations.
Zahra and George (2002)	IE	IE is a process in which firm would discover and exploit opportunities in the international marketplace.
Oviatt and McDougall (2005)	IE	IE is related with the discovery, enactment, evaluation, and exploitation of opportunities across national borders to create future goods and services, recognising the importance of the INVs within IE field
Jones and Coviello (2005)	IE	IE is an evolutionary and potentially discontinuous process determined by innovation and influenced by environmental change and human volition, action or decision.
Zahra (2005)	INV	INV types identified by Oviatt and McDougall (1994) received less attention and important knowledge gap about INVs' different strategies and their sources of competitive advantages
Coviello (2006)	IE	IE as a dynamic process that evolves over time
Styles and Seymour (2006)	IE	IE as behavioural processes associated with the creation and exchange of value through the identification and exploitation of opportunities that cross national borders.
Jones et al., (2011)	IE	Authors explore the domain of IE by thematically mapping and assessing the intellectual territory of the field.

Source: Adapted from Peiris, 2014 and Mascherpa, 2011

While there is a considerable research about speed of internationalization (the time lag between the founding of a firm and its initiation of international operations), there is scant attention to post-entry speed of internationalization (subsequent international development) which is also of interest (Agndal & Chetty, 2007; Morgan-Thomas & Jones, 2009; Prashantham & Young, 2011; Sleuwaegen & Onkelinx, 2014; Tan & Mathews, 2015). The factors influencing post-entry speed may also positively assist in the generation of new resources leading to innovative internationalization pathways and the continuance of rapid international growth in the post-entry development phase (Autio et al., 2000; Morgan-Thomas & Jones, 2009).

Some researches adopt a one-dimensional perspective of speed, conceptualizing and measuring it as the time it takes the firm to start to internationalize. Other researchers adopt multidimensional perspective of speed, considering this as an evolution in order to develop understanding of performance in the context of entrepreneurial internationalization (Coviello, 2015).

The concepts de-internationalisation (Benito & Welch, 1997) and re-internationalisation (Crick, 2004) also must be viewed as dynamic processes; consequently, a firm that has failed in international markets may successfully re-internationalise later, even rapidly (i.e. born-again global firms; see Bell et al., 2001). This definition does not capture the INV speed to international markets, that is, the pace at which their post-entry internationalisation develops (Chetty et al., 2014; Prashantham & Young, 2011).

The research on internationalization process has also argued that INV firms evolve in phases (Coviello, 2006; Gabrielsson et al., 2008; Rialp-Criado et al., 2010). Applying the life-cycle model (Kazanjian & Drazin, 1989) to network development Coviello (2006) described three stages (1) the discovery of new opportunities; (2) the deployment of resources in the exploitation of these opportunities, and (3) engagement with competitors (Mathews & Zander, 2007). According to Gabrielsson et al. (2008) the INVs develop in three distinct phases: (1) opportunity recognition and INV creation; (2) growth and resource accumulation, and (3) break-out. By another hand, Rialp-Criado et al. (2010) proposed an approach to INV development in which firms evolve through distinctive phases: (1) pre-start-up/venture creation, (2) pre-internationalization, and (3) post-internationalization. In addition it has to take into consideration another stage (the pre founding stage) which is also important for internationalization process (Coviello, 2006; Prashantham & Dhanaraj, 2010; Rialp et al., 2010).

The foreign market entry mode choice is characterized by unsystematic and fragmented research (see: Laufs & Schwens, 2014). The firms entering to the foreign markets choose from different entry modes, shifting from licensing and franchising, through exporting directly or through independent channels, to foreign direct investments (i.e. including joint ventures, acquisitions and mergers) (Rasheed, 2005). The choice of entry mode comprises the choice of location and type of control, thus, resources may be located domestically or in the foreign market (Pehrsson, 2008). The use of multiple modes of entry at a point in time, including its additions and deletions, is a form of change in internationalization behaviour that has received scant attention in prior research (Petersen & Welch, 2002).

In summary, newer forms of encourage international firms, improve theorization (Knight & Liesch, 2016). The scope of IE has been broadened since the initial work of

Oviatt and McDougall (1994), which emphasised small INVs. Since that, the definition of the boundaries of IE has been discussed continuously. The scope of IE is now wider but, despite the appropriate broadening of the boundaries of the research, it seems still located within the small INV domain.

#### **2.4.2 International New Ventures**

Many researchers consider Oviatt and McDougall's (1994) article the starting point of IE research (Autio, 2005; Keupp & Gassman, 2009). Small firms are usually considered to be affected in their development due to their resource constraints. In general, the literature on international activities of SMEs emphasizes constraints of i.e. financial, human, knowledge resources and risk aversion (Coviello & McAuley, 1999; Karlsen et al., 2003, Dimitratos & Plakoyiannaki, 2003), which are important to the extent that they allow the firm to enter (new) foreign markets and devise effective ways of doing business in those markets. Whesthead et al. (2002) describe the internationalization as a high degree of risk activity where the founder or management team of SMEs is less able to manage uncertainty and risks than larger firms as well as the larger firms are more likely to skip a (internationalization) stage because of their sufficient resources (Calof & Beamish, 1995). Also, SMEs are more likely to suffer from liabilities of newness (Sapienza, et al., 2006) (meaning that young or new firms face particular difficulties and have a greater risk of failure) and liabilities of foreignness (Hymer, 1960; Zaheer, 1995), which arise from differences in, for example, cultural and legal facets of the host country (Johanson & Vahlne, 1977).

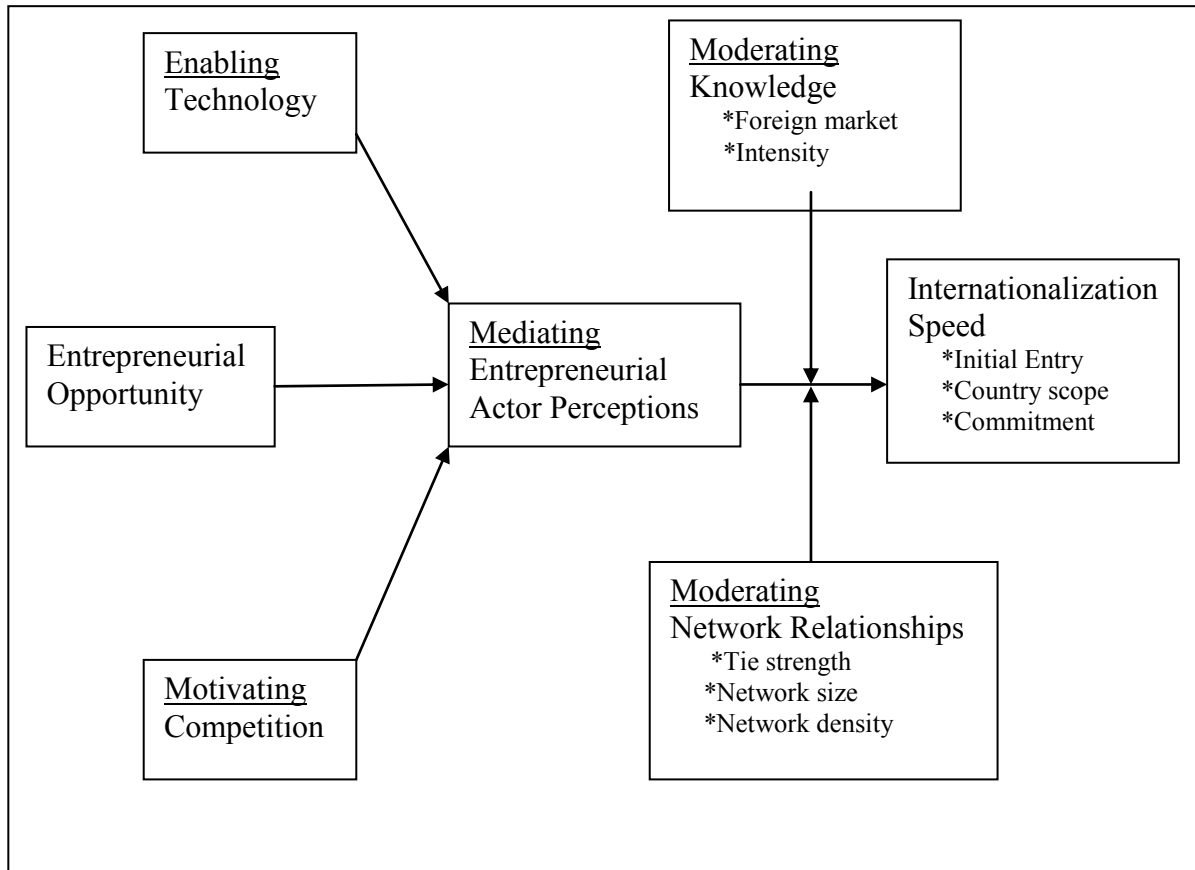
The SMEs which internationalize from inception or at an early stage of start-up and rapidly, challenged propositions about the gradual internationalization of firms, particularly with regard to resource-constrained. The so-called Born Globals (Rennie, 1993) became a popular phenomenon, and since then a number of similar concepts such as International New Ventures (Oviatt & McDougall, 1994), Micro Multinationals (Dimitratos et al., 2003), Early Internationalizing Firms (Rialp et al., 2005a) and Born Regional (Lopez et al., 2009), among others, have emerged. Zahra (2005) argued some new ventures decide to internationalize from inception whereas many others focus on their domestic markets. Thus, the internationalisation strategy may differ and so be confused under the label of INV (Baum et al., 2011). As a generalist concept

International New Venture (INV) firms, can differ in terms of timing of internationalization, market scope, strategy, degree of internationalization or orientation (Jones et al., 2011; Kuivalainen et al., 2007). One central part of IE is INVs and the existence and behaviour of INV firms has been reported in different geographical areas (i.e. Hashai, 2011; Ibeh & Kasem, 2011; Lopez et al., 2009; Nordman & Melén, 2008; Oviatt & McDougall, 1994; Rialp-Criado & Rialp-Criado, 2007) as well as different business sectors (Rialp et al., 2005).

Oviatt and McDougall (1994) define INVs as “a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (p.49). The definition places three generic criteria of an INV: (1) Time to derive competitive advantage from the use of resources and sales output in foreign countries; (2) number of countries involved, and (3) age of the firm when it becomes internationalized (Oviatt & McDougall, 1994). The firm has to make observable resource commitments within a conventionally accepted short period after formation. Although the selection of any period is defined differently in various studies, if internationalization occurs within the first six years, it is likely to have occurred during the venture’s formative stage (Oviatt & McDougall, 1997). This time is generally measured in years elapsed between the moment of its first international sales and the moment of its creation (Rialp-Criado et al., 2002).

The fast and early internationalization of resource-constrained small and young firms is made feasible by external and internal enablers. As a summary of driving forces for fast and early internationalization of new ventures, Oviatt and McDougall (2005) propose a model on factors impacting a rapid internationalization (see Figure 6). The factors are: entrepreneurial opportunity, technology, competition, entrepreneurial actor perceptions, knowledge and network relationships. According to the model the process of entrepreneurial internationalization starts with an entrepreneurial opportunity identified by an entrepreneur. Together with technological developments in e.g. transportation and communication as an enabling factor and competition as a motivating factor, the entrepreneur evaluates the potential and attractiveness of opportunity and decides whether and how to realize it and whether to exploit it internationally. Moderated by knowledge and network relationship the internationalization speed can be accelerated. Oviatt and McDougall (2005) emphasize the international network of the entrepreneur.

**Figure 6 A model of factors influencing a fast internationalization of INVs**



Source: based on Oviatt and McDougall, 2005

The international ambition of the entrepreneurs (owner/managers) at the inception of the firm as well as their global mindset is a pre-requisite for an early internationalization (Andersson & Wictor, 2003; Knight & Cavusgil, 1996; Oviatt & McDougall, 1995). Thus the key role of the owner/manager in new venture internationalization has an important influence and is another focus of analysis (Andersson, 2011; Coviello & McAuley, 1999).

### 2.4.3 The entrepreneur

The entrepreneurial phenomena pertain not only to entrepreneurial firms, but also to individual entrepreneurs. The researchers have found that entrepreneurs, who identify international opportunities, are vital for early and fast internationalization (Andersson & Wictor, 2003). The concept of (international) opportunity identification into the IE domain has been recognised as a new critical element in the field (Chandra, et al., 2009; Jones et al., 2011). This process (opportunity identification) includes discover opportunities to start internationalization, or to go into other international markets, and

the answers of how and why, the entrepreneur and firm, decided to exploit it (Chandra et al., 2009).

Consequently is relevant to discuss definitional issues and assumptions in entrepreneurship field, characterized by abundance of theoretical contributions and lacks a unifying conceptual framework (Shane & Venkataraman, 2000), and the opportunity identification concept.

### **2.4.3.1 Theories of entrepreneurship**

The entrepreneurship theory is founded on three influential views that emerged from the domains of economics. Schumpeter (1934) introduces the entrepreneur as a person who creates new combinations and waves of creative destruction and reconstruction. Kirzner (1973) views entrepreneur as the enabler and discoverer of the market process. By responding to these, entrepreneurs can obtain resources, recombine them, and sell the output in the hope of making a profit (Shane & Venkataraman, 2000). Knight (1921) differentiated uncertainty from risk and suggested that entrepreneurs have certain capacities to deal with uncertainty effectively.

Schumpeter (1934) defined entrepreneurship as new combinations including the doing of new things or the doing of things that are being done in a new way. New combinations include (1) introduction of new goods; (2) new method of production; (3) opening of a new market; (4) new source of supply; (5) new organisations. Kirzner (1973) saw entrepreneurship as the ability to perceive new opportunities. Knight (1921) differentiated between the notion of risk, which is calculable, and uncertainty, which is not. The entrepreneurial task is rewarded with the residual income (profit), which is the reward for bearing uncertainty. Thus, the domain of entrepreneurship is encompassing a discovery process, an innovation process, and an uncertainty bearing process that has the starting point with opportunities. Opportunity is a key concept with different meanings and it is explained from different approaches. As a central concept in the entrepreneurial process (Eckhardt & Shane, 2003; Shane & Venkataraman, 2000) it is convenient to develop an explanation, to better understand it.



### 2.4.3.2 Opportunity definition

Non-competitive markets come into existence because businesses want to make a profit, in this sense, an *opportunity* is to buy at a low price and sell at a higher one to earn supernormal profits (Shane & Venkataraman, 2000). The exploitation of profit opportunities by entrepreneurs alerts others to the opportunities and competition reduces profit levels until equilibrium is restored (Shane & Venkataraman, 2000).

Shane (2003) describes an opportunity as a situation in which a person can create a new means- ends framework for recombining resources that entrepreneur believes, will yield a profit. This definition of opportunity assumes that imperfect nature of information gives rise to opportunities, which are identified by entrepreneurs on the basis of informational advantages (Sarasvathy et al., 2003).

According to Shane and Venkataraman (2000) the entrepreneurial opportunity research is interested in ‘how, by whom, and with what effects opportunities to create future goods and services, are discovered, evaluated, and exploited’. An entrepreneurial opportunity, therefore, consists of a set of ideas, beliefs and actions that enable the creation of future goods and services in the absence of current markets for them (Venkataraman, 1997).

In brief, the opportunity concept is inculcated in market forces, where the supply or demand could be know or unknown and describes a wide range of phenomena that may initially appears indefinite, but just become explicit through time (Ardichvili et al., 2003).

In a broader sense, opportunities can be defined as the initial business idea that leads to the creation of a new firm or as opportunities perceived that lead to improvements of the situation of an existing firm (Christensen et al., 1994). Thus, opportunity processes is equally associated with pre-founding stage of a firm or initial and subsequent stages of a firm.

A major divergence in the field is about the nature of opportunity. That is, whether the opportunity exists in the environment and entrepreneur simply discovers it or if the entrepreneur is capable of creating new opportunities which never existed before. To

clarify this debate, in order to understand and explain Opportunity Identification (OI), Alvarez and Barney (2007), Sarasvathy et al. (2003) and Mainela et al. (2014), provide some useful distinctions between opportunity recognition view, opportunity discovery view and opportunity creation view.

### 2.4.3.3 Views on the phenomenon of opportunities

The three views (see Table 3), namely the allocative view (mainly relating to “opportunity recognition”), the discovery view (mainly relating to “opportunity discovery”) and the creative view (mainly relating to “opportunity creation”) draw the model entrepreneurial opportunity as a function; a process or a set of decisions respectively (Sarasvathy et al., 2003).

**Table 3 Comparing the three views of entrepreneurial opportunity**

View	Allocative View	Discovery View	Creative View
What is an opportunity	Possibility of putting resources to good use errors in the system	Possibility of correcting errors in the system and creating new ways of achieving given ends	Possibility of creating new means as well as new end
Focus	Focus on system	Focus on process	Focus on decisions
Method	Opportunities “recognized” through deductive processes	Opportunities “discovered” through inductive processes	Opportunities “created” through abductive processes
Domain of application	When both supply and demand are known	Only one or the other (supply or demand) known	When both supply and demand are unknown
Assumptions about Information	Complete information available at both aggregate and individual levels	Complete information at the aggregate level, but distributed imperfectly among individual agents	Only partial information even at the aggregate level, and ignorance is key to opportunity creation
Management of Uncertainty	Uncertainty managed through: Diversification	Uncertainty managed through: Experimentation	Uncertainty managed through: Effectuation
Outcomes	Strategies for: Risk management	Strategies for: Failure management	Strategies for: Conflict management

Adapted from Sarasvathy et al (2003)

#### **2.4.3.4 Entrepreneurial Opportunity Identification definition**

As a result of the continuing development of opportunity identification research, in particular, about ontological views of opportunity, each of the processes (views) may describe different elements of the same entrepreneurial process (Chandra et al., 2009) and each view of opportunity is most appropriate, under different conditions, problems and decision parameters (Sarasvathy et al., 2003). This thesis defines the notion of OI based on the dynamic nature of the processes, explaining the identification of new means, ends and/or new means-ends relationships (Shane & Venkataraman, 2000) adopts the definition of Eckhardt and Shane's (2003) of entrepreneurial opportunity, 'the discovery, evaluation and exploitation of entrepreneurial opportunity'. This definition of OI is based on:

First, research in the entrepreneurship field focuses on what happens, after opportunities have been discovered. The prior activities (pre-founding phase) has received less attention (Christensen et al., 1994; Shane, 2000). Previous research on the early phases of new firm creation normally focuses on start-up activities, when business opportunity has been identified. In this research entrepreneurial events are sub-divided (i.e. Christensen et al., 1994; Kazanjian 1988; Witt, 2004) into a pre-founding phase, start-up phase and later development phase. The pre-founding phase contains activities related to the discovery, evaluation and exploitation of the initial business idea that occurs before the decision of start a firm. Whereas, the start-up phase includes activities which occur after the decision to start a firm is made and hence results in the establishment of a specific firm. The later development phase is referring to the growth phase.

*Discovery:* Second, the entrepreneurial process starts with opportunity discovery, the static nature of the economic view (Kirzner, 1973) based on the equilibrium assumption, seems rather restrictive in examining entrepreneurial phenomena. The opportunity discovery is as a rational and a systematic search process that involves careful strategic planning (Drucker, 1985; Timmons, 1990). Although discovery of entrepreneurial opportunities is a subjective process, the opportunities themselves are objective phenomena that are not known to all people at all times (Shane & Venkataraman, 2000). Entrepreneurial opportunities require the discovery of new

means-ends relationships (Kirzner, 1997). Because people possess different knowledge, skills, and experience, they make different conjectures about the price at which a market will be in equilibrium or about the possible new market they may create in the future. This is triggered by the decision to create (due to personal and environmental circumstances) a venture, and then followed by opportunity discovery based on the entrepreneur's knowledge, skills, and experience (Shane & Venkataraman, 2000). This also encourages a type of behaviour for seeing opportunities instead of risks and threats.

*Evaluation:* Third, “although an opportunity for entrepreneurial profit exists, an individual can earn this profit only if he or she evaluates that the opportunity exists and has value” (Shane & Venkataraman, 2000, p.221). All opportunities must not be obvious to everyone all of the time (Hayek, 1945) and according to the literature, entrepreneurs are capable to recognize the opportunity because: (1) the possession of the prior information necessary to identify an opportunity and (2) the cognitive properties necessary to value it. To evaluate an opportunity, an entrepreneur has to have prior information that is complementary with the new information, and this information is necessary to recognize any given opportunity that is not equally distributed across the people. Exogenous shifts are considerable changes in the market because of government actions, demographic changes or creation of new knowledge (Eckhardt & Shane, 2003). However, even if a person possesses the prior information necessary to evaluate an opportunity, he or she may fail to do so because of an inability to see new means-ends relationships. They must be able to identify these new means-ends relationships that are generated by a given change. Cognitive research shows that people differ in this aspect. Some are good at visualising means-end relationships, whereas others find it difficult to observe relationships (Shane & Venkataraman, 2000).

*Exploitation:* Four, exploit or not to exploit the discovered opportunities, may be influenced by the joint characteristics of the opportunity and the nature of the individual (Venkataraman, 1997). The exploitation of an entrepreneurial opportunity requires that entrepreneur believes that the expected value of the entrepreneurial profit will be large enough to compensate for its opportunity cost. Not all potential entrepreneurs will exploit opportunities with the same expected value. The opportunities can either be exploited by creating new firms, within the firm or by selling them to other firms.

In brief, the present thesis considers OI as encompassing the “discovery”, “evaluation” and the “exploitation” of entrepreneurial opportunities.

#### **2.4.3.5 Internationalization as an entrepreneurial process**

This research adopts the definition of Chandra et al. (2009) of internationalization as ‘the discovery, evaluation and exploitation of entrepreneurial opportunity in international markets’. Through this internationalization conceptualization, this research uses these events (discovery-evaluation-exploitation) as an organizing framework and attention is focused upon identifying antecedents and processes underlying (i) opportunity discovery, (ii) evaluation and (ii) exploitation, consisting of activities that relate to international opportunities in the start-up phase and/or subsequent development phase, such as sales, outsourcing and cooperation opportunities as well as launching the product or service internationally. An assumption guiding this work is that the internationalization phase may be parallel to the pre-founding and the start-up phase. Furthermore, this definition allows the inclusion of all types (born global, traditional, born-again global, etc.) and sizes of firms that are in different stages of the internationalisation process. This conceptualisation also permits the analysis previous to the start-up, in order to suitably explain the internationalisation process of the firm from its pre-founding stage (Chetty & Söderqvist, 2013).

#### **2.5.3.6 Factors and processes influencing opportunity discovery, evaluation and exploitation in international markets**

Based on literature review and drawing on Chandra et al. (2009), this study conceptualises the key antecedents of opportunity identification under: prior knowledge and experience, networks ties/social capital, access to resources and mode of reasoning.

*Prior knowledge and experience:* Prior knowledge encompasses an individual’s distinctive information about a particular subject matter and provides him or her with the capacity to identify certain opportunities (Venkataraman, 1997; Shane, 2000). Prior knowledge may be the result of work experience, education or other means (see: Shepherd & DeTienne, 2005). Prior knowledge is generally equated with prior work experience (Evers & O’Gorman, 2011). Prior knowledge can be derived from various sources through experiential learning (intentional or unintentional knowledge that

comes from direct experience and vicarious learning) and/or through second-hand experience (Huber, 1991). Some kinds of prior knowledge are important to the discovery of opportunities: knowledge about markets, knowledge about ways to serve markets and knowledge of customer problems (Shane 2000). Prior knowledge is a key variable in international opportunity identification (Chandra et al., 2009). In this sense, another type of prior knowledge is the adaptation of prior technical knowledge for new uses which could be important in international opportunity recognition (Dew et al., 2004).

“Prior knowledge influences firms’ internationalization process but does not determine these firms’ paths of opportunity discovery and exploitation in a direct relationship” (Nordman & Melén, 2008, p.175). Initial international market entry is largely a process of opportunity discovery rather than deliberate search, especially when little or no prior international experience and knowledge is present (Chandra, 2009). McDougall et al. (1994) pointed out that the founders’ unique backgrounds, knowledge, and networks enabled INVs to recognize opportunities for earning high returns in international markets. The relevance of such prior experience in speeding up overseas market entry by INV has been also accepted (Madsen & Servais, 1997; Oviatt & McDougall, 1997), and founders’ prior knowledge and networks were important to understand the rapid international expansion (Andersson, 2011).

An entrepreneur’s prior knowledge can explain how they discover entrepreneurial opportunities, including international opportunities (Evers & O’Gorman, 2011). Chandra et al. (2009) found that firms with limited prior international experience tended to discover opportunities in a serendipitous or ad hoc way, rather than searched for them deliberately.

*Network ties/Social capital:* The positive role played by networks and social ties is well studied in entrepreneurship research (Aldrich & Zimmer, 1986; Elfring & Hulsink, 2003). A social and business network of an individual or firm, comprises both strong and weak ties. According to Granovetter (1973) strength a tie “depends on the combination of the amount of time, emotional intensity, intimacy and the reciprocal services” (p.1361). “The network of an entrepreneur is a source of information helping the entrepreneur to locate and evaluate opportunities” (Elfring & Hulsink, 2003, p.412)

and social networks are assumed to be relevant as for discovering opportunities (Ardichvili & Cardozo, 2000). Singh (2005) argued social network relationships are important for recognising entrepreneurial opportunities among information technology entrepreneurs.

Network ties have been regarded as extremely important for international opportunity recognition. Ellis (2011) proposes that is mainly the entrepreneurs' existing relationships that shape the recognition process of international exchange-opportunities. This process is a very subjective process and the relationships may both be an advantage and disadvantage for this process. Chandra et al. (2009) indicated the important role of weak and strong ties when firms initially recognize international opportunities. Söderqvist and Chetty (2009) found that stronger ties were more often used in the early internationalization phase. Also access and developed of new opportunities through networks have been studied (Agndal & Chetty, 2007; Chetty & Holm, 2000).

Evers and O'Gorman, (2011) argued foreign market opportunity and customer identification emerged as a result of the interaction between the entrepreneur and their social and business networks. Manolova et al. (2010) pointed out entrepreneurs tended to benefit and rely initially on their domestic networks. Yli-Renko et al. (2002) have argued that management contacts, customer contacts and suppliers' contacts positively impact on the level of foreign market knowledge and, in turn, the international growth of new ventures.

Social capital has been perceive as a critical resource in the process of opportunity identification, in different stages of the firm (Carolis & Saporito, 2006; Manolova, et al., 2010; Nowieski & Rialp, 2013; Yli-Renko, et al., 2002).

*Access to resources:* Exploitation of entrepreneurial opportunities requires acquisition and recombination of resources, and these need to be financed either through external means or internally by the entrepreneur (Shane, 2003). Competing in international markets will need resources that are valuable and idiosyncratic to that particular market and those which facilitate the integration of the entrepreneurial knowledge coordinate and transmit the tacit knowledge (Alvarez, 2003). The more unique the resource is, the

easier it will be for a firm to exploit an entrepreneurial opportunity and to exploit it faster (Chandra et al., 2009). Research on international entrepreneurship evidence these unique resources in smaller firms can be obtained through the use of networks (Andersson & Wictor, 2003; Coviello & Munro, 1995; Coviello & Martin, 1999; Oviatt & McDougall, 1994).

#### **2.4.4 Criticism of the IE perspective**

In some parts of this section had been indicated some criticism (or challenges) to this new field. As Keupp and Gassmann (2009) claimed, IE research has not attained the necessary theoretical rigor and external theoretical legitimization yet. Young et al. (2003) argued in favour of the application of more IB theories and notions in IE studies and they call for a more “international nature” of future examinations. IE needs delineation of its boundaries and demarcation of its key theoretical aspects (Young et al., 2003). According to Coviello et al. (2011) one major critic/challenge comes from Gamboa and Brouther (2008). They argued the research on IE has been replicated from international business studies. That is the findings emanating from those research may belong to a delimited geographical area. In the same way focus of IE research has largely been about small and new ventures. Keeping this focus represent an obstacle to advance toward a generalizable IE theory (Keupp & Gassmann, 2009). Coviello et al. (2011) considered that the lack of use of theoretical frameworks from either international business or entrepreneurship is a fail. Is important to assess the IE research in a manner that is first focused on research of the intersection of international business and entrepreneurship and second, it should be comprehensive, and rigorous (Coviello et al., 2011).



## 2.5 Summary of Internationalization literature review

Subject	Process theories	Strategic	International Entrepreneurship
<b>Key rationale</b>	-Firms trade off between growth and risk/uncertainty.	Looking for unique knowledge.	Manager's attitudes, knowledge, and experience;
<b>Unit of analysis</b>	-The lack of complete information of overseas market poses risks, which are reduced by experiential knowledge. Firm (SME)	Minimization of risk and uncertainty	Profit from growth opportunities in international markets. Firm's capabilities; External market factors.
<b>Explanatory variable</b>	Internationalization is seen as causal of cycles. Further market commitment occurs in small steps	Firm (No Size specified) Strategic behaviour of competitors	EI (entrepreneur international) Firm (any size) Interest in exploit unique ideas and competences, as well as the opportunities that the foreign market offers
<b>Assumptions</b>	Bounded rationality and Internationalization is linked with managerial learning – a key element for a firm moving from one stage to another.	Bounded rationality	Early internationalization is possible, even from inception.
<b>Method of internationalization</b>	Psychic distance model: start with low psychic distance markets and progress to greater psychic distance market. -Establishment chain model: progression from no regular exporting, exporting via independent representatives, exporting via sales subsidiary, a mix of export and FDI in the form of subsidiary with assembly activities and fully-fledged production subsidiary	Creation and sustainability of competitive advantage abroad.	A priori no psychic or geographical proximity is required. Random market entry irrespective of psychic distance
<b>Sources of competitiveness</b>	Path dependence and firms' experiential knowledge of market Experiential and internationalization learning from own experiences made in the foreign market	Firm's imitation and pre-emptive capability	Managers bring experience, information and know-how to the firm that may serve as a catalyst for early internationalization. Alternative governance structures such as networks and interaction with foreign market players

Subject	Process theories	Strategic	International Entrepreneurship
<b>Strengths</b>	Empirical support	Global competitive dynamics: explains industry stability	Support particularly for SMEs: focuses on dynamics rather than description of internationalization
<b>Weaknesses</b>	Time-dependent and deterministic evolutionary path does not include cooperative entry modes; strategic factor ignored: less valid in technology and services	Considering oligopolistic and others non competitive industry structure: new forms of cooperative	Lack of theoretical rigor and external theoretical legitimization
<b>Modes of entry</b>	Indirect and direct export and foreign production	FDI	Use of multiple modes of entry
<b>Role of networks</b>	None	Network may be used for the acquisition of external knowledge of the firm	Alternative governance structures and network relationships are avenues for the acquisition of resources and knowledge necessary for foreign development of firms

Source: Malhorta et al., 2003; Karslen, 2007; Chandra, 2007; Rialp and Rialp, 2005

Following these theories it can be argued that the possession of specific advantages, knowledge, and experience are important to international new ventures as well as the efforts and social capital to obtain the resources. Call for integration of a different theoretical lens or 'holistic' approach in internationalization research, indicates that this research and theories need to integrate the social capital perspective with other models to explain the complex processes on internationalization (Andersson & Wictor, 2003; Chetty et al., 2015; Coviello, 2006; Ibeh & Kasem, 2011).



## **CHAPTER THREE: SOCIAL CAPITAL PERSPECTIVE AND THE SMEs INTERNATIONALIZATION PROCESS**

This chapter focuses on the internationalization process of small and medium-sized firms (SME) and the impact of social capital on them. In order to successfully achieve this objective, this study starts by reviewing social capital as the main approach of this research to specify its role driving and enabling the emergence and development of the international entrepreneurial phenomena. Thus, the concepts of social capital and its deployment to internationalization analysis are reviewed. Based on the existing literature pertaining to social capital and SME internationalization, the literature gaps are identified in order to justify the focus and contributions of this research. Finally a research framework is developed.

### **3.1 INTRODUCTION**

In order to improve understanding on internationalization process of SMEs; the social capital perspective has become another mainstream of thought (Coviello & McAuley, 1999). Theoretical interest in understanding the role of social capital in influencing entrepreneurial decisions is achievable when introducing the notion of social capital and its relevance to entrepreneurial phenomena.

### **3.2 SOCIAL CAPITAL CONCEPTS**

Literature of social capital describes network relationships as facilitator of the acquisition and development of resources (Coviello & Cox, 2006) and as a conduit to obtain information of international business opportunities (Chandra et al., 2009).

#### **3.2.1 Network relationships**

Social capital is a resource that is generated through a network, and therefore it is related to the nature of the relationships. The relationships within a network could be divided in two groups: inter-organizational networks (also called business networks or formal networks) and personal networks (also called social networks or informal networks) (O'Donnell et al., 2001). Business or personal networks refer to the set of business firms (alters) or individuals with whom focal firm (ego) or the entrepreneur, that has direct relations and relations between alters (Aldrich, 1999; Aldrich & Zimmer,

1986). Since relationships are multidimensional concept, one way of distinguished between them is to look at who is the actor in the relationship (see Table 4). The actor in business relationship is the firm, this type of relationship is institutionalised and does not depend on specific individuals (formal linkages involving firms). These relationships consist of the long-term business relationship that the firm has with its customers, distributors, suppliers, competitors and government contact (Johanson & Mattsson, 1988). Through these relationships the firms access to a variety of important resources and complementary skills, which leads to the building of specialised knowledge and achievement of economies of scale in operations and collaboration to acquire greater knowledge and capabilities (Chetty & Wilson, 2003).

**Table 4 The distinction between personal and business networks**

	Business Network	Personal Network
<i>Network "actor"</i>	Firm	Individual
<i>Type of link</i>	Formal	Informal
<i>Level of analysis</i>	Dyad	Egocentric

Source: based on O'Donnell et al., 2001.

Personal relationships consist in the interaction of all these people with whom managers have direct relations. Typically, that group includes people whom they obtain services, advice and moral support (Dubini & Aldrich, 1991). However some others researches uses many different terms to describe the meaning of personal networks, including social networks (Zhou et al., 2007), personal connections (Andersen 2006), informal networks (Coviello & Munro, 1997) and social ties (Ellis, 2011). Involvement in social networks influences the entrepreneurial process providing access to different types of valuable resources. The business networks differ significantly from personal networks (Sasi & Arenius, 2008); they consist of actors and the relationship between them. This means that each actor controls certain activities or resources directly and has indirect control of their counterpart activities or resources (Hakansson & Johanson, 1993). At a firm-level, Stevenson and Jarillo (1990) mention that networks facilitate the development of informal social networks, internal and external, promoting resource sharing and exhibit increased levels of entrepreneurial behaviour.

The intensity and frequency of network relationships, has been considered as key element of the entrepreneurial process (Jack & Anderson, 2002). Research on

entrepreneurial networks at the individual level focuses on the relationships or ties of entrepreneurs with other individuals and organizations (Shane & Cable, 2002). The strength of ties (strong and weak ties) has been used for different purposes such as entrepreneurial processes in venture creation (Aldrich & Zimmer, 1986; Singh, 2000; Hite & Hesterly, 2001) and facilitates successful firm emergence, growth and performance (Hite, 2005; p.1).

Weak ties are defined by Granovetter (1973) as relationships which involve infrequent contact, but rarely involve common close friends. Granovetter's (1973) notion of weak ties derived from direct and indirect linkages, describes the extent to which actors can gain access to new information and ideas through ties that are located outside of their immediate group of contacts. Weak ties are more likely to provide unique information, given that most individuals have more weak than strong ties (Granovetter, 1973). Weak ties are "bridges" to information sources, but not necessarily included in an individual's strong-tie network (Granovetter, 1973). Opportunity identification and exploitation have generally been associated with holding a "bridging" position in a network. (Elfring & Hulsink, 2003) argued that friends, friends of friends, casual business contacts, scientific community contacts and association memberships, are examples of weak ties.

Strong ties characterize close friends and family member (Granovetter, 1973). Lin et al. (1981) also equate strong ties with friends, relatives and neighbours. Hite (2003) founded that strong ties based on personal relationships and on dyadic economic interaction, could be seen as business relationships. Strong ties are likely to be more densely connected to other ties (Granovetter, 1973) and more densely connected alters are less likely to be forgotten (Marin, 2004). Jack (2005) argued strong ties are important for business activity. According to her (strong ties provide the link to the wider social context and act as a mechanism to invoke weak ties. Strong ties are perceived as being less beneficial than weak ties because they are likely to provide redundant information since they can be anticipated to move in similar, if not the same, social circles (Burt, 1992b). A central issue to this research is one of Jack's (2005) conclusions showing that "strong ties can remain latent and dormant within the network" (p. 1243). Information and support gained through strong ties offers multiple benefits: it is cheap; it is more trustworthy because it is richer, more detailed and

accurate; it is usually from a continuing relationship and so in economic terms it is more reliable (Granovetter, 1985).

Some researches explain that relationships varying from strong to weak (Aldrich & Zimmer, 1986). According to Granovetter (1973) “the strength of ties within a network defines the strength and quality of relations” (p. 1361). The strength of ties can be determined by the amount of time, emotional intensity, intimacy and reciprocal services characterising the tie (Granovetter, 1973). Uzzi (1997) defined that close ties are more important for firm success and overall business volume, even though arm’s length ties may be used with greater frequency. Time spent in the relationships and frequencies of contact have been used also as measures for strength (e.g. Aldrich & Zimmer, 1986; Elfring & Hulsink, 2007; Granovetter, 1973). Jack (2005) are critical towards using frequency as a measure for strength, instead, Jack et al. (2004) suggest strong-tie continuum based on trust, integrity and honesty as characteristics.

Söderqvist (2011) explain that existing literature considers that strong and weak ties are separate entities. She describes weak ties as differing from each other and based on personal and on business relationships.

An individual’s or firm’s social and business network comprises both strong and weak ties. Most people have more weak than strong ties and weak ties can act as bridges linking networks with different types of information and ideas and “strength of a tie depends on the combination of the amount of time, emotional intensity, intimacy and the reciprocal services” Granovetter, 1973, p.1361). Burt (1992), further developed Granovetter’s theory by pointing out that it is not the strength of the tie that matters so much as whether they link different networks that are otherwise not connected or, in his terms, they bridge ‘structural holes. The actors can profit from establishing ties that bridge these, otherwise unconnected actors (Burt, 1992). Complementary to the benefits of weak ties exist benefits of bridging structural holes, defined as the absence of ties between actors.

Social capital encompasses the ability of actors to extract benefits from their networks (Lin et al., 1981; Portes, 1998). This concept is multidimensional, and occurs at both individual level and firm level (Nahapiet & Ghoshal, 1998). Thus, it can be a useful



resource by enhancing external organizational issues, providing resources through networks (Adler & Kwon, 2002; Putnam, 2000).

These network benefits include that SMEs identify and exploit opportunities abroad (Bell 1995; Coviello 2006; Crick & Jones 2000; Loane et al., 2007; Sharma & Blomstermo, 2003). Ellis (2011) examines the opportunities and constraints of interpersonal networks using social network theory and explains that through the personal networks of the founders flows the information about international opportunities, via all forms of ties. This information about international opportunities is usually acquired through personal networks rather than a systematic market research (Ellis, 2000). Loane and Bell (2006) explain that lack of knowledge is a major barrier to SMEs internationalization and personal networks are, the key networks in INVs facilitating access to knowledge and opportunities (Andersson & Wictor, 2003; Zucchella 2001). In consequence, the personal networks of founder are important to INV firms, particularly at start up phase (Chetty & Campbell-Hunt, 2004; Gabrielsson, et al., 2008; Rialp et al., 2005). Business networks can aid in internationalization of new venture firm by providing connections and opportunities in the foreign markets (Coviello & Munro, 1995, 1997; Ellis, 2011; Fernhaber & Li, 2013; Knight & Cavusgil, 1996; Weerawardena et al., 2007) and gain access to invaluable source of information about local market knowledge (Coviello & Munro, 1995). Consequently, both personal and business networks are useful to new venture internationalization by providing connections and opportunities in the foreign markets (Coviello & Munro, 1995, 1997 Ellis, 2011; Fernhaber & Li, 2013; Knight & Cavusgil, 1996; Weerawardena et al., 2007).

The dual function of social capital (obtain resources and information) requires the review of the existing definitions of social capital.

### **3.2.2 Social capital definitions**

According to Nahapiet and Ghoshal (1998) social capital has many different attributes characterized in three dimensions: (1) the structural: which refer to the overall pattern of connections between actors: who you reach and how you reach them (Burt, 1992). Among the most important characteristics of this dimension is the presence or absence

of network ties between actors describing the pattern of linkages in terms of such measures as density, connectivity and hierarchy and appropriate organization (Nahapiet & Ghoshal, 1998); (2) the relational (or relational embedded): it describes the kind of personal relationships people have developed with each other through a history of interactions (Granovetter, 1992). According Nahapiet and Ghoshal (1998) this concept focuses on the particular relationships people have, such as respect and friendship, that influence their behaviour and it is through these ongoing personal relationships that people fulfil such social motives as sociability, approval and prestige. The relational dimension of social capital refers to those assets created and leveraged through relationships. The key characteristics are trust and trustworthiness, norm and sanctions, obligations and expectations, identity and identification; (3) the cognitive dimension: it refers to those resources providing shared representation, interpretations and systems of meaning. The key characteristics are shared language and codes, and shared narratives (See Table 5).

Nahapiet and Ghoshal (1998) also examined the consequences of social capital for action identifying two distinct themes: i) the networks of social relations, particularly those characterized by weak ties or structural holes, which increase the efficiency of information diffusion through minimizing redundancy (Burt, 1992) and ii) the role of social capital as an aid to adaptive efficiency and the creativity and learning it implies.

**Table 5 Social Capital dimensions and descriptions**

<b>Dimension</b>	<b>Description</b>
<i>Structural</i>	Overall pattern of connection between firms
<i>Relational</i>	Assets rooted in trust, norms, obligations
<i>Cognitive</i>	Shared language and narratives

The most comprehensive approach to providing an overview of the existing definitions can be found in the seminal review of Adler and Kwon (2002). The authors argued the social capital definitions vary depending on whether they focus on substance, the sources, or the effects of social capital. The authors mentioned the definitions vary depending on whether their focus is primarily on (1) the relations an actor maintains with other actors (bridging form of social capital); (2) the structure of relations among other actors within a collectively (bonding form of social capital), or (3) both type of linkages (neutral on this internal/external dimension).

According to Adler and Kwon (2002) the bridging view (1) focuses on the individual and how he or she is linked to other actors. In this view, social capital may be used to explain the differential success of individual actors in their competitive rivalry. Burt (1993) is a promoter of this view, emphasizing the importance of positioning and structuring within a network to gain a competitive advantage. The bonding view (2) – focus on the collective (organization, community, nation, etc.) and its internal structure, which may constitute a cohesiveness that facilitates the pursuit of common goals (Adler & Kwon, 2002). The last of the views is neutral (3) to the internal/external argument. The promoters of this view argue that the distinction between internal and external views is largely a matter of perspective; a relationship that is external at one abstraction level may be internal at a higher one. Moreover, the internal and external views are not mutually exclusive, as an actor's action will be influenced by both external linkages and the cohesiveness of the network fabric (Adler & Kwon, 2002).

It is useful to distinguish those views which define social capital as an asset that is instrumental to the achievement of individual or organizational goals (Uzzi & Gillespie, 1999) from those that define social capital in terms of the quality of relationships which constitute network membership (Burt, 1997; Tsai & Ghoshal, 1998). Nahapiet and Ghoshal (1998) describes that the central proposition of Social Capital approach is that networks of relationships constitute a valuable resource. According to the authors much of this capital is embedded within networks of mutual acquaintance and recognition. Other resources are available through the contacts or connections networks bring, for example through a “weak ties” (Granovetter, 1973) networks members can gain privileged access to information and to opportunities. Also, significant social capital in the form of social status or reputation can be derived from specific networks, especially in which such membership is relatively restricted (Bourdieu, 1986; Burt, 1992). For Bourdieu (1996, 1993) and Putman (1995) the conceptualization of social capital includes the actual or potential resources that can be accessed through such networks. For Nahapiet and Ghoshal (1998) is the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or organization. These definitions thus comprise both the network and the assets that may be mobilized through that network. As mentioned above, some authors agree on the significance of relationships as a resource, but there is still lack of consensus on a precise definition.

A widely accepted definition of social capital according to Lin (2002) describes how the social resources that are available to an individual in his/her network influence his/her success at reaching his goals. Social capital usually consists of three basic ingredients: (1) resources that are bound in the network; (2) access to these resources through the network and (3) the appropriate use of these resources. Also, it can be seen as an analogue to human or financial capital, only with the distinction that there individual are fostering relations and connections instead of other goods.

Finally, a stream of research on social capital also highlights “the dark side of social capital” (Adler & Kwon, 2002; Gargiulo & Benassi, 1999), which describes how social bonds can be an obstacle to pursuit economic interests. Some scholars criticized some approaches to social capital because focused only on the positive effects of social capital, without considering the negative ones (Portes, 1998). There is empirical evidence that social capital has negative issues: tightly controlled relationships reinforce social obligations and expectations that may limit the freedom of economic agents to recognize and exploit new opportunities (Batjargal, 2003; Uzzi, 1997). Some relationships may turn into ‘dark resources’ or social liabilities that constrain rent-seeking activities of managers and entrepreneurs, affecting negatively their performance indicators (Gargiulo & Benassi 1999; Portes, 1995).

### **3.2.3 Levels of Social capital**

Social capital can be found at different hierarchical levels such as the individual level or firm level and firm-level social capital has been increasingly studied in the context of domestic relationships (Borgatti et al., 1998; Coleman, 1990; Gulati, 1995; Lin et al., 2001; Nahapiet & Ghoshal, 1998). The entrepreneurship research has emphasized the importance of firm-level social capital in understanding how firms create and manage a network and its outcomes (e.g. Aldrich & Zimmer 1986; Larson & Starr, 1993; Liao & Welch, 2005). Adler and Kwon (2002) have further explored the effects of social capital on business outcomes such as (product) innovation and firm performance. Firms networks have been found to promote learning and alliance formation (Kogut, 1989; Uzzi, 1996) and alliances, one firm-level social capital outcomes promote competitive advantage (Uzzi & Gillespie, 2002).

The social capital of SMEs is often sourced by personal relationships between the entrepreneur and the members of her/his social network. As the relationship continues to develop, the economic motives can: “overlaid with social content that carries strong expectations of trust and abstention from opportunism” (Granovetter, 1985, p.490). A favourable reputation allows firms gain access to, as well as, mobilizes external resources (Florin et al., 2003; Johannisson et al., 1994). The accessibility of resources through entrepreneurial social networks enhances the survival and growth opportunities of new firms (Liao & Welch, 2005). The entrepreneurs utilize their social capital in creating new ventures and in this process, each dimension of social capital reinforces the creation of the other dimensions (Liao & Welch, 1998). A firm’s capability to create and develop social capital is thus determined by the total resources it can mobilize through relationships.

Despite the debate about if social capital develops at a firm level or at an individual level, both levels can be united under a network perspective (Borgatti et al., 1998). Those two usages (of social capital) primarily reflect two different levels of analysis: the individual and the social unit (firm) (Borgatti et al., 1998). Both levels of analysis are simultaneously applicable in empirical research of SMEs internationalization.

### **3.3 SOCIAL CAPITAL AND SMEs INTERNATIONALIZATION**

The international context differs from the domestic context. Often there are differences, for example, in language, culture, and institutional systems hindering the creation of external ties. In the Uppsala internationalization model (Johanson & Vahlne, 1977) these difference define the psychic distance between the home and international markets. In addition to psychic distance, the physical distance between the domestic and international market could be far.

An internationalize firm may has (or has not) a position in the domestic network. The firm that has this domestic network position and its effects on internationalization are discussed in the network model of internationalization (Johanson & Mattsson, 1988). If the domestic network is not internationalized, the firm cannot take advantage of the knowledge and experience of the network partners. In this situation, the internationalization of the firm is driven by knowledge development. If the network in which the firm is embedded already is internationalized, the domestic relationships may

become the driver of the internationalization. A problem is that the network perspective offers little guidance to those firms whose network horizon is limited to the local market (presumably most SMEs). For such firms international expansion may be problematic and is seen to follow the default hypothesis of psychic distance (Andersen, 1997). But this assumption is based on a firm-level analysis. At individual level, even newly established SMEs may have a network of importance for international expansion.

Johanson and Vahlne (1977) focus on the issues of knowledge as a resource and mode selection. They argue that as firms become experienced with conducting international activities, they become more willing to commit additional resources to these activities. Over time, these firms become involved in greater resource-consuming modes. These firms may progress from direct exporting to setting up a subsidiary abroad. As the internationalizing firm engages in more resource-consuming modes, it acquires more control over its international activities. Johanson and Vahlne (1977) argue that frequent interaction with a partner firm allows for uncertainty reduction. The internationalization process itself can be viewed as a process of developing and accessing social capital, as firms initiate, establish and deepen international relationships (Johanson & Vahlne, 2006).

The concepts and ideas in the social capital theory are most recognizable in the network model of internationalization (Johanson & Mattsson, 1988). An early starter is characterized as having few and rather unimportant relationships with firms abroad.

According to Johanson and Mattsson (1988), the firm's position in the market characterizes its relations to other firms and consists of the role of the firm, the importance of the relationship in terms of sales volume, and the strength of the relationship measured as bonds. What Johanson and Mattsson (1988) called the strength of a relationship is called relational social capital in social capital theory. Both the network model of internationalization and the social capital theory distinguish dyadic and network relational social capital. Cognitive social capital is missing from the network model of internationalization; Johanson and Mattsson (1988) suggested that a firm's success in entering new markets is more dependent on its relationships within current markets, both domestic and international, than on those in the chosen markets.

Autio (2005) pointed out that although McDougall et al. (1994) did not explicitly mention social capital in their study their findings indicate its importance for early internationalization.

Social Capital role as a value-adding resource in the international entrepreneurship domain was highlighted by Yli-Renko et al. (2002). They distinguished two types of Social Capital: Internal (extent and quality of relationships between individuals and units within a given firm) and External (that resides in exchange relationships between firms and individuals representing these). Their study found a positive effect of internal and external Social Capital on accumulation of knowledge, resulting in greater knowledge intensity. As such, they perceive it as a resource that can and should be actively managed and harnessed, not as something that accrues over time as a by-product of the firm's activities. Structural, relational and cognitive Social capital allows INV early internationalization (Coviello, 2006; Chetty & Söderqvist, 2013; Lindstrand et al., 2011)

Studies that examine social relations emphasize the importance the importance of networks for perceiving international opportunities, initiating international activities and improving international capabilities and competitiveness, which become enhanced as entrepreneurs acquire more knowledge about foreign markets (Blomstermo et al., 2004; Ellis & Pecotich, 2001; Freeman et al., 2010; Loane & Bell, 2006; Sharma & Blomstermo, 2003). McDougall and Oviatt (2000) emphasized the discovery and pursuit of opportunities outside the firm's domestic markets in pursuit of competitive advantage, which describes an international opportunity as a combination of resources and foreign markets (Mathews & Zander, 2007). According to Chandra et al., (2012) gradual or rapid form of internationalization reported in the literature depends on opportunity development that in turn is shaped by the domestic and international networks.

Social Capital supports not only the actors' wiliness to cooperate, but also their propensity to undertake riskier choices. The sociological literature has asserted that social capital represents a valuable source of information encouraging relationships among agents that are stable and productive over time (Granovetter, 1973; Coleman, 1988; Burt, 1992). Social relationships, often established to pursuit other goals, reduce

the time and the investment required to obtain information. Burt (1992) claimed that the information benefits derived from social capital consist on access, the opportunity to obtain important information; on timing, the opportunity to obtain information earlier; and on referrals, to be mentioned at the right time in the right place.

Ellis (2000) argued that awareness of foreign market opportunities (which has been identified as being a critical antecedent of foreign market entry) is commonly acquired via existing social ties. Foreign market knowledge is often acquired by firms through repeated interactions with others who have this knowledge (Chetty & Holm, 2000). Zhou (2007) synthesized the information benefits generated by social capital that can help internationalization in (1) knowledge of foreign market opportunities; (2) advise and experiential learning; (3) referral, trust and solidarity by a third party. Sharma and Blomstermo (2003) found that Social Capital provides tacit and valuable knowledge about international business practices or experience gained from foreign market operations (Autio et al., 2004). Freeman et al. (2010) argued that the use of personal network relationships allows managers of smaller firms to develop quickly and proactively new knowledge for rapid commercialization of their products.

Ellis (2000) found that decision-makers in practice respond to the inherent risks associated with foreign market entry by placing more not less, reliance on their social ties as a means of economizing on these higher search costs. Contrary to assumptions of the normative literature, international markets are not anonymous and the process of internationalization can be legitimately described in terms of establishing relationships in foreign markets (Johanson & Vahlne, 1990). In general networks can be useful in general for the acquisition, mobilization and development of organizational, human, physical, financial and social capital as the INV internationalizes (Coviello & Cox, 2006). Social capital facilitates the creation and acquisition of knowledge (Nahapiet & Ghoshal, 1998; Yli-Renko et al., 2001).

In addition to providing connections into other markets, social ties are useful for screening and evaluating potential exchange partners. Larson (1992) pointed out that foreknowledge of a potential partner's reputation combined with a history of personal relations reduced exchange risk by providing a foundation for mutual trust.



Coviello and McAuley (1999) and Jones (1999) found that managing business networks helps to acquire these resources needed for internationalization, enabling to overcome size-related challenges. Most research in this area centres more on a firm's portfolio of strategic alliances and less on the entrepreneur's social relations. The use of personal networks of founders and managers for resource access is also shown to be vital in the internationalization (Coviello & Munro, 1997; Crick & Spence, 2005; Chetty & Söderqvist, 2013; Ellis, 2000; Kontinen & Ojala, 2010). Jones and Coviello (2005) in their model of entrepreneurial internationalization refer to Social Capital (where the main focus is the entrepreneur's proprietary network relationship) as an influencing variable in the internationalization process. Some studies shows the weak ties are important that strong ties at the venture formation stage, whereas others found both strong and weak ties important at different stages of firms internationalization process (Evers & O'Gorman, 2011; Freeman et al., 2006; Kontinen & Ojala, 2011)

Sasi and Arenius (2008) found INV firms gained access to and mobilized resources using the relationships (social capital) of the founders or of the entrepreneurial team instead of networks connections of the firm. Coviello (2006) provides strong support for Social Capital's linear relationship with internationalization and growth of new international ventures. The role of social capital in subsequent internationalization have been studied, showing that facilitator of post-entry speed through the learning and knowledge process processes (Prashantham & Dhanaraj, 2010)

The potential benefits of Social Capital have been discussed, while overlooking the potential liabilities it brings to the firm. This gap was first addressed by Chetty and Agndal (2007). They identified three roles of Social Capital with particular reference to mode change, namely: *efficacy role* (usefulness of the firm's Social Capital-value of relational assets, such as knowledge, information, and access to resources); *serendipity role* (unexpected events arising from a Social Capital), and *liability role* (where mode change is triggered as a result of high cost and amount of time required to monitor and sustain Social Capital). Based on the data collected from 20 SMEs they conclude that all three roles influenced mode change decisions of SMEs. Light and Dana (2013) suggests that social capital promotes entrepreneurship only when there is business supportive cultural capital. Social capital has showed insights into liabilities of networks, growth

and decay of ties, as a bundle of resources and its dynamic role (Agndal et al., 2008; Musteen et al., 2010; Prashantham & Dhanaraj, 2010; Prashantham & Young, 2011).

Some studies have showed that the network requirements might change over the time and the optimal form of social capital differs for new and old small firms (Slotte-Kock & Coviello, 2010; Stam et al., 2014). The networks of SMEs will become increasingly cohesive and the new firms benefit when network density decreases over the over the time (Hite & Hesterly, 2001; Larson & Starr, 1993). Additionally, social capital helps firms in overcoming the resource limitations that often constrain international expansion (Lu & Beamish, 2001) establishing legitimacy and credibility, and facilitating the development of new capabilities for international expansion at lower risks (Zaheer & Mosakowski, 1997).

Although much of the above discussion applies to small and medium sized firms at early stages of its internationalization, it is argued here that analysis the pre-founding stage of the firm is considered as an important issue of understanding the internationalisation process as well as subsequent stages of internationalization. Little is known about the social capital development and internationalization processes in small and medium enterprise (Lindstrand et al., 2011), taking into account that social capital is a resource in each stage of the entrepreneurial process. That is, opportunity identification, start-up, development and growth of a firm (Jenssen & Koenig, 2002).

### **3.3.1 Social capital and pre-start up/venture creation**

In this research social capital is defined “as the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or a social unit” and its attributes are characterized in three dimensions (Nahapiet & Ghoshal, 1998). The activities occurring before the decision to start a firm sometimes occurs long before the start-up of a firm (Chetty & Söderqvist, 2013) suggesting there is a process in social capital development at pre-founding phase.

The entrepreneurial process starts with opportunity identification (international or domestic), an issue not enough studied within entrepreneurship research (Söderqvist, 2011). The elements that affect entrepreneurial opportunity recognition are the discovery, evaluation and exploitation (Eckhardt & Shane, 2003; Shane, 2000; Shane &

Venkataraman, 2000). Ellis (2011) argued that is mainly entrepreneurs' existing relationships, that shape the recognition process of international exchange-opportunities and this is very subjective. The relationships may both be an advantage and disadvantage for this process. Individual level social capital research in pre-founding phase is assumed to be important for opportunity identification processes (Ardichvili & Cardozo, 2000, Chandra et al., 2009; Elfring & Hulsink, 2003). Social capital allows the entrepreneur access the resources he/she may need to create and develop a firm (Chetty & Söderqvist, 2013; Hite, 2003). Individual social capital, therefore, may provide the discovery of (domestic) opportunities (Elfring & Hulsink, 2003) and/or international opportunities (Chandra et al., 2009). "The view of entrepreneurship as the nexus of individuals and opportunities can be applied to international new ventures by distinguishing between opportunities that entail novel resource combinations versus opportunities that entail novel market combinations" (Di Gregorio, et al., 2008, p.190).

The entrepreneurs' relationships with others individuals or institutions may allow them to receive/obtain tangible or intangible resources, e.g. information about potential business opportunity/customers a first loan. Thus, the type of resources flowing through the network depends on the type of relationships involved in networks. Different kinds of relationships influence differently the (international) opportunity identification process (Shane & Venkataraman, 2000; Chandra et al., 2009) and new venture creation (De Carolis et al., 2009). Social networks are assumed to be important for opportunity identification (Ardichvili & Cardozo, 2000). This suggests that different kind of ties may influences differently on opportunity identification. Nowinski and Rialp (2015) pointed out network ties affect the attractiveness and feasibility of international opportunities identification process. In the literature discrepancies exist as to whether strong or weak ties are more productive (Chetty & Söderqvist, 2013). Some of the researches argued information in general (not only more valuable information) flows through weak ties more often than through strong ties. The entrepreneurs, therefore, may uses their ties, domestic (Fernhaber et al., 2008) or international (Chandra et al, 2009) as a means to access resources and information far below market price (Elfring & Hulsink, 2003). Sharma and Blomstermo (2003) mentioned that weak ties are important to market selection and entry mode. For brokerage purpose Granovetter (1973) pointed out that weak ties are better at linking disconnected networks than strong ties. If the entrepreneurs' weak ties span structural holes linking domestic with international

networks is more likely that they discover first time entrepreneurial opportunities in international markets (Chandra et al., 2009; Fernhaber et al., 2008), even without domestic activities. Consequently this *brokerage action* may contribute to create international new ventures from inception.

From dimensions perspective, the structural social capital takes into account the people that entrepreneur knows. One of the most important facets of the structural dimension of networks “is the presence or absence of network ties between actors” (Liao & Welch, 2005, p. 349). The relational (social) capital also has been argued to influence venture creation (De Carolis et al., 2009). Cognitive dimension affects resource acquisition and exchange within the network (Tsai & Ghoshal, 1998), which is relevant for opportunity recognition, visualizing new means-ends relationships using existing concepts and information (Shane & Venkataraman, 2000). Cognitive social capital facilitates access to tangible and intangible resources for venture start-up (Maurer & Ebers, 2006).

According to Prashantham and Birkinshaw (2015) and Andersson et al., (2013) is important to remark that domestic ties (strong or weak) may has different effects on different stage of firms’ development, including internationalization. In consequence, is relevant to this work explore the dimensions of social capital and its sources (weak/strong ties) located domestically or abroad, to analyze the influence on opportunity identification process at pre-founding phase. In addition to individual social capital, other factors (prior work experience, risk and mode of reasoning) have been also argued to affect the opportunity identification process (Evers & O’Gorman, 2011; Carolis & Saporito, 2006; Sarasvathy et al., 2010).

### **3.3.2 Social capital and pre-internationalization**

The start-up phase includes activities which occur after the decision to start a firm is made and hence results in the establishment of a specific firm. Internationalisation events, however, consist of activities related to the discovery, evaluation and exploitation of international opportunities in the early internationalisation phase, such as sales, outsourcing and cooperation opportunities as well as launching the product internationally. In this study foreign market opportunity identification is considered as crucial antecedent of internationalization process (Johanson & Vahlne, 2009). An

assumption guiding for this research is that the initial internationalisation phase may be parallel to both the pre-founding and the start-up phase.

The social capital that the founders/owners possess ought to be transferred to the firm itself to secure the resources in case important members should decide to leave the firm (Arenius, 2002). The transfer should occur between inception to shortly thereafter and therefore the founders/owners' knowledge and other personal resources must be available to the entire firm (Arenius, 2002; Berg et al., 2008). Once the firm is created, it develops new social capital building on founders/owners' social capital (Arenius, 2002).

Social networks (sources by business and personal relationships) play a crucial role to entrepreneurship for generating trust and social capital within a network (Zahra et al., 1999). The prevailing social capital concept is to explain how firms generate value from the network of relationships in which they are embedded (Nahapiet & Ghoshal, 1998). In this sense social capital are important to knowledge-intense firms for identifying international opportunities and foreign exchange partners, acquiring knowledge, reducing liabilities of newness and foreignness, and gaining access to other strategic resources (Lindstrand et al., 2011). But, (social capital) is not only a way to obtain resources but also instrumental resource because it facilitates the development of other resources (Coviello & Cox, 2006). Thus, the resource acquisition and/or sharing and resources creation as mechanisms to understand how firm uses their social capital to enable business development must be explicated.

Zhou et al. (2007) argued the information advantages generated by firms' home country relationships in the context of involvement in foreign markets are knowledge of foreign market opportunities; advice and experiential learning; referral, trust, and solidarity involving third parties. According to Laursen et al. (2012) social capital is the conveyance to acquire knowledge and information (i.e. product, technology, etc.). These opportunities for knowledge flows in the domestic social networks influence the involvement of firms in foreign market. This resource acquisition, in turn, allows access resources (Agndal et al., 2008). In the sense of resource access (and/or share), relational social capital is related to the ability to leverage relationships and the ability to create new relationships.

Relational social capital regulates the amount of resources accessible to the firm. A network partner may be rich in physical and financial resources, but if the firm does not have a good working relationship with that network partner (in other words, a relationship endowed with a high level of relational social capital), the firm may not have access to those resources. At the same time, social capital helps to identify foreign exchange partners and provides access to tacit knowledge on international business practices and promotes the creation of domestic ties among firms, which help to establish legitimacy and credibility (Laursen et al., 2012). Milanov and Fernhaber (2014) found that domestic (USA) alliances can help the focal firm to internationalize if the partner is internationally experienced. Contacts with a locally based internationalized firm may help new ventures engage in activities abroad as 'client followers' (Bell 1995). It has to be remark that the quality of those relationships is what gives greater access to unique information (or knowledge) (Arenius & De Clercq, 2005; De Clercq & Arenius, 2006). Granovetter (1973) discussed the quality of ties differentiating strong and weak ones. Thus, weak ties give greater access to unique information than strong ties (Arenius & De Clercq, 2005). The quality of the relationship encompasses both relational and cognitive dimensions of social capital and encircles both the individual and firm-level of analysis (Nahapiet & Ghoshal, 1998). A firm cannot compensate for the lack of relational social capital by creating more structural social capital. If the firm would merely increase the amount of network embedded resources, but without relational social capital, the firm is not able to access to those resources. One component of social capital cannot substitute the lack of the other components.

Some level of each component (structural, relational, cognitive) is required for a firm to take advantage of its social capital, because the utility of the firm-level social capital is not the sum of the components. The relationship among the components is not a simple additive relationship. For example, the more structural social capital a firm possesses the more resources it has available through the network. However, relational social capital regulates the actual amount of embedded resources that the firm is able to access.

In terms of creation, social capital facilitates the development of new capabilities needed to trade goods and technologies in foreign markets (Laursen et al., 2012). The knowledge and learning that result creates value for both actors (Johanson & Vahlne,

2009), greater social capital results in higher levels of external knowledge acquisition and knowledge exploitation (Yli-Renko et al., 2001). Sharma and Blomstermo (2003) suggest it is important to make early contacts with internationalized firms on the domestic market or abroad. International social networks are of critical importance either, for enhancing knowledge creation in business relationships for small firms (Evers & O’Gorman, 2011; Johanson & Vahlne, 2009; Prashantham & Dhanaraj, 2010). Nahapiet and Ghoshal (1998) discussed the relational dimension of social capital, which refers to the assets that have been created and leveraged through relationships rooted in trust, norms, obligations, and identification.

The SMEs are able to internationalize early by linking themselves to extensive, established networks, taking advantage of their social capital to increase the speed of internationalization (Coviello & Munro, 1995). The early internationalization starts because the SMEs are able to perceive and exploit business opportunities in multiple markets from inception. Social capital can speed up internationalization by making necessary resources available and also by providing access to foreign customers. According to Crick and Jones (2000), the market-selection decision was primarily based on the managers’ experience of operating in international markets. According to Ellis and Pecotich (2001) a market is selected due to the identification of a specific exchange partner or opportunity abroad. They emphasize that when faced with the uncertainty involved in entering new markets, social relationships help to minimize these risks. Axelsson and Agndal (2000) indicate that market selection appears to be based less on rational decision-making and more on corporate relationships. It has been suggested by Johanson and Vahlne (2003) that psychic distance should actually be seen as related to firms and even individuals, not countries. SMEs from emerging economies are exploiting the advantages offered by international network relationships (Filatotchev et al., 2009) in order to wide their entry mode choices (Prashantham, 2011). According to Prashantham (2011) SMEs could become MNEs (Dimitratos et al., 2003) to controls and manages value-added activities through constellation and investment modes in more than one country, doing foreign direct investment on a solo basis due to resource constraints (Prashantham, 2011). Alliances and networks constitute an important facilitator of MNE behaviour. Or SMEs could be exporters, in which case social capital derived from overseas ethnic ties could result in a useful support system for internationalizing SMEs (Zafarullah et al., 1997), this cross-border co ethnic ties are

important because they bridging institutional differences and reducing trust asymmetries (Zaheer & Zaheer, 2006).

The negative aspects of social capital that firms experience include opportunistic behaviour from business partners, lack of commitment, and failed relationships that needed to be ended (Chetty & Agndal, 2007). The social capital might not be advantageous in every case (Nahapiet & Ghoshal, 1998).

To summarize, it is here argued that both personal and business networks alike, play important roles as driving forces and enablers in the start-up of internationalization. Individuals' relationships influence what kind of personal and business relations evolve and what market opportunities are identified and reacted to. These networks benefits can be considered as social capital that may be crucial to the initiation of the internationalization process when a large amount of resources are not readily available.

### **3.3.3 Social capital and post- internationalization**

Efforts must be made to deepen market penetration through acquiring new customers and widening country scope (Jones & Coviello, 2005). Mathews and Zander (2007) described this processes as opportunity discovery; resource deployment in exploiting these opportunities; and the engagement with international competitors.

The pace of international expansion of a new venture (post-entry speed) once it has become an INV is a key issue to growth and to achieve superior performance of knowledge and technology intensive INVs (Prashantham & Young, 2011). Technological and market knowledge has a central explanatory role (Autio et al., 2000; Johanson & Vahlne, 1977) on internationalization processes as learning has an important influence on the internationalization process and speed in particular (Prashantham & Young, 2011). The success key to firms' ability to learn is their dynamic capabilities (Sapienza et al., 2006). Sales growth in foreign markets has been associated with cautious experiential learning and a gradually increasing commitment over time (Johanson & Vahlne, 2009). Learning orientation is positively associated with superior international performance in INVs (Jantunen et al., 2008; Zhou et al., 2010).



In terms of learning and knowledge, cognitive social capital relates to how efficiently the knowledge is transferred. On the level of a dyad, cognitive social capital and relational social capital are interrelated. Some level of cognitive social capital is required for the partners to be able to build relational social capital, for example how could the partners interact if they would not have a common language. Because relational social capital is built over time as the partners interact, simultaneously cognitive social capital is being build (Nahapiet & Ghoshal 1998). Nevertheless, relational social capital on network level (reputation and credibility) may compensate for the lack of dyadic relational social capital. If the firm is unknown and its performance is uncertain, the status of the new firm and the quality of its outputs as perceived by others depend on the status of other firms with which it interacts. A member of the network, with whom the firm has never interacted and thus there is no dyadic relational social capital, may decide to lend the firm physical or financial resources merely based on the firm's reputation. Freeman (1999) showed that start-up businesses that received support from centrally-connected venture capital companies were more likely to attract initial public offering subscriptions. The individuals and firm are likely to differ in respect to their levels of international social capital. Given that international exposure is required to build international social capital, individuals and social units without international exposure are likely to be short of international social capital.

The decision to start exporting to many different foreign markets on a significant scale puts pressure on available resources and may substantially increase costs and risk of failure in the short run. The factors influencing post-entry speed may positively assist in the generation of new resources leading to innovative internationalization pathways and the continuance of rapid international growth in the post-entry development phase (Autio et al., 2000; Morgan-Thomas & Jones, 2009). Some literature suggests that external relationships are a valuable source of resources and thus enhance firm survival and performance meanwhile other researches mentioned such ties do not always translate into high performance (Gulati & Higgins, 2003).

The dynamic nature of social capital indicates that it may increase or decrease as firms deepen existing relationships, establish new ones, and end problematic ones (Larson & Starr, 1993) and to overcome this liabilities the firm must transform its social capital

focusing to reach international growth (Coviello, 2006; Prashantham & Dhanaraj, 2010; Yli-Renko et al., 2002).

### **3.4 The literature gaps of this research**

Most of the literature, such as those cited in the preceding sections, provide detailed explanation of the effects of social capital on SMEs' development, including internationalization. Current discussions of social capital generally tend to be based upon the following three premises:

1. Social capital development starts from firm creation
2. Social capital is an available resource for all firms
3. Social capital has positive effect on firms' development

It is, however, questionable whether the three premises limit the achievement of a comprehensive understanding of the effects of social capital on the internationalization of SMEs (Coviello, 2006; Loane & Bell, 2006; Pasthantham & Dhanaraj, 2010). It is the examination of the three premises that provides the focus for this study.

#### **3.4.1 Gap 1: The influence of pre-founding social capital on international business activities**

The process of new firm creation may be traced with ties and knowledge generated during pre-founding phase (Shane, 2000). The social capital as a given premise is questioned in this study. In the pre-founding phase the process of business creation takes place and the main activities are selecting suppliers, raising capital, and selecting an organisational structure (Söderqvist, 2011). During this stage the time range from conception to commercialisation can take several years due to time-consuming product development processes for technology-based firms (Kazanjian, 1988). In this sense Katz and Gartner (1988) requested that more research is needed to examine the pre-founding phase until firm creation, but the gap remains.

Milanov and Fernhaber (2009) emphasize that new firms in an early stage of development should find partners with a central position in large networks. This allows them to access network resources in the long-term. This suggest that pre-founding stage is the conception of social capital of the firm.

A particularly relevant area of inquiry considers individual networks' (e.g. families or ethnic groups) influence on making the decision to start a business (e.g. Davidsson & Honig, 2003) or become self-employed (e.g. Jack, 2005) without considering that social capital may also have negative implications for start-up process which may be myopia-inducing which, in turn, limit the range of opportunities that may be effectively discovered and pursued (Gedajlovic et al., 2013).

### **3.4.2 Gap 2: Social capital: a resource that must be develop**

Bourdieu (1983) argued that social capital is not a social gift; it is the product of investment strategies, individual or collective, consciously or unconsciously aimed at establishing or reproducing social relationships that are available in the short or long term. Social capital provides opportunities for SMEs to access additional resources to compensate for their inherent resource constraint. As long as social capital is sourced by social interactions it needs to be created first, as a precondition for the development and maintenance (Nahapiet & Ghoshal, 1998).

Dubini and Aldrich (1991) described networking concept as a social skill that can be learned, and which involves making contacts, building relationships, and activating linkages. Based on this a firm's social capital development precedes and preconditions its social relationships and position on the network, which in turn determines the effects of the social capital on its business activities. The clarification of the two constructs - social capital and social relationships- and their causal relationship is fundamental to explaining social capital outcomes and associated effects on business activities. Research on the social capital of firms in the specific context of internationalization is an emerging topic (Jones et al., 2011). However, social capital has been a theme in entrepreneurship research, which has provided some important findings (Dubini & Aldrich, 1991; Johannisson, 1988). Research on social capital in the entrepreneurship literature is concerned primarily with the personal networks of entrepreneurs and it is studied in terms of its structural dimensions such as diversity, density and intensity of entrepreneurs' personal networking activities. The underlying presumption is that personal networks of entrepreneurs directly relate and contribute to business activities. Thus, social capital at personal level of the entrepreneur is often seen as synonymous with social capital at the level of the firm. However Johannisson (1997) argued personal

networks may be critical for create a new venture, but do not guarantee sustained growth in ongoing business development.

Personal networks that extend from a focal individual are inevitably concentrated according to the individual's historical ties (due to path dependence of network development). Therefore, personal networks of an individual (owner/founder) are unlikely to provide sufficient business and resources to support foreign business development of a firm. Furthermore individual social capital may not be valid for initiating and promoting business relationships in the global marketplace, where legitimacy, viability and reputation are essential (Elfring & Hulsink, 2003). Seen social capital as a collective effort at the level of the firm under a shared orientation with other strategies of a firm towards achieving its business goals is significant (Dubini & Aldrich, 1991; Hite & Hesterly, 2001).

Although entrepreneurs are crucial to the social capital of SMEs, the transfer to social capital at the firm level from social capital at the personal level is strategically important to establish the firm's legitimacy and viability among organizational entities in the market, in order to promote and sustain the growth of the firm (Larson & Starr, 1993). From above, social capital development at the level of the firm needs more focal research efforts, in order to explore and explain its preconditioning influence on social capital outcomes, and on the internationalization of firms. It is the objective of this study to contribute to enriching the understanding of the relation between the social capital development of SMEs and their internationalization processes.

Social capital development is a time and resource-intensive process. Continuous investment is needed to maintain the interactions of a stable and long-lasting relationship to achieve value creation (Johanson & Mattsson, 1985; Johanson & Vahlne, 2009). A firm may transform a network 'asset' into a 'liability' (Adler & Kwon, 2002). This is in particular a concern to SMEs when they are already under resource constraints and they need to develop its social capital into focus to support their development. Thus, the dark side of social capital may arise. The potential can be exerted through a firm taking a more proactive and deliberate social capital orientation to the establishment, development, and management of network relationships of those

structural attributes and strengths which better serve its purposes (Dubini & Aldrich, 1991; Hite, 2005; Inkpen & Tsang, 2005; Johannisson, 2000; Larson & Starr, 1993).

According to Burt (1992) the structural hole proposition also implies that an actor can build an effective network by focusing resources on the maintenance of ties. Loane and Bell (2006) proposed that focus on network-building activities in firms' internationalization is an important issue. This study expects to expand the focus from social capital outcomes to the social capital development of the firm when investigating the impact of social capital on the internationalization processes of SMEs. The findings provide a comprehensive view of the effects of social capital on the internationalization of SMEs, in terms of both the antecedent and outcomes

### **3.4.3 Gap 3: The dark side of social capital**

Coleman (1988) and Burt (1992) developed two alternative views on the relationship between network structure and the benefits of social capital. Network closure perspective (Coleman, 1988) described the positive effect of cohesive social ties (network closure) upon facilitating trustworthy and cooperative network exchanges. The structural hole view (Burt, 1992) described the diversity of information and brokerage opportunities made available by disconnected network segments. Nahapiet and Ghoshal (1998) elaborate on the elements contributing to the strength of ties, and the interactions of these elements, within network value creation by distinguishing three dimensions - the structural, the relational, and the cognitive - of social capital. The categorization of bonding, bridging and linking social capital is also based on the level of homogeneity and connectedness of relational ties. All these propositions pointing out to variations of the effects of networks on specific business activities according to different tie strength or connectivity of networks. Because of the contingent effect of tie strength upon network functions, an appropriate mix of networks combining both strong and weak ties (or bonding and bridging social capital) is crucial to making opportunities and resources available to support business development (Dubini & Aldrich, 1991; Oviatt & McDougall, 2005; Sharma & Blornstermo 2003).

There is empirical evidence that the social embeddedness has a negative aspect (Uzzi, 1997). Relationships may turn into 'dark resources' or social liabilities that constrain business activities of managers and entrepreneurs, affecting negatively their

performance indicators (Gargiulo & Benassi, 1999; Portes, 1995). Strong ties seem to affect performance negatively, providing redundant information. This is an example of how social capital may turn into dark resources that affect outcome variables negatively (Uzzi, 1997).

Chetty and Campbell-Hunt (2003) described the volatile international growth and problems of SMEs and suggested social capital may be an important inhibitor. Since the firm's social capital tends to be path-dependent (Hitt et al., 2002; Johanson & Vahlne, 2003; Sharma & Blomstermo, 2003), the initial choices of network relationships will then shape its subsequent network development and expansion. Under these circumstances firms may not realize (or be able to take advantage of) the opportunities that are provided beyond their existing networks.

Nummela et al. (2016) suggest that the "dark side" of social capital could provoke the INV failure, influencing internal and external factor of the firm, which typically includes terminating networks combined with diminishing efforts in developing international activities. However, is important to remark the social capital liabilities are not homogeneous because the appropriate strategies to avoid them are highly dependent of the context (Sleuwaegen & Onkelinx, 2014) and some industries lying on a riskier environment than others (i.e. knowledge-intensive industries) (Baum et al., 2013).

This research contributes to provide relevant insights of the effects of social capital, by valuing them based on the resources made available and accessed by firms specifically to support their internationalization. Social capital research tends to focus on its consequences (outcomes) rather than on the social capital development which determine the outcomes (Borgatti & Foster, 2003).

### **3.5 Synthesis: social capital and SMEs internationalization processes**

Social capital has been mainly defined and operationalized as a one-dimensional rather than multidimensional construct, with much emphasis placed on the network or structural component. Studies related to other dimensions of social capital are remarkably absent. Such omission may have caused researchers to oversimplify the role

of social capital on venture creation, survival, growth (Liao & Welch, 2005) and international processes (Lindstrand et al., 2011).

Consequently, this research adopted the view that social capital is more than just a structure or network, that is, includes many aspects of social context, such as social interaction, social ties, trusting relationships, and value systems that facilitate the actions of individuals located in a particular social context (Nahapiet & Ghoshal, 1998). Scholars have recognized that networks are mechanisms for generation and conveyance of social capital which in turn as a basis for social benefits (Coleman, 1988) or private advantage (Burt, 1992). However, social capital and its role as source of value and competitive advantage for the firms are dependent upon its conformation and development (Ahuja et al., 2012).

This research analyses social capital development (personal-level/firm-level) as a key explanatory factor to the internationalization process of SMEs. Also it identifies the entrepreneurial firm as a firm which was created by entrepreneur/entrepreneurs (Timmons & Spinelli, 2003). The core presumption is the entrepreneurial firms' social capital is the aggregate of the social capital of individual (founders/owners) firm members and has a preconditioning influence upon the firm's social capital outcomes. A firm's social capital builds on and is generated by the social capital of individual founder/owner firm members. This is particularly true in small entrepreneurial firms (Maurer & Ebers, 2006). Nevertheless, it seeks to articulate the investigation of the influence of the owner/founder on its individual social capital to the social capital development at the firm level specifically. This research, therefore, acknowledges the founder/owner to be the driving force of business activities, including networking and internationalization of SMEs. Larson and Starr (1993) argued that a significant transformation and configuration of social capital development orientation: from individual social capital between the entrepreneur and other individuals, to the combined social capital between individuals and organizational entities once the organization is formed and ready to develop.

By integrating aspects of those internationalization approaches and social capital, this research takes an integrated view to how social capital is developed and its influence on internationalization processes of the firms. This research aims to investigate the

importance of the development of social capital, which is not clearly explained in the literature. It provides new insights into the sources of social capital at different stages of internationalising SMEs. Although the literature generally describes the benefits of social capital, there is a growing interest in its "dark side" and its effects on SMEs internationalization processes. Prashantham and Dhanaraj (2010) argued social capital is a dynamic concept that shows the complex evolution of relationships, sequences of tie decay and growth stages.

Literature has also focused on social capital from firm creation. This research extends this literature by analyzing the development of social capital from pre-founding phase and through the processes of internationalising SMEs. With regard to the SMEs internationalization literature, a more integrative perspective is called for and attempts are increasingly being made to construct a wider view (Coviello et al., 2011; Jones & Coviello, 2005; Keuppman et al., 2009; Rialp et al., 2005).

In conclusion, building on the theoretical underpinnings of the existing literature and the gaps presented in the preceding sections, the understanding of the causal links pertaining to the social capital, resources and the internationalization of SMEs is conceptualized. The following conceptual framework presents the standpoints and focus of the research, based on which the main research questions are defined and the research construct is specified.

### **3.5.1 The conceptual framework and the main research questions**

The pre-founding phase contains activities related to the discovery, evaluation and exploitation of the initial business idea that occurs before the act to start a firm is done.

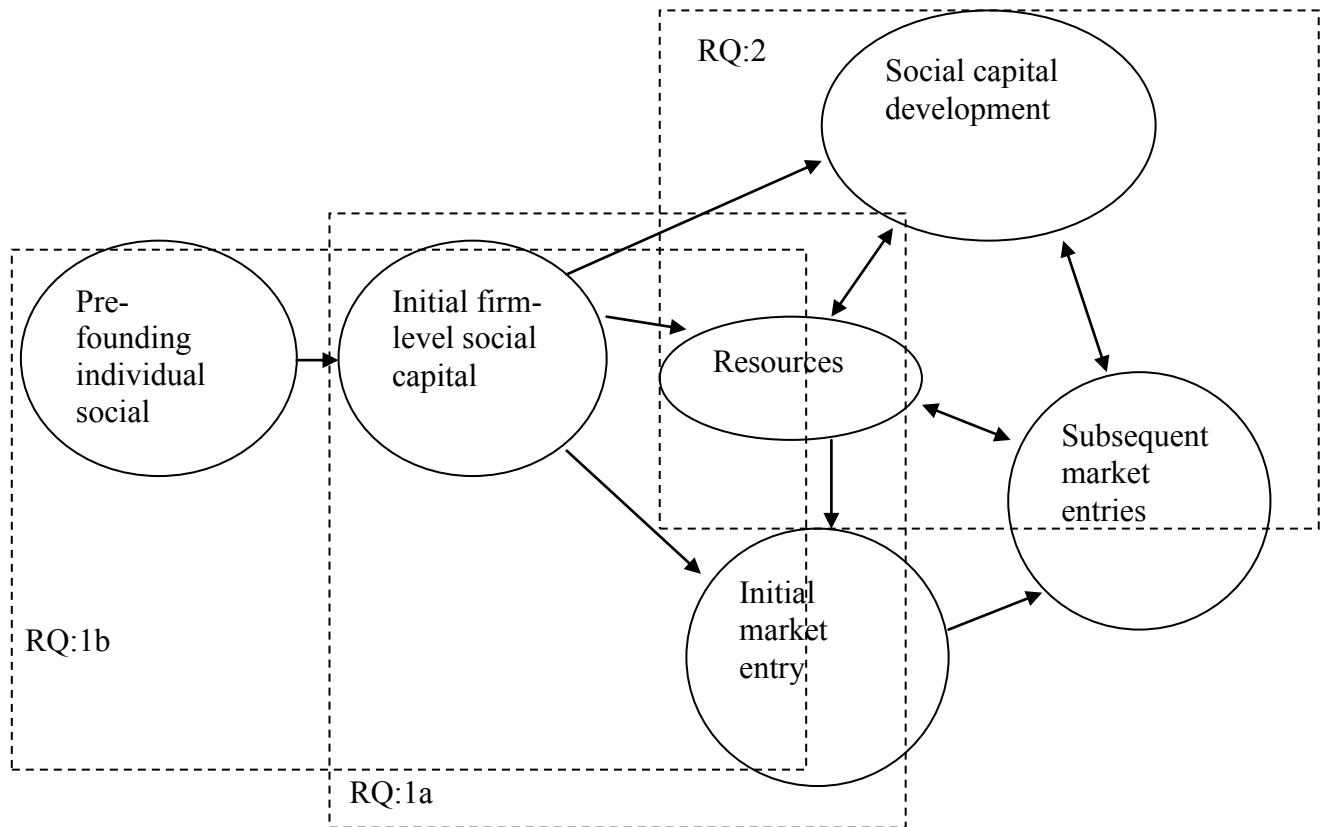
A research framework is developed by integrating the literature on SMEs internationalization discussed in chapter two, namely internationalisation process theory, resources- and-capabilities-based perspective, and international entrepreneurship perspective, and networks and social capital which is presented in chapter three.

The empirical analyses of this study will be conducted in correspondence to the two sets of associations in the framework (see Figure 7): (1) the relation between social capital and internationalization, and (2) the association between founders/owners and



development of firm-level social capital. Primary focus is placed on the former set of associations between the two main constructs of this study, i.e. the social capital and the internationalization of SMEs. Findings regarding the influence of the founder/owner on social capital development enrich the explanation of the social capital construct.

**Figure 7 The conceptual framework**





## **CHAPTER FOUR: RESEARCH SETTINGS AND METHODOLOGY**

This chapter presents the research settings and methodology used in the study to investigate the social capital development and its influences on internationalization processes of SMEs. First of all, the research provides an overview of the Costa Rican context and one of the most dynamic sectors in the country: software. The general role of SMEs in the economy, the role of multinationals companies in Costa Rica and the institutional context are also reviewed. Then, the research process is discussed, starting by the research philosophy and approach which underpins the research methodology used. And finally, the research design and implementation is presented.

### **4.1 INTRODUCTION**

So far the literature review on IE includes just a few empirical evidences from emerging/developing countries. Research context involving different geographical areas is therefore needed to fill the existent gap in order to expand the existing understanding about different firms' behaviours, and the quality and characteristics of the entrepreneurial firms' resources. Then the research design is presented which includes a discussion of the selection of the case study method, data collection and data analysis techniques used.

### **4.2 RESEARCH SETTINGS**

SMEs from emerging/developing countries may not necessarily have access to the skills required for learning processes on foreign market, neither legal nor institutional information (Mariotti & Piscitello, 2001). There is limited research available on the role of environment in a geographical sense concerning the facilitating or limiting resources, which may directly impact a firm's internationalization potential and process (Mariotti & Piscitello (2001). Thus, the choice of the context becomes relevant. Over the last 15 years, Costa Rica had been representing an interesting case study for many scholar or organizations (Altenburg & Meyer-Stamer, 1999; Ciarli & Guiliani, 2005; Ciravegna, 2012; Ketelhoehn & Porter, 2002; Guiliani, 2008; Nicholson & Sahay, 2005; Porter & Stern, 2001; Lopez et al, 2009; Monge-Gonzalez & Hewitt, 2010; World Economic Forum, 2013). Furthermore, the choice is made based on the personal background and

experience of the author in the country, which ensures the author's semantic, normative and conceptual understanding of the culture and language, and hence the research findings, which are significant to research involving unique setting (Behling & Law, 2000).

#### **4.2.1 Costa Rica**

Costa Rica is a small developing country located in Central America, with a population of slightly over four million people and a US\$14,918.1 in PPP\$ *per capita* (World Bank, 2014), income that positions the country among those with an average income. Its growth rate during the past twenty years has been 14.7%. Due to sustained efforts in education and health for over 100 years, the country currently holds a good position in human development (ranked 67th worldwide), characterized by a literacy rate of almost one hundred percent (96.6%) and a life expectancy of 80 years among other important social factors (World Bank, 2014; Human Development Report, 2014).

The relative importance of Costa Rican Small and medium enterprises (81%) is not significantly different from that obtained for OECD countries, where firms with less than 10 employees represent between 70% and 95% of firms in these countries (OECD, 2013). With respect to the generation of sources of employment by firm size, SMEs generate only 14% of employment sources in Costa Rica, a situation which did not change between 2001 and 2012 (Monge-Gonzalez & Torres-Carballo, 2014). This result certainly contrasts with that of the OECD countries, where SMEs account for less than 20% of the employment generated in some cases and more than 40% in others (OECD, 2013). This means, SMEs are as relatively important in Costa Rica as they are in the OECD countries, but it seems that these firms in Costa Rica do not have the necessary size to be an important source of employment. Supporting this assessment Monge-Gonzalez and Torres-Carballo (2014) argued the Costa Rican SMEs have been reduced their average size between 2001 and 2012.

On the other hand, the relative importance of large firms as generators of employment increases significantly from 39% in 2001 to 49% in 2012. This relative importance is greater in Costa Rica than in more developed countries, where these firms represent between 3% (in the case of Italy) and 21.6% (in the case of the United Kingdom) of

employment sources (OECD, 2013). An explanation about this particular issue could be pointed out for Monge-Gonzalez and Torres-Carballo (2014): the Costa Rica SMEs' survival and growth through time, is less than 6%.

#### 4.2.2 Information and communication technologies industry in Costa Rica

Data on the Costa Rican software industry are scant (Lopez et al., 2009); more of the statistics data is available within the Information and Communications Technologies (ICT) statistics. Besides Costa Rican is a small country, ICT sector is larger (relative to the size of its population) than most of Latin American countries, even some EU countries, which have higher per capita Gross Domestic Product (GDP) than Costa Rica (Monge-González & Hewitt, 2008). As we show in Table 6, in 2013 there were 170 ICT firms per million people, while Mexico and the Czech Republic had 12 and 20, respectively. Available data also show that some countries, such as Uruguay and New Zealand, have relatively larger ICT sector than Costa Rica (736 and 3,250 firms per million people, respectively).

**Table 6 ICT Sectors in Selected Countries (2013)**

Indicators	Costa Rica	Uruguay	México	Czech Republic	New Zealand
<i>Population</i>	4.700.000	3.400.000	118.395.00	10.512.419	4.365.000
<i>Gross National Income (GNI) per capita (2013) in US \$</i>	12.800	16.200	9.740	28.770	36.900
<i>Broad Band penetrations x 100 inhabitants</i>	27.7	16.6	11.9	29.4	29.5
<i>Number of ICT firms</i>	800	2.501	3.005		14.187
<i>ICT firms x 1000000 inhabitants</i>	170	736	25		3.250
<i>ICT development ranking (2012)</i>	60	47	84	23	16

Source: Compilation based on data from IMF, OECE, WB

The country also scores well in different international assessments benchmarking national performances in a number of aspects related to ICT development. The World Bank's *World Development Indicators 2010* placed Costa Rica as the fourth-largest technology-exporting country in the world, with high-tech exports representing 39 percent of its total exports in 2008, surpassed only by the Philippines (66 percent), Singapore (51 percent), and Malaysia (40 percent). It also ranked 4th out of 139

countries in the foreign direct investment (FDI) and technology transfer components of the Global Competitiveness Index (GCI) 2010–2011.

Table 7 shows the value of exports of ICT goods in Costa Rica. They grew by 2.7% between 2005 and 2011, taking into account the context (upper-middle income countries), such growth is expected to be obtained researching the foreign markets which are regarded as opportunities for expansion (Madsen & Servais, 1997). The world and the global economy have continued to change, today the international environment is more demanding and poses major challenges, especially for countries such as Costa Rica that have made the opening of global markets a key driver in their development (CINDE, 2013).

**Table 7 Exports of ICT goods by country: Some upper-middle income countries**

	<u>Exports</u>		
	Value (in 100.000 USD)		Growth (%)
	2005	2011	2005-2011
<i>China</i>	2,340,862.3	4,921,807.5	13.2
<i>Malaysia</i>	614,441.6	661,263.3	1.2
<i>Mexico</i>	385,333.6	588,905.7	7.3
<i>Thailand</i>	257,951.3	350,301.0	5.2
<i>Turkey</i>	32,269.3	22,161.9	-6.0
<i>Costa Rica</i>	16,972.9	19,917.3	2.7
<i>Brazil</i>	37,012.8	16,532.2	-12.6
<i>Tunisia</i>	2,075.6	14,088.0	37.6
<i>Panama</i>	6.9	11,407.8	243.5
<i>South Africa</i>	5,873.3	7,493.7	4.1
<i>Chile</i>	2,061.7	2,919.1	6.0
<i>Serbia</i>	244.9	1,638.1	37.3
<i>Belarus</i>	1,530.6	1,564.4	0.4
<i>Dominic Republic</i>	n.a.	1,264.5	n.a.
<i>Kazakhstan</i>	176.4	1,253.4	38.7
<i>Jordan</i>	n.a.	1,165.8	n.a.
<i>Argentina</i>	778.6	873.3	1.9
<i>Colombia</i>	524.5	553.8	0.9
<i>Lebanon</i>	345.3	415.9	3.2
<i>Namibia</i>	147.3	370.5	16.6
<i>Ecuador</i>	223.2	258.8	2.5
<i>Peru</i>	413.2	240.3	-8.6
<i>Iran</i>	151.1	148.2	-0.3

Source: "Aid for trade and value chains in information and communication technologies"  
OECD/WTO 2013

Been a small country usually means have little population and as a consequence domestic market for ICT products and services is also small. One of the most challenging constrains for Costa Rica is the size of the skilled workforce suitable for

ICT businesses (Monge-Gonzalez & Hewitt, 2010). The presence of large numbers of skilled programmers and other technical workers has been one of the most important factors involved in the successful development of ICT sectors in large developing countries such as Malaysia, China, and India (Hanna, 2009), while ICT companies in countries with small domestic markets and small number of local skill workers (Singapore and Ireland) have tended to overcome these barriers through the development of specialized strategies, such as supporting multinational corporations or their subsidiaries (Hanna, 2009). In the case of Ireland, ICT companies were greatly aided by the national government's ICT sector development strategy, which was based on the attraction of multinational ICT companies through financial incentives and heavy investment in education and telecommunications (Heeks & Nicholson, 2002).

According to a study by IBM Corporation named Global Location Trends (2013), in terms of job creation through new FDI projects, the number of jobs created by foreign investment with respect to the population showed that Costa Rica country performed the best, ahead of Ireland. Moreover, job creation fell globally by 6% in 2012 but remained steady in Costa Rica, according to this study. This makes Costa Rica one of the world leaders in per capita job creation, passing even Ireland, as reported also in the 2013 IDA Annual Report.

ICT sector development in Costa Rica has been fostered by a government strategy that differs in some respects from those followed by other developing countries with stronger ICT sectors, such as Singapore, Ireland, China, Malaysia, and India. Costa Rica has used only three main public policies in this area: free primary and secondary education and a public university educational system; duty-free access to modern ICT products from around the world; and an economic liberalization process including an EPZ regime to attract a significant amount of foreign direct investment. This issue will be discussing in section 4.2.4.

#### 4.2.2.1 Costa Rican software sector

The software firms' activities include ICT-related products and services depend on the products and service they offer their clients (Monge-González & Hewitt, 2008). According to the authors, the three main activities for a software firm in Costa Rica are:

**Software engineering services (outsourcing):** It has become a strategic necessity, because the fiercely competitive and rapidly changing in software sector. Firms provide skill workers to another firm related to software business and/or ICT industry (services and products) for a specific task.

**Software products:** firms that carry out activities related to the creation and sale of relatively standardized software applications and tools, which may be designed to be used by organizations operating in specific sectors of the economy (“vertical” applications), by a wide variety of organizations (“horizontal” applications), or by individuals. Both types of applications are sold by Costa Rica firms. The most frequent types of software products offered are administrative tools oriented towards office, customer and financial management.

**Direct services:** firms that offer support, training, development of custom-made software components, systems integration and configuration, or any one of a large number of other services related to the implementation and maintenance of information and/or telecommunications systems.

Although software firm often operate in more that one of these areas at the same time a software company may offer standard products, design custom applications for large clients, and offer consulting and training services related to their products and services. According to data provided by the Costa Rican Trade Promotion Agency PROCOMER and the local ICT Chamber (CAMTIC), the 77.8 percent of software firms are dedicated to direct services, 64.7 percent to software development, and 66.7 to IT-enabled services.

According to the Central Bank of Costa Rica (2014) by 2012 there were about 1400 software firms in 30 different activities linked to software business (i.e. design services, app development, operative systems, network, data base, game development, web



hosting services, among others). In 2002 the software sector contributed 0.28% to the Gross Domestic Product (GDP ) and ten year later the weight rise up to 1.31% of GDP; (i.e. 4.2 billion USD) (BCCR, 2014). This is an increase of almost 470 % in 10 years, in terms of contribution, without any public support (Camtic, 2014). It is estimated that the contribution to the economy of the firms that develop and, distribute systems and software applications in the country grew 594 % in real terms, therefore the software sector represented in 2012 a quarter of production agriculture (5.7 %) in the economy surpassing coffee exports (1%), the later the most important sector and the former the most important product in Costa Rica 40 years ago.

For 2004, external sales were 41%, targeting 60% to Central America, 6% to Mexico and 13% to U.S.A. (Brenes & Govaere, 2008). The 43% of software production and services in 2012 was exported, while 57 % was domestic demand (BCCR, 2014). The growth of software sector has remained constant, with a peak in 2010 of 53.95% over the previous year (BCCR, 2014).

According to CINDE (2013) In Costa Rican software sector there is shortage of skilled workers (see table 8), however taking into account that the unemployment rate was 8.3% in 2013, seems the problems is better explained by scant incentive to work in that sector.

**Table 8 Job profiles in High-Tech firms**

<b>REQUEIRED JOB CATEGORIES IN HIGH-TECH FIRMS</b>
<ul style="list-style-type: none"> <li>• Young professionals in multiple fields of education</li> <li>• Unskilled workers</li> <li>• Skilled workers</li> <li>• Youths with knowledge of languages who are still studying</li> <li>• Technicians with various specializations</li> <li>• Administrative positions</li> <li>• Outsourced goods and service providers</li> </ul>

Source: CINDE 2013

#### **4.2.2.2 Costa Rican software value chain**

The software firms express that they have grown because of its innovation, specialization and alliances (Brenes & Govaere, 2008; Monge-Gonzalez & Hewitt, 2010). Costa Rican-owned firms have been highly involved in innovations that encompass a wide range of changes in their activities, including product innovations (introducing a new product or service in the market, or improving an existing product or service), organizational innovations, and marketing innovation. The principal factors facilitating innovation output activities by those firms are access to highly skilled workers, entrepreneurial culture, access to loans and information systems, internal training programs, design, market information, fiscal incentives, technology trials, access to technical assistance, and organizational changes (Brenes & Govaere, 2008; Monge-Gonzalez & Hewitt, 2010).

These firms are highly engaged not only in R&D activities, but also in other important innovation-input activities such as training of human resources, product or process design, receiving consulting services and technical assistance, carrying out organizational changes, and patenting. The innovation input activities are carried out inside domestic firms, while only in the cases of patenting and licensing, training of human resources, and technical assistance and consulting do these firms frequently use an outsourcing approach (Brenes & Govaere, 2008; Monge-Gonzalez & Hewitt, 2010).

Some domestic firms reported having commercial relationships such as “channel partnering” with MNC, in which domestic firms are themselves clients of high-tech MNCs, entering into formal relationships to sell and/or locally support the multinationals’ products and services. The domestic firms report important benefits from these commercial relationships with MNC, such as training in sales and marketing techniques, information about current or possible clients, special events for network formation between both actor, and increased visibility for local partners (being featured in local advertisements by the multinational firms, for instance) (Monge-Gonzalez & Hewitt, 2010).

These software firms establish relationships with clients more frequently than companies in the other sectors, and were highly satisfied with these relationships. MNC

are likely to continue to come, seeking not only efficiency, but also innovation, and thus allowing for Costa Rica's participation in Global Value Chain to get deeper and broader. There is no research about specific value chain description, however there a description of the ICT activities which includes the software activities that are part of a value chain (see Table 9, shaded text). Taking into account previous section, the above text and net table, Costa Rican software value chain include, product research, product development, implementation and maintenance and support.

**Table 9 A holistic perspective of ICT sector (including software)**

<b>Information Technology</b>	Services	Managed services	Application management services	Hosting infrastructure services		Research & development	
		Integration services	Systems integration	Product assembly			
		Support services	Maintenance & support	IT consulting		ICT education & training	
		Online services		Online platforms			
	Software	Software development	Packaged applications	Gaming		Customized applications	Systems software
	Digital media	Digital content	Content creation	Content aggregation		Content distribution	
	Hardware	End-use equipment	PCs & peripherals	Laptops	Tablets	Handheld devices	Multimedia device
		IT equipment	Data centre equipment (servers, storage, etc.)			Network equipment (routers, tubs, switch, etc.)	
		Hardware components	Semiconductors devices	Electronic components		Microprocessor device	Sensors (RFIDs, M2M, etc.)
	<b>Communication</b>	Service provision	Wireless	Wireless operators	MVNOs		Support services
Wire line			Wire line operators	ISPs		Support services	
Interconnection			Terrestrial	Submarine		Satellite	Support services
Network equipment (hardware & proprietary software)		Wireless		Wireless network equipment			
		Wire line		Wire line network equipment			
		Interconnection	Cable	Satellite			

Source: Camtic, 2009

### **4.2.3 The software industry worldwide**

The software industry is fundamentally different from other industries; this is partly due to the unique nature of software as a product, but also the structure of software markets and the industry is more international than practically any other sector (Buxmann et al., 2013). Software can be developed by distributed teams working in different places in the world, and sold over the internet, thus compared to other industries; providers in many segments may enjoy little “home advantage” in their national markets.

The history of software industry dates back some 63 years, when it was still common practice to sell software and hardware as a single package. Later in a different phase the independent software products appeared and so the enterprise solutions developers arise. The literature shows there are some definitions for software product, but a relevant one which is given by Nambisan (2002), who classifies software products into two categories, based on their product scope and degree of innovativeness. Minor software product is characterized by incremental innovation and it carries out minor tasks or complements bigger software products. Minor software products often include software utilities, tools and add-ons, which extend existing features of a product or provide specialized services. Major software products involve radical innovations instead of incremental. They are comprehensive in scope, serving multiple tasks, and are often stand-alone products. For example, “minor software product can be an add-on for Microsoft-Excel or Word, and major software product can be an Internet browser, or enterprise resource planning (ERP) solution” (Nambisan, 2002, p.147).

In the beginning of 21th century the latest stages could be characterized by the emergence of mass market software products and internet value-added services (Hoch et al., 2000). Trying to concentrate in the evolution of software industry this can be seen in the industry segmentation. According to Buxmann et al. (2013) there are three categories using the criterion of how directly interacts (the software) with the hardware. The latter each category can be further divided into different segments (see Table 10)

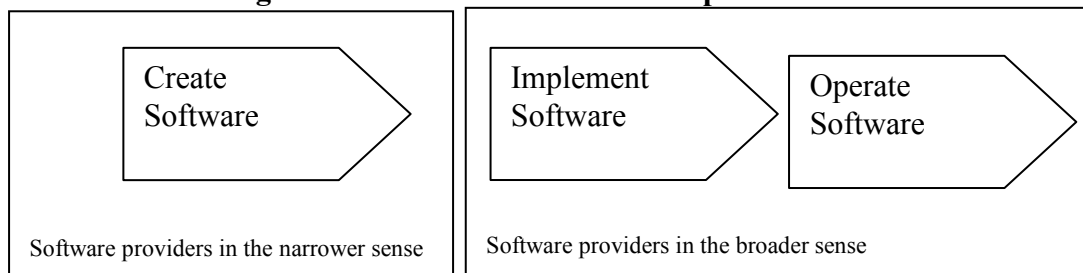
**Table 10 Software Industry Segmentation**

Categories	Segments
1. <b>Types of software</b>	<ul style="list-style-type: none"> <li>a. System Software: (e.g., Operating systems)</li> <li>b. Middleware: (e.g., game engine or data integration)</li> <li>c. Application Software: (e.g., word processing)</li> </ul>
2. <b>Types of products</b>	<ul style="list-style-type: none"> <li>a. For commercial user</li> <li>b. For private user</li> </ul>
3. <b>Degree of Standardization</b>	<ul style="list-style-type: none"> <li>a. Custom software: is developed in line with specific customer requirements. There are multitudes of smaller or mid-size companies that are still operating nationally or regionally in high-wage countries; by contrast, custom software development companies based in low-wage countries are more likely to operate globally.</li> <li>b. Standard software: is developed for the mass market. Thus providers address the lowest common denominator in terms of users' needs.</li> </ul>

Source: Bauxmann et al., 2013

In terms of standardization, when no standard application software companies is available, firms will continue to develop individual solutions (by their own or outsourcing), so they will need standard software solutions but customization still be necessary. Thus there are firms that develop standard or custom software and these firms are defined as software providers in the narrower sense and there are firms that offer services for the later phase in the lifecycle of software solutions (called software providers in the broader sense (Bruxmann et al., 2013).

**Figure 8 Classification of software providers.**



Additionally in case of complex software solutions there is a demand for other (important) services like:

1. IT consultancies and systems integrators (IT consulting, development of custom software, etc.)
2. IT services providers (outsourcing, ASP, user training)
3. Business innovation/transformation partners (management and IT consulting, system implementation).

In a hyper competitive sector as the ICT the evolution and new trends have been affecting the whole industry no matter if they are large or small ones (Su, 2013; Contractor et al., 2010). The outsourcing services has been one of the "tools" of the firms to face the global hyper competitive. It has disaggregated the value chain of the ICT firms, reducing cost while acquiring knowledge from their contractor or partners (Contractor et al., 2010). Equally, the increased sophistication of outsourced activities brings knowledge "opportunities" for reaching external markets to firms from emerging/developing countries (Li et al., 2010). In this industry, knowledge is far more important than cash and equipment, besides the low financial requirements (Hoch et al., 2000). Very consistent with the argument that early internationalization may be fostered by possession of specialized knowledge, proprietary products, knowledge-intensive products, high-technology products, high-value products, and high-quality products (e.g., Acedo & Jones, 2007; Bell et al., 2003; Efrat & Shoham, 2012; Gassmann & Keupp, 2007; McNaughton, 2003; Rialp et al., 2005a; Weerawardena et al., 2007).

In the other hand, outsourcing activities may provoke the dilution of some specific resources, because firms rely on rather generic external knowledge to which competitors might have equally good access and manage external relationships is time consuming to managerial team (Grimpe and Kaiser, 2010: p.1484).

Despite the increasing interest of IB scholars in outsourcing activities (Contractor et al., 2010), this is a phenomenon not yet well incorporated into the literature of IE (Su, 2013).

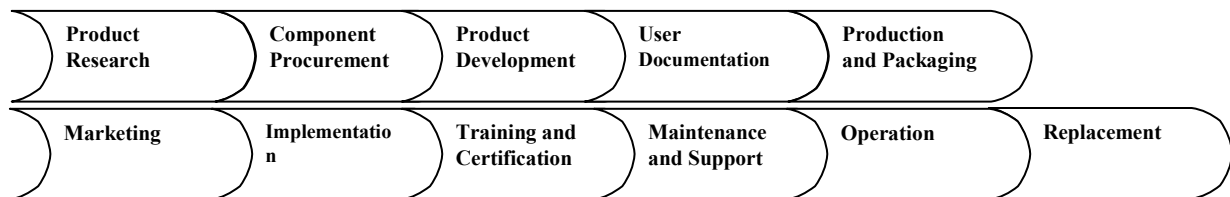
#### **4.2.3.1 Software industry value chain**

Introduced by Porter (1985) as a tool for developing and sustaining competitive advantage of a firm the concept disaggregate a firm into various activities (this concept has also been applied to industries as a whole). According to Pussep et al. (2011) the value chain should contain all important activities of a generic firm competing in the corresponding industry and should range from the very beginnings of the corresponding product up to its operation and final replacement (see figure 9). In this order they proposed unify value chain and to do this they following a recursive approach base on the definition of the industry and its frontiers, listing of value activities of proper

granularity an naming entailed sub-activities and ordering of the value activities in a visual representation of the value chain.

Based on combination of sources mentioned above the unified value chain consists of eleven activities:

**Figure 9 Software value chain**



Source: Pussep et. al, 2011

1. **Product Research:** Software products and to enable sophisticated software solutions.
2. **Component Procurement:** It covers the sub-activities of selection, purchase, adaptation, verification and validation of components in a broad context.
3. **Product Development:** Is the core activity of a software producing firm and consists of the sub-activities requirements engineering, software design, software development, code documentation, verification and validation.
4. **User Documentation:** Involves sub-activities which document software functionalities and properties for end-users. The results of this activity are text files, which can be processed electronically or printed in user manuals.
5. **Production and Packaging:** It involves physical activities: assembly, production and packaging.
6. **Marketing:** Is contained in the generic value chain.
7. **Implementation:** Refers to installation, configuration and adaptation of the product according to the customer's needs.
8. **Training and certification:** This activity is about training of users and third party firms. In addition, certifications attest users and third party firms a certain degree of seniority in the handling of a software product.
9. **Maintenance and support:** These sub-activities deal with the support of users and comprise the collection of error messages and ideas for enhancements.
10. **Operations:** This activity ensures the execution for a product on an information system (Messerschmitt & Szyperski, 2003).
11. **Replacement:** Comprises the sub-activities of migration and shut-down.

Nambisan (2002) notifies market globalization and dispersed value chains as important management issues in software industry. Compared to other high-technology companies, software companies have the most spread value chains. "The value chains of software companies can often cross national boundaries with conceptualization, design,



development, and marketing of a product being conducted in different countries” (Nambisan, 2002: p.146).

#### **4.2.3.2 The role of U.S.A. multinational companies**

Even though US market is the key global market, by 2000 the US market was about 75 % of the whole software market (Rovio & Uusi, 2005), emerging countries like India’s software market reached close to \$2.5 in 2010, and this market is expect to reach by 2015 almost \$4.5 billion, network and database management represent a quarter of the total market. In the same way China’s software market exceeded \$12.5 billion in 2010, by 2015 expected to reach over \$25 billion. Network and database management represent the leading segment accounting more than 27% of the market. According to Market Line (2012) the US market is expected to reach \$126 billons by 2015 meanwhile the global market expected to reach \$357 billons.

Costa Rica geographical proximity to the USA play a part in making it attractive to North American ICT MNCs as well as a highly skilled labour force at wages that were lower than any other industrialized country (Giuliani, 2008). Current main export markets to Costa Rica are United States of America (largest trading partner), China and Central America, then Costa Rican exports goes to Mexico and South America and finally Europe and the rest of Asia. Domestic firms have taken advantage of the presence of multinational high-tech companies in the country to expand their client base (Monge-Gonzalez & Hewitt, 2010).

Most of the multinational corporations dedicated to the production of electronics, or firms that make intensive use of Information and Communication Technologies (ICTs) have established branches in this country during the last decade and they from USA (see Table 11).

**Table 11 ICT firms established in Costa Rica in last decade**

<p>Firms</p> <ul style="list-style-type: none"> <li>• <b>Components Manufacturing Plant: INTEL Costa Rica (1997) (U.S.A)</b></li> </ul>
<p><b>IT-enabled Services (Shared services)</b></p> <ul style="list-style-type: none"> <li>• Procter &amp; Gamble GBS (1999) (USA), Western Union Global Service Centre (1998) (USA), Baxter (2004) (USA), Astra Zeneca (2008), British American Tobacco (2006), Chiquita Brands (2003) (USA), Citi Business Services (2008) (USA), DHL (2007) (USA), Dole (2005) (USA), INTEL SS (2006). (USA)</li> </ul>
<p><b>Back offices</b></p> <ul style="list-style-type: none"> <li>• Hewlett Packard (BPO) 2004 (USA), IBM (2004), LL Bean (1989)(USA), Pacific West (2000) (USA).</li> <li>• Entertainment &amp; Media (E&amp;M): AvVenta (2005), Software Design: Align Technologies (2001)(U.S.A).</li> </ul>
<p><b>Contact services</b></p> <ul style="list-style-type: none"> <li>• SYKES (1999)(U.S.A), Hewlett Packard (ITO) (2004)(USA), Teletch (2006), Amazon 2008, ACE (2008) (USA), BA Continuum (2007), Convergys (2004), Dell (2002)(USA), Fujitsu (2006), Stream International (2002).</li> </ul>
<p>Most IT companies have operations and offices in Costa Rica: Microsoft (USA), Oracle(USA), CISCO (USA), IBM (LENOVO-CHINA).</p>

Source: CINDE 2014

Among the firms that have invested in Costa Rican was Intel, which arrived in 1997, the most noticeable example of FDI Costa Rican policy. In 2014 Intel started to reorganize its business model around the world and because of this, manufacturing business in Costa Rica will close, in order to move in to Asia. Instead of manufacturing business, Intel will create a Mega Test Laboratory, the first one around the world, for this MNC. This will be a challenge to Costa Rica for the coming years because they would need top high qualified employees (CINDE, 2014). Most of the MNE are under special regime treatment (EPZ) guaranteed by the government the foreign firms benefit from the same legal protection as national firms, they do not pay any import taxes and are exempted from income taxes for 8-12 years. In the domestic market Costa Rica participates in software chain by providing intermediate goods and services to its main market: United States. Outside the explanation is different for Costa Rican firms.

#### **4.2.4 Inserting Costa Rican software firms in Global Value chains**

Value chains in the software industry have steadily disintegrated across corporate and national boundaries. It is very likely that the variables that define the governance pattern of these chains in Costa Rica, such as the complexity and ability to codify transactions

and the capabilities of the suppliers, correspond to modular value chains, just like the governance pattern of these chains in the United States. Different kind of relationships between domestic ICT firms and MNCs, one of the drivers of internationalization for software firms in Costa Rica had been investigated (Ciravegna et al., 2014; Monge-Gonzalez & Hewitt, 2010; Monge-Gonzalez & Torres-Carballo, 2014; Monge-Gonzalez & Rodrigues-Alvarez, 2013; Paus & Gallager, 2008).

In most of Latin America, foreign investors had targeted mainly resource-based industries and privatized utilities (Cimoli & Katz, 2001). In Costa Rica, the relatively abundant highly educated and healthy labour force with respect to other developing countries (Larraín and Velasco, 2006) and an explicit instrument of economic policy from the 1990s onwards, so-called Export Processing Zones (EPZ), has been a key divers to success in attracting FDI inflows from High-Tech Multinational Enterprises (HT-MNCs) during the last two decades.

The aggressive government campaign to attract high-tech MNCs was strongly supported by CINDE (the organization responsible for Costa Rican FDI) which played a crucial role in attracting most important MNEs in this sector and its world-wide suppliers to Costa Rica in 1996 (Rodriguez-Clare, 2001). The Costa Rican software sector gained significant global publicity, when most important MNCs (i.e. INTEL) establish their development unit in the country (Ketelhoehn & Porter, 2002).

In most cases MNCs provided the demand stimulus for local firms to upgrade, but did not actively support it. Those linkages were an incipient process in Costa Rica during last decade, with the only exception of the growing domestic software industry (Ciravegna, 2008). However, MNCs has contributed to improving Costa Rica export performance as well as terms of trade (Ciarli & Giuliani, 2005) and to the formation of linkages between foreign investors and domestic firms (Ciravegna 2008). This was the beginning of the inclusion of local producers into global value chains leading by MNCs which ignited any upgrading of products, processes, or functions of the majority of the local firms, especially of production processes to attempt to comply with the requirements of multinationals in order to become suppliers (Ciravegna et al., 2014).

This public support was redesigned by the end of the 90s decade as a result of important limitations in SMEs sector. Few linkages with high-tech MNCs due to low level of

technological sophistication, lack of entrepreneurship (especially in quality and risk management), difficulties with accessing credit and venture capital, limited productive infrastructure capacity and ignorance of procurement practices, standards and demand requirements of MNCs (Groote, 2005). The general objective of this new program was increasing the domestic value-added from high-tech MNCs and improving the technological capacity of SMEs to help them become local suppliers to MNCs to later export to foreign markets (Monge-Gonzalez & Gonzales-Alvarado, 2007)

The plan also included a focus on continuing to insert the country in new niches and geographical markets in order to diversify the foreign direct investment sources captured by Costa Rica. Some of the main markets included in the 2013 plan were Latin America (Mexico, Peru, Colombia, and Central America), Europe (Germany, England and Spain) and Asia (China, Korea and India) (Paus & Gallagher, 2008).

Costa Rican software firms have do business with MNC clients but the relationship between these firms is relatively recent. They have been selling their products or services to these clients beginning in or after 2000. This means that domestic software firms face stiff competition from suppliers abroad when selling to MNCs, since MNCs (specifically those working under a free zone regime) because they can import anything under a duty-free regime and frequently have their own international suppliers.

The relationship between MNCs and domestic firms is described as a commercial relationship, such as “channel partnering” (Monge-Gonzalez & Rodrigues-Alvarez, 2013). According to the author there are four types of commercial relationships: (a) wholesalers or distributors, who sell ICT products and services to retailers of those products and services; (b) retailers, who sell the ICT products and services to final users; (c) value-added resellers (“VARs”), which provide third-party products and services to final users as parts of packages that also include the VAR’s own products and services; and (d) representatives, who do not usually directly sell multinationals’ products and services themselves, but provide local points of contact for firms and individuals that need information about, or support for, products and services that they have already purchased, or wish to purchase. The most commonly reported benefits of commercial relationships with High-Tech MNCs had to do with receiving discounts for

products and services that were resold to end users, and training in the technical aspects of these multinational products and services (Monge-Gonzalez, 2013).

There is another channel through which knowledge can be transferred from MNCs to domestic software firms: worker mobility (i.e., ex-MNC employees who either become employees of domestic software firms or form their own software firms). Almost half of all domestic ICT firms have at least one owner that previously worked for an MNC in Costa Rica (Monge-Gonzalez & Hewitt, 2010). There is a strong possibility that social capital influence in many ways the domestic software firms in Costa Rica, since a significant number of workers have moved from local MNCs to a local software firm or to create their own software firm. Due to the generation of *knowledge spillovers* from MNCs to domestic firms, two out of three domestic software firms have MNCs of some type as *clients* in Costa Rica. The majority of knowledge flows (business to business) occur horizontally among subsidiaries operating in Costa Rican high-tech industries, only a relatively small percentage of technical knowledge transfer is attributable to backward linkages between subsidiaries and Costa Rican suppliers (Giulani, 2008)

In brief, firms in the software sector report relationships with clients more frequently than companies in the other sub-sectors, and were highly satisfied with these relationships. MNC are likely to continue to come, seeking not only efficiency, but also innovation. Those relationships therefore, seems to allow that software firms identify partners abroad, moreover they act as a driver of the growing pool of knowledge and learning allowing Costa Rican software firms' participation in Global Value Chain deeply and broadly.

#### **4.2.4.1 Public Policy**

Costa Rican SMEs confront a series of restrictions such as lack of access to financing, weak administrative capacity, lack of employee skills, inability to exploit economies of scale, unsound information on market opportunities, scarce access to new technologies and work organization methods, and excessive bureaucratic requirements for their creation and operation, among other restrictions related to the investment climate (Monge-González, 2009; Monge-González & Rodríguez-Alvarez, 2010).

As a general objective public support had propose increase the domestic value added from high-tech MNCs and improving the technological capacity of SMEs to help them become *indirect exporters* to MNCs (local suppliers) to later export to foreign markets. This had creates a national productive linkage program between SMEs and high-tech MNCs, to manage the supply and demand data from SMEs, MNCs and supporting organizations, to create programs to detect the needs of multinational companies, identifies business opportunities, and recommends partner suppliers that comply with the production, technical, and quality specifications and characteristics required by MNCs. This programs has oriented its services toward a strategic business Information & Communications Technology area, and to create opportunities through small projects between SMEs and MNCs, whit the objective to help local suppliers to rise in the local value chain and ultimately becoming global suppliers (Paus & Gallagher, 2008)

On the supply side, local firms are not necessarily capable of supplying goods and services to multinationals, due to lack of firm-level capabilities. Because even when local firms are competitive in becoming MNCs suppliers, host country absorption capability also depends on systemic learning infrastructure, institutions and government policies (Paus & Gallagher, 2008).

*Human capital policies:* In the 1990s, a constitutional reform guaranteed that public expenditure on education should be no lower than 6 percent of GDP. As of today, the political constitution mandates that primary and secondary education is free until 11th grade and mandatory until 9<sup>th</sup> grade. Promotional campaign for all secondary school students, including financial incentives for their families, so that students will not drop out of school before they finish high school, increase expenditures in education from 6% to 8% of the Gross Domestic Product (GDP) and the Educational Computing Program (ECP), are some of the policies the country had been implemented recently. As a consequence, Costa Rica can count on more educated workers than it could two decades ago.

However, more than a fourth of developed countries' work forces have university degrees, 28 percent average versus 17 percent in Costa Rica. Moreover education data indicates that centres for professional education are producing more professionals in the areas of economic sciences, education and social sciences than graduates in areas that

seem to be more relevant for a country in transition to a knowledge-based economy (KBE), such as engineering. Thus, the country faces important challenges in this field and its public policy on skills development targeting this transition towards a KBE. There is a need to strengthen the national technical education system in Costa Rica through joint agreements among technical professional high schools, university colleges, and public universities is important, to make this type of professional education centres more attractive.

The country has consistently invested in education as a part of its development strategy, strongly believing in the key role this play as basic competitiveness enablers.

*Economic liberalization policy:* Costa Rican, as many other countries, also has an open economy because has undergone a process of liberalization, import tariffs have steadily decreased in the past three decades, and free trade agreements have been signed with a variety of countries around the world. Costa Rica does not have a large domestic market, but it has preferred access to the most important markets of the world, like the United States, China, and the European Union, as a result of the robust foreign trade platform it has developed over the last two decades. In addition, Costa Rica was an early promoter and is a member of the Information Technology Agreements (ITA) of the WTO, which removes all import tariffs on information technology-related goods.

Beside above mentioned for the Costa Rican high-tech sector the presence of MNC is an extremely important source of foreign exchange for the country. Although there are multinational firms operating in software products and services, the majority of such companies are Costa Rican owned and operated.

*Foreign Direct Investment policy:* The results of foreign direct investment (FDI) in the specific sector of high technology are important for the country; despite that international economy was growing at a slower rate than in the pre-crisis years; the number of high-tech projects attracted has increased at an average annual rate of 14% since 2010. In 2013, mindful of the challenges posed by the context, and in order to maintain its growth, have been put into effect a strategic plan promoting Costa Rica as the headquarters for high-tech multinationals in consolidated sectors such as services, life sciences, advanced manufacturing and light manufacturing (CINDE, 2013).

Local authorities acknowledged the need to develop suppliers because of the low level of integration of MNCs operating in Exporting Promotion Zones (EPZs) with local companies, so as a result were created a program so-called Local Industry Improvement in order to help local companies do more business with high-tech MNCs (Monge-Gonzalez & Rodriguez-Alvarez, 2013).

Thus this support program turn into more MNC demand-driven, identifying the main requirements of inputs and raw materials from multinational companies and matching demands with local suppliers. It also applied the concept of creating business opportunities through small projects between SMEs from ICT sector (among others) and MNCs, where the objective was to help local suppliers to rise in the value chain, ultimately becoming global suppliers through two mechanisms: (1) direct purchase when an MNCs company buys a final good or service from a local firm, without any contribution of raw materials, machinery or equipment from the MNC to the local supplier and (2) outsourcing when the MNC provides raw materials and even machinery and equipment to the local supplier to produce the final products (Monge-Gonzalez & Gonzales-Alvarado, 2007). By 2008 the program had suffered three important reforms related to linkages, the share of maximum outsourcing increased from 25 to 50 percent of total MNC value-added and the simultaneous contracting with different suppliers was permitted. The machinery and equipment were allowed to move outside MNCs and finally the registration steps were reduced from ten to two, while time went down from 15-20 three days.

*Financial Policy:* The support model for SMEs in the Costa Rican ITC sector does not encourage the creation of new enterprises. The existing model consists mainly of bank loan programs and therefore is not geared toward new entrepreneurs, who may not qualify for a loan. For the few entrepreneurs in Costa Rica with personal capital and contacts, the typical business model consists of passing directly from seed capital to bank debt without going through the intermediate step of entrepreneurship learning. As a result, there is a high mortality rate, creating a “death valley” of good ideas.



#### **4.2.4.2 Institutional context**

Costa Rican software firms (and ICT in general) interact very little with private and public educational and research institutions, and do so mostly for training purposes. The relationships between domestic software firms and educational institutions, industry associations or chambers, the national government's trade promotion agency and government ministries are infrequent (Monge-González & Hewitt, 2010; Ciravegna et al., 2014). Those relationships that exist are concentrated in the areas of training, information, organizational change consulting and, to a lesser degree, technical assistance. The exception is the relationship with a private investment promotion agency (CINDE). This agency provides support to solve problems or carry out processes before local public institutions. From financial view domestic SMEs have little support from the financial system in Costa Rica. State banks dominate the market with more than 50% of assets, but they act as commercial banks (Monge-González 2009). No seed capital is in place for new start-ups.

Local firms (SMEs in particular) still facing significant obstacles in searching for and identifying better business opportunities with more advanced companies (incomplete information). Potential high-value transactions and contracts with advanced MNCs are often out of reach for SMEs, even if they have basic productive skills that could be enhanced through specific investments. Market opportunities identification may be costly for these companies (coordination failures). Required investment (and its financing) for technological upgrading to comply with MNCs requirements can be yet another structural obstacle for local suppliers cluster development. All of this makes more difficult to have productive backward linkages or to become direct suppliers in Costa Rica. Seems easier to become an international firm and establish relationships with MNC in its own country (i.e. United States) than to be part of any (local and) Global Value Chain.

#### **4.2.5 Implications for the research**

Review of existing theoretical and empirical studies on the Information and Communication Technologies industry (which includes software sector) and software sector itself in the Costa Rican context clarify the core ideas and main arguments underpinning this research. The influence of social capital on the software business

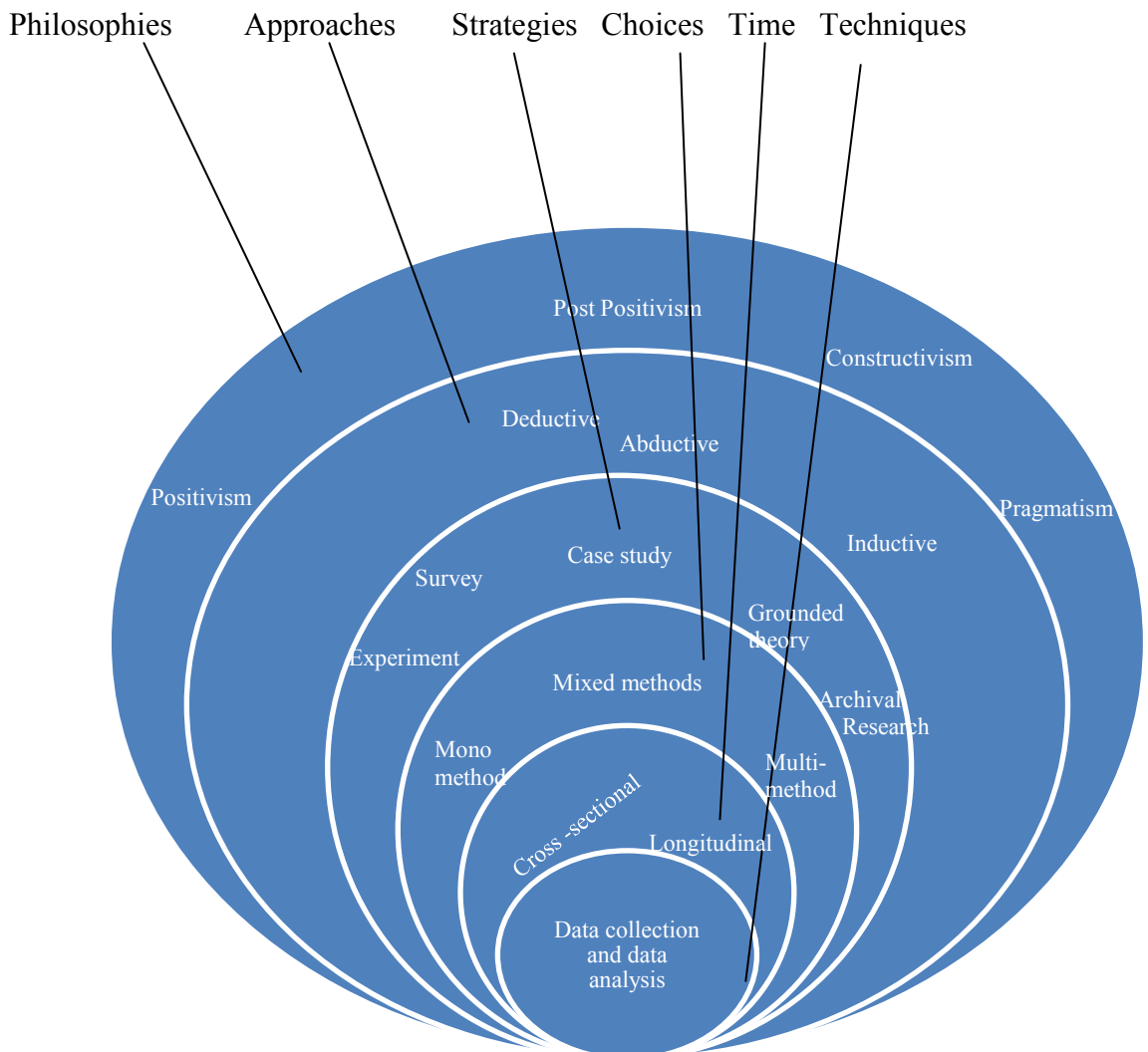
development of SMEs in the context is evident. However, it is presumed that the empirical evidence from the context helps to describe that not only the positive effects of social capital on business activities which are mostly the concern of existing studies, but also the dynamism in social capital that causes potentially negatives changes in social capital outcomes.

The dynamism of social capital slightly described in this context revealed by the constraints resulting institutional context and from reliance on network that appears to support domestic and regional business. Due to the specific conditions and resource requirements for the pursuit of internationalization (which involves - higher - risks and uncertainties, stronger resource commitment, and more importantly, distinctive market knowledge and practice), the social capital development of the firm must be aligned and adapted accordingly to develop networks and network positions from which specific strengths and benefits for foreign business development can be actually realized. The proposition and the empirical findings with reference to the Costa Rican context are insightful to SMEs in general. It is also expected that the research findings will, to a certain extent, enrich the knowledge of the business development of SMEs in the Latin America context.

### 4.3 RESEARCH METHODOLOGY

This study uses multiple theoretical perspectives to conceptualise entrepreneurial internationalisation from a holistic perspective. As such it requires integration of concepts such as social capital development and internationalization process as well as discusses the methodology commonly applied to social capital and SME studies. This chapter, therefore, highlights the explanatory nature of this research, and the need to position it using qualitative research methodology. It then provides a justification for the method used to collect the data, and the approach taken to design and analyse the findings as a part of the research process (see Figure 10).

**Figure 10 The research process**



Source: Based on Saunders et al., 2009

### **4.3.1 Methodology approach overview**

The different concepts included in methodological hierarchy are defined, guiding the researcher towards achieving the specific aims of this study. Tashakkori and Teddlie (2003) state that there are four philosophical orientations that represent different stages in the paradigm debate: positivism, post positivism, constructivism and pragmatism. According to Teddlie and Tashakkori (2003), there is a debate about whether it is possible to combine views that are based on particular paradigms, since they differ concerning ontological assumptions (nature of the reality).

#### **4.3.1.1 Scientific philosophical orientation**

The design approach begins with philosophical assumptions and paradigms regarding the nature of the social world and the way in which it may be investigated.

The positivists approach tries to explain and predict the activities of the social world by identifying casual relationships and regularities found in the elements in the research and to remain an ‘observer’, it is possible to make time and context-free generalizations (Bryman & Bell, 2003). In post positivism, the understanding of reality is constructed and therefore research will be influenced by the values of the researchers (Tashakkori & Teddlie, 2003). Constructionism says that actor and social reality have correlation and social phenomena which are continually being accomplished by actor (Bryman & Bell, 2003). In the pragmatism paradigm, the problem is the most important aspect and researchers can use all kind of approaches to understand the problem. In other words, pragmatists have a freedom to choose methods, techniques and procedures that best meet their needs and purposes (Creswell, 2013)

Positivism and constructivism represent opposite ends of an ontological continuum; post positivism realism represents a midpoint between these two extremes (Krauss, 2005). Pragmatism argues that the most important determinant of the epistemology, ontology and axiology you adopt is the research question (Saunders et al., 2009). Since the aim is to understand how social capital is developed and its influence on SMEs internationalization, this results in the following kinds of question:

Ontological: What is social capital development?

Epistemological: How can a researcher know that there is a ‘social capital development’?

Methodological: What methods and techniques should be employed for collecting and analyzing data regarding a social capital development?

#### 4.3.1.2 Scientific approach

There are three forms of scientific inference – deduction (i.e. the inferences of particular instances with reference to a general law or principle), induction (i.e., the inference of a general law from particular instances) and abduction (the inference to the best explanation from a single, often unexpected, instance).

The *deductive* approach has traditionally been seen as the most appropriate way of conducting reliable research, a statement which can be traced back to positivistic values. The first step in this approach is to develop a theory later to be exposed to a continuous and careful contrasting. Depending on the findings, the theory is either confirmed, discarded or formed to become basis for a new theory. The strong point of deductive is that it tries explaining a causal relationship between variables (Saunders et al., 2009).

An *inductive* approach means that researcher starts with collecting empirical data. Based on this empirical work, general theoretical assumptions are created. This approach can be seen as appropriate when studying new phenomena for which theories have not yet been development (Söderqvist, 2011). The inductive approach often deals with collection of qualitative data. After the collection of data the researcher will attempt to analyse it and this later forms a theory. Within social science, it is common to use inductive method, as it concerns with the way to build a theory when no previous theory in this field exists (Saunders et al., 2009).

In practice, it seems to be difficult for researchers to follow either a strictly deductive or a strictly inductive approach. Saunders et al. (2009) emphasise that the division between deduction and induction should not be interpreted as totally rigid and that it is possible to combine the deductive and inductive approach in the same research. The *abduction* approach (Peirce, 1878) develops a more flexible approach, constructivists have increasingly emphasised abduction as its key epistemological strategy (Oliver, 2011) (see Table 12 for a comparative of above mentioned approach). This approach “entails

considering all possible explanation, checking them empirically by examining data and pursuing the most plausible explanation” (Charmaz, 2006: p.188). Observations that fail to correspond to the theory – failed hypotheses or unexpected qualitative observation – can stimulate modifications or new extensions to the theory (Gelo et al., 2015). This means new research results can thus permeate the theory in the form of tenets that are added or elaborated or modified to accommodate new observations through the process of abduction (Rennie, 2000, 2012; Salvatore & Valsines, 2010; Stiles, 2009).

Abduction is related with Grounded Theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Grounded theory is a comparative and interactive method which helps to construct your analysis by comparisons bits of ideas or incidents with each other, thus GT keeps you interacting with the data and your emerging ideas about it (Charmaz & Belgrave, 2002). The process of associating data with ideas is abduction and the existing theory can be used as a tool to develop such ideas (Richardson and Kramer, 2006). Most contemporary grounded theorists, now see the method as preceding either by a “pattern of reverberating induction fostering deduction and so forth” (Glaser, 1998 p.43).

According to Dubois and Gadde (2002) abduction is positioned closer to induction, than deduction. In this approach, theory often functions more as a source for inspiration than as a base for building hypotheses; there is an interaction between theory and practice (Alvensson & Skoldberg, 2000). The abductive logic implies going back and forth between theory and empirical findings (Alvensson & Sköldberg, 2000). The development of knowledge, thus, becomes a continuing process, where the researcher e.g. starts with data collection, continues with looking for theories, complements with more data collection and if needed changes the theory (Söderqvist, 2011). A process where theoretical framework, empirical fieldwork and case analysis evolve simultaneously is used by Dubois and Gadde, (2002). In this research, therefore, the approach followed is abduction rather than deductive or inductive. Abductive logic commonly part of the pragmatism paradigm (Tashakkori & Teddlie, 2003) and aims to understand deep meanings of the phenomena (Miles & Huberman, 1994). Theory and results thereby impact each other and the goal is to find a systematically connection between the theoretical level and the practical level (Alvensson & Sköldberg, 2000; Creswell, 2013)

**Table 12 Major differences between paradigms**

Paradigm	Positivism	Constructivism	Pragmatism
<i>Methods</i>	Quantitative	Qualitative	Quantitative/Qualitative
<i>Logic</i>	Deductive	Inductive	Deductive + Inductive = Abductive
<i>Epistemology</i>	Objective point of view	Subjective point of view	Both objective and subjective points of view
<i>Axiology</i>	Inquiry is value-free	Inquiry is value-bound	Values plays a large role interpreting the results
<i>Ontology</i>	Naive realism	Relativism	Choose explanations that best produce desired outcomes
<i>Causal linkages</i>	Real causes temporally precedent or simultaneous with effects	All entities simultaneously shaping each other. Not possible to distinguish causes from effects	There may be casual relationships, but never be able to pin them down

Source: based on Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2003; Slotte-Kock, 2009

IE may have a critical realist approach to research, as it focuses on human actions and social exchanges by definition (Seymour, 2006). As the context both shapes and is shaped by the phenomenon, contextualise research requires study on multiple levels (Michailova, 2011). The focus on the interaction between organizations neglects important social exchanges at the level of the individual entrepreneur (Ellis, 2008). Thus there is a need to distinguish between a focal firm and the entrepreneur, which are endogenous to the broader system, the social capital that is exogenous to the focal firm and the entrepreneur but endogenous to the broader system, and the context that is exogenous to the broader system (Adler & Kwon, 2002; Slotte-Kock & Coviello, 2010). Whereas social networks refer to the relationship between individuals, business networks refer to inter-organizational relationships (Jack, 2010). Social capital, therefore, refers to different levels of analysis. Traditionally, scholars have studied social capital as a one-dimensional concept (e.g.: Burt, 1992; Coleman, 1988). However, current research recognizes the relevance of the multidimensional nature of social capital in explaining the value of entrepreneurs' social capital (Maurer & Ebers, 2006). This research uses the three-dimensional (structural, cognitive, and relational) framework of social capital (Nahapiet & Ghoshal, 1998). Although these dimensions are conceptually separate from each other, many of their features are highly interrelated. In brief, due to the complexity of the phenomena which is pretended to describes the

starting point for the abductive logic was a pre-understanding based on a literature review, followed by a empirical observations generating new ideas, followed by a recheck of the literature resulting in new empirical observations, and so on.

### 4.3.2 Operationalization

The research literature deals only to a modest degree with measurement problems when it comes to exploratory/”qualitative” research (Ghauri & Grønhaug, 2005). The problem is usually approached by using semi- structured questions, based on an interview guide as in this study. The interview guide was developed by surveying previous studies. The researcher should be able to demonstrate the validity of the findings and to do that the researcher must supply evidence.

The factors and processes described in previous chapter are summarized below. The summary contains each of the construct’s definition and operationalization.

- ✓ *International new ventures*. Definition: A business organization that, from inception, seeks to derive significant competitive advantages from the use of resources and the sale of outputs in multiple countries (Oviatt and McDougall, 2004). Operationalization: Firms that begin receiving revenues from international business activities while not more than 6 years old (McDougall et al., 2003; Zahra et al., 2000).
- ✓ *De-internationalization*. Definition: Any voluntary or forced actions that reduces a company’s engagement in or exposure to current cross-border activities (Benito and Welch, 1997). Operationalization: Complete withdrawal from international markets (Benito and Welch, 1997).
- ✓ *Multiple modes of entry*. Definition: The concerted use of several modes of entry in an integrated and complementary way (Petersen and Welch, 2002). Operationalization: Multiple modes consist of a) unrelated modes, b) segmented modes, c) complementary modes and d) competing modes (Petersen and Welch, 2002).
- ✓ *Entrepreneurship*. Definition: The study of the discovery, evaluation and exploitation of opportunities and who does this (Shane and Venkataraman, 2000).
- ✓ *Entrepreneurial opportunity*: Situation in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new mean, ends or means-ends relationships (Eckhart and Shane, 2003). Operationalization: Creative decisions, because the entrepreneur has to construct the means, the ends, or both (Eckhart and Shane, 2003; Kizner, 1997) and an uncertain set of alternatives and consequences (Knight, 1921)
- ✓ *Internationalization*. Definition: The discovery, evaluation and exploitation of entrepreneurial opportunity in the international markets (Chandra et al., 2009). Operationalization: Opportunity discovery: How did you recognize your first international business opportunity? Did you



purposefully search the opportunity? Were there any other international opportunities that you recognized, i.e. subsequent international opportunities? Opportunity evaluation: What happened once you recognized the opportunities? What were your considerations before you entered the overseas market? Opportunity exploitation: Were there any obstacles along the way before you entered the overseas market? Choice of mode of entry and why.

- ✓ *Prior knowledge*. Definition: prior knowledge of markets, of how to serve markets and customer problems (Shane, 2000) and Prior knowledge of foreign business, institutional (Eriksson et al., 1997), internationalization (Eriksson et al., 1997 and Fletcher et al., 2013), technological (Fletcher, 2007) and product (Teece, 1987). Operationalization: Knowledge of how the market operates such as information about suppliers, customers, sales techniques, capital requirements, culture or way of doing business in the target market (Shane, 2000, Eriksson et al., 1997). Knowledge of government, institutional framework, rules, norms and values (Eriksson et al., 1997). Knowledge of how to develop market entry strategy in new territories and how to implement market entry decisions (Eriksson et al., 1997). Knowledge of how to develop competitive strategies, and implement appropriate competitive and/or collaborative strategies in new territories (Fletcher et al., 2013). Knowledge of how to implement internal structures and procedures for international business performance (Fletcher et al., 2013). Knowledge of how to produce a viable product or service includes technological know-how, market know-how, manufacturing know-how, and financing, that allows the firm to produce a viable product or service (Fletcher, 2007; Teece, 1987).
- ✓ Network ties. Definition: Strong ties and weak ties in domestic and international market (Chetty and Söderqvist, 2013; Granovetter, 1973) Operationalization: Weak: replaceable relationships, passive, invisible or only temporarily involved in the business. Strong: strictly business relationships close friends as well as family ties in a particular market.
- ✓ Location of ties: Replaceable relationships, passive, invisible or only temporarily involved in the business, strictly business relationships, friends as well as family ties in a focal firm's home market (Prasthantam and Birkinshaw, 2005) or abroad (Ellis, 2000)
- ✓ Firms Resources. All assets, capabilities, organizational processes, firm attributes, information, knowledge controlled by the firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness (Barney, 1991; Piercy et al., 1998).
- ✓ Strength of relationships. Stronger, weaker, Unchanged (Burt, 2004)
- ✓ Structural holes. Definition: A place in a network that could create value (Burt, 2005). Operationalization: Firm contacts in the target market when planning operations (Kontinen and Ojala, 2012).
- ✓ Internationalization speed: time to initial foreign market entry
- ✓ Social capital. Definition: the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or organization (Nahapiet and Ghoshal, 1998). Operationalization: Structural dimension: which people were included in the individual's network and how they were reached through the network?

Relational: Trust, Trustworthiness, reputation and social interaction. Cognitive: Shared working background, experiences and frame of mind

- ✓ Social capital depreciation: Definition: the strength and value of tie diminish over time (Soda et al., 2004) Operationalization: Weak ties decrease (decay or obsolescence) or disappearance (utility life cycle) (Burt, 2002; Prashantham and Dhanaraj, 2010).
- ✓ Foreign Market learning: Definition defined as accumulation of knowledge about characteristics of the specific market business climate, cultural patterns, structure of the market system and specific individual (Eriksson et al., 1997) Operationalization: increase in the number of countries entered (Prashantham and Young, 2011).
- ✓ Technological learning: Accumulation of a set of assets that include complementary technological know-how, market know-how, manufacturing know-how, and financing, that allows the firm to produce a viable product or service (Teece 1987). Operationalization an increase in percent of international revenues (Prashantham and Young, 2011).
- ✓ Internationalization learning. Definition: is a composite of market entry, localization and international enterprise internationalization knowledge (Fletcher et al., 2013). Operationalization: increasing in the number of entry modes used in each country entered.

### **4.3.3 Research strategies**

For social construction, it is suggested the use of single qualitative data collection methods from narrative research, grounded theory, case studies, sample survey (Saunders et al., 2009). A brief evaluation of commonly applied qualitative research methods is summarized (see Table 13).

During the entire research process there have been movements back and forth between theory and practice not only in writing phase but also when finalizing the frame around it. Logic, related complexity and process theories are not bound to any particular method. Since this research is mainly of an abductive nature it is theoretically justified to employ any method in the research.

**Table 13 Evaluation of Commonly applied research methods**

Method	Main Focus	Unit of analysis	Realism of context	Stance of the researcher	Additional concerns
<i>Narrative research</i>	Exploring the life of an individual	One or more individuals	Maximized	Collaboration with participants	Requires ability to interact during the encounter
<i>Grounded theory</i>	Developing theory grounded in data from the field	Studying a process, action or interaction involving many actors	Maximized	Research must set aside, as much as possible, their own theoretical ideas or notions	Evidence collected can be unexpected and complex to be analyzed
<i>Case Study</i>	Developing an in-depth description and analysis of a case or multiples cases	Studying an event, a programme, an activity involving more than one individual	Maximized	Researcher draws inferences from a variety sources or observable objects to arrive at meaningful abstract concepts	Bias of both the researcher and supplier of information
<i>Sample survey</i>	Generalisable propositions about population	Single level (firm)	Low	Representative sampling for that population	Evidence collected can be relatively superficial

Source: Creswell (2007) and own elaboration

Since the objectives of this research are more related to understanding the behaviour of a firm than to quantitative measurement (Jack, 2005), a qualitative approach provides understanding about social capital; providing more knowledge about the content of relationships; the processes involved; how relationships evolve, change and develop over time” (Jack, 2010). For social capital research, case study method is considered suitable in addressing features of complexity (Agndal et al., 2008; Chetty & Söderqvist, 2013; Prashantham & Dhanaraj, 2010). Moreover, this method allows capturing the dynamics of social capital (Maurer & Ebers, 2006) in ways not possible through quantitative research (Jonsson & Lindbergh, 2013). Hence, this research used a multiple case study method, similar to the approaches introduced by Eisenhardt (1989), Eisenhardt and Graebner (2007), and Yin (1994).

#### **4.3.3.1 Case study method**

Given the phenomenon in question, multiple in-depth case studies, employing a participant observation technique and other instruments that follow the process through time (Sinkovics et al., 2008), seemed the most appropriate methodological approach to this research. Case research is a valid methodological approach for scholars studying

internationalization process from the social capital lens (Lindstrand et al., 2012; Prashantham and Dhanaraj, 2010).

According to Yin (2003), case study research is applied when there is a need to understand complex social phenomena. Moreover case research is a relevant method for context-specific issues (Welch et al., 2011). As such, it enables the researcher to capture meaningful characteristics of real-life events of individuals, small groups, organizational and managerial processes. It is also encouraged in the complex contexts of network evolution (Coviello & Cox, 2006). The examination of context specific issues related to entrepreneurial internationalisation usually involves either grounded theory or case study techniques (Rialp et al., 2005), the latter is an appropriate approach to unravel the complexities in the process of international opportunity identification (Zahra et al., 2005).

Eisenhardt (1989) argued that developing theory from case studies mainly relies on the replication of logic. Yin (1989) pointed out that cases are discrete experiments and that they serve as replications, contrasts and extensions of the theory under development. When presenting a single case, the story is important and should consist of narrative that includes quotations from key informants. In order to facilitate the evidence, a visual device can be used. In general, the case study method is more valid for developing theories than for testing theories. However, there are also negative aspects of using case studies, the concern relates to capturing the social capital from only one perspective, it will limit representativeness (Coviello, 2005).

There are different manners to obtain data within case studies, in-depth interviews for understanding network formation have been proposed by Ellis (2000). Narrative interviews are based on interpreting and making sense of human experience by listening to, collecting, and analyzing stories from an actor's life world. These interviews are particularly relevant in understanding perceptions on value propositions in various contexts enabling the revelation of meaning of a phenomenon as informants actively reconstruct and construct the past, present, and anticipated future (Kaatermo, 2013). The complexity of a network picture is influenced by the manager's experience and the specific tasks undertaken by an individual (Ramos et al., 2012). A dynamic retrospective approach is utilized in this research, as ongoing longitudinal methods are

more suitable for explaining the dynamic mechanisms of social capital development (Coviello, 2006; Hoang & Antoncic 2003; Slotte-Kock & Coviello, 2010). Thus, this study also adopts a longitudinal design. Cross sectional studies usually involve selecting a large number of organizations or people and investigating how factors vary across these units (Easterby-Smith et al., 1991). Cross sectional designs, especially where they use questionnaire and survey techniques, do not explain why correlations exist and have difficulty eliminating external factors (Easterby-Smith et al., 1994). International entrepreneurs researchers have called for more longitudinal research into firms' social capital that reflects its dynamic nature (Chetty & Agndal, 2007; Lindstrand et al., 2011; Maurer & Ebers, 2006; Prashantham & Dhanaraj, 2010).

Decision-making in small firms are usually made by entrepreneur and/or a few key individuals (Chetty & Campbell-Hunt, 2004; Chetty & Söderqvist, 2013; Zuchella et al., 2007). To strength the reliability of the accounts from responders the techniques suggested by Huber and Power (1985) were used. Previous studies with these techniques had been applied for similar purposes (see Chetty & Agndal, 2007). The establishment of construct validity and forms part of a chain of evidence recommended by Yin (2003) which links the questions asked, data collected and conclusions. Thus a longitudinal approach matches the goal of the study to explore social capital development of internationalizing firms. The case studies allow the researcher to take a longitudinal and a flexible approach to investigating different types of research questions (Ghauri, 2004).

Although early identification of the research questions and possible constructs is helpful, they are tentative in theory building research (Eisenhardt, 1989). Yin (2003) suggests four types of case study design; holistic single case, embedded single case with multiple units of analysis, or multiple cases with multiple units of analysis or multiple cases with one unit of analysis. The unit of analysis is related to the research questions of the study (Yin, 2003). In this study the unit of analysis is the social capital development (personal level/firm-level) taking in to consideration that a qualitative methodology was undertaken based on interviews with the owners/founders of the participating firms in order to secure a deep understanding of the social capital at individual level, and uncover the social capital development from pre-founding phase

until post-internationalization phase, analyzing the processes within the firms and outcomes of that social capital.

With the use of multiple comparative case studies enables within and cross case comparisons, search for patterns and general explanations to be developed (Eisenhardt, 1989; Yin, 2003; Pettigrew, 1992). Following Yin (2003) separate case studies on each firm were developed from interviews, database information and archival records. Case studies can be exploratory, descriptive and explanatory (Yin, 2003). In this study all three approaches are used. The exploratory aspects allow the researcher to answer “what” questions. A descriptive approach is taken to portray an accurate profile of the events and situations (Yin, 2003). An explanatory approach seeks to establish causal relationships between variables and answer “how” and “why” questions (Yin, 2003).

The use of multiple case studies allows the researcher to search for cross-case patterns and themes to provide accurate and reliable theory and capture novel findings that may exist in the data (Eisenhardt, 1989; Miles & Huberman, 1994). The flexibility offered in case study design allows aspects such as number of cases, scope of cases, purpose and research questions to be modified over time (Eisenhardt, 1989; Miles & Huberman, 1994). This flexibility was important for this study given the abduction and longitudinal nature of this research; it allows emergent issues to be explored.

#### **4.3.3.2 Selection of case study**

In case research, the first requirement for the selection of a research site is comparability (Eisenhardt, 1989). This means that cases are preferably from the same sector and from the same political and economic context (Pettigrew, 2012). Based on previous research, Costa Rica is considered a small, open economy (Lopez et al., 2009), as a consequence, the research findings can be compared to the social capital development of firms from other small and open economies. Costa Rica has scant research on ICT industry. More studies are needed to improve the characterization of the firms of this sector. Costa Rica has been consolidating its trade liberalization through free trade agreements with key countries (i.e.: US, European Union, China). In addition the country is taking different economic actions to be part of the OECD in a

very near future. The environment, therefore, is highly dynamic and new knowledge about ICT industry, are a must.

The number of cases is in line with Eisenhardt (1989), who recommends using four to ten cases. The selection of the firms for investigation was based on an overall theoretical perspective, as recommended in the study by Eisenhardt (1989). It had been studied 7 cases in this research. Ghauri et al. (2002) suggest that cases in a multiple case study investigation should be selected to serve a particular purpose in the study. Representativeness is not the criteria for selecting cases. In this research it was not known in advance if the firms had common characteristics. The firms were international and from Costa Rican software industry. The criteria used for selection of the cases were richness of data and replication logic, not sampling logic (Perry, 1998). There can be *literal replication* where similar results are found for predictable reasons or *theoretical replication* where contrary results are found for predictable reasons (Perry, 1998). Validity is enhanced through emergent relationships being confirmed; theory can be refined or extended where cases disconfirm the relationship (Eisenhardt, 1989). Case studies are generalizable to theoretical propositions, not to populations as in survey research (Yin, 2003).

The firms selected for this research are member of CAMTIC by the end of 2011. The selection of the case studies was based on all firms that belong to CAMTIC which were part of Export Link program. The advantage of selecting these CAMTIC firms is that it ensured that firms were international and were thus actively in the process of internationalization. Also, selecting these firms CAMTIC allow a web access with information about the firms to cross-check some of their information (Yin, 2003). A disadvantage of selecting these firms is that the results might be subject to "selection effects" that would not be present if non CAMTIC firms were included (Shane, 2000). All the firms were in the process of internationalization by 2012. The firms had to be Costa Rica based independent firms with the expectations to develop their business activities. This ensured the firms were in the process of internationalization and thus fitted the aims of the research (Ghauri *et al.*, 2002). The selection of the case studies was based on all firms that participated in the program (Export Link) by 2011.

The firms had to be six years or older to be included in the study, targeting export firms that have reached international markets within 6 years of their inception (Chandra et al., 2012; Evers & O'Gorman, 2011; McDougall, et al., 2003). This condition was, also to ensure that the firms had endured through the threshold stage of new firm survival (Audretsch, 1991; Shepherd, 1999). Costa Rica has a national accepted definition to differentiate SMEs from their larger counterparts (MEIC, 2002). The following criterion is used to define the size of the firms:

Manufacture sector:

$$P = [(0.6 \times pe/100) + (0.3 \times van/c 1.785.000.000) + (0.1 \times afe/c 1.095.000.000)] \times 100$$

Retail and services sector:

$$P = [(0.6 \times pe/30) + (0.3 \times van/c 3.084.000.000) + (0.1 \times afe/c 964.000.000)] \times 100$$

ICT sector:

$$P = [(0.6 \times pe/50) + (0.3 \times van/c 3.084.000.000) + (0.1 \times afe/c 964.000.000)] \times 100$$

P: firm score

pe: firm average number of employees (last year)

van: firm annual net sales value (last year)

afe: firm total asset value (last year)

If  $P \leq 15$ : micro-size, if  $15 < P \leq 30$  small-size, if  $30 < P \leq 100$  medium-sizes and if  $P > 100$  large-size.

This study adopted the above definition for ICT sector. Therefore, under that definition six out of seven cases were micro-size and the other was small-size, at the time of its inception. By the time of the interview, two of out seven are large-size firms, two out of seven small-size and three out of seven medium-size firms.

Nine firms were selected to this research. Then, two firms dropped out during the research period. One of them because considered they had not enough guaranties of confidentially for requested information and the other one because have entered in a



bankruptcy process and nobody except them knows about this situation. The research was based on the seven remaining.

It had been emphasize the appropriateness of qualitative analysis for exploration and description of dynamic aspects of business activities, including social capital and the internationalization of SMEs, which it is unrealistic to study in isolation from the socioeconomic context (Arenius, 2005; Coviello & McAuley, 1999; Jack, 2005; Prashantham & Dhanaraj, 2010).

Hoang and Antoncic (2003) called for "more qualitative, inductive research (in network-based studies) that will stimulate further work by introducing new theoretical ideas" (p. 183), which they believe is often dismissed simply because of perceived shortcomings in the findings with regard to generalization and prediction. A qualitative research approach is seen as appropriate for this study, since qualitative research has been considered to be useful for studying processes (Patton, 1990). In particular Jack (2010) highlights the potential inherent in qualitative research to develop the insight into how networks change and evolve over the time. Regarding the research objectives, this research aims to explore and explain the social capital development of Costa Rican SMEs software firms and examine its influence on internationalization process. There is a need for new conceptual insights in this area, which mainly derived from developed countries context (Kazlauskaitė et al., 2015). The flexibility of the case study method facilitates the discovery of considerably broad and rich facets of a phenomenon and thus allows new insights to emerge from within its complexities even when little in the way of established literature or prior empirical findings is available (Chetty, 1996; Eisenhardt, 1989; Halinen & Tornroos, 2005).

With regard to the research objects, context and existing theoretical contributions in the field, multiple-case studies with an embedded design were considered to be the most appropriate strategy to understand the two core objects- social capital development and internationalization process- of this study, that is widely supported in other similar studies (Chetty & Agndal, 2007; Coviello, 2006; Chetty & Söderqvist, 2013; Lindstrand et al., 2011; Prashantham & Dhanaraj, 2010). Moreover, social capital is flexible and dynamic in nature; the ability to capture the process-based mechanisms inherent in the dynamism of networks makes case study the most viable research method for network

analysis (Coviello, 2005; Easton, 1995; Halinen & Tornroos, 2005). Following the abductive approach of Dubois and Gadde (2002) the researcher regularly moved backward and forwards between the data and the literature to match theory and reality.

#### **4.3.4 The process of collecting data**

Data collection following Leonard-Barton (1990), an interview was conducted with each firm to construct retrospectively the company's history ranging from the period of pre-founding until the moment of the interview. A timeline was constructed to detect major events that impacted the development of the firm as mentioned in Fuerst and Zettinig (2015). Data collection method is the process from where this study can gather relevant information which will be used for answering the research questions.

##### **4.3.4.1 The interviews**

The research involved two or three in-depth, semi-structured interviews with the owners/founders and CEOs of the cases of study carried out during 2013 (3-4 months between each interview). It is acknowledged that multiple interviews are highly recommended for a case study. Nevertheless, it is difficult to get more than one interview in a small company, particularly with the key decision-maker. Smaller firms generally have few slack resources and the key decision-maker is often too occupied by business activities at all levels to spare time for additional tasks, especially when they are not perceived to present direct business benefits. This study has the same limitation. The author was offered only one interview in most cases; except for three out of seven firms. Each time of the interview lasted an average of one hour and 20 minutes. Every firm was interviewed at least twice during 2013. The interviews were taped and transcribed. The owners/founders were the prime focus of attention as the key informants, as they are the key decision makers in the firms. Interviews are an important method of undertaking qualitative research. A detailed description of the cases is presented (see Table 14). In the first interviews it was mainly explored the firms' social capital at pre founding stage and pre-internationalization. In the second interview focused on the firms' social capital at post-internationalization phase. When needed, one more interview was arranged and focused on the missing details in order to complete the information.

The interview was recorded for future reference. In order to make it more accurate it had been written down the informants statements in paper as well. The entire interview was voice recorded in order to maintain the accuracy of respondent's view. Each interview had been transcribed as soon as possible after first, second and sometimes third round of interviews were taking. The transcriptions are detailed and reproduce all spoken material. The transcripts are in Spanish and only the parts that have been quoted in this dissertation have been translated into English. Moreover, the data analysis and collection are iterative in nature that involves a weaving back and forth between data and theory. In inductive process it is organized the data and reduced through data classification and reduction. In additionally, the data are organized by coding, for example, description of behaviour, statements, feelings, thoughts, etc. are identified and coded (Bryman & Bell, 2007).

**Table 14 Summary of cases in this study**

Case	No of Employees	Start up Date	First International Market entry	Subsequent International Market Entry	Current FS/TS Ratio	No of Interviews	No of Persons Interviewed	Position
<i>Alpha</i>	400	1993	1993	2005	80	3	2	Founders
<i>Beta</i>	35	2005	2007	2011	100	2	1	Founder
<i>Gamma</i>	8	1993	1993	2013	-	2	1	Founder
<i>Delta</i>	25	2001	2001	2008	30	2	2	Founders
<i>Epsilon</i>	13	2007	2007	2011	15	2	3	Founders
<i>Kappa</i>	16	2002	2006	-	35	2	1	Founder
<i>Omega</i>	1200	1997	1998	2007	50	4	1	CEO

Source: Own elaboration

#### 4.3.4.2 Triangulation

The use of multiple sources of evidence helps to improve the validity of case study research (Yin, 2003). Triangulation can be used to strengthen a study by combining methods or using several kinds of data (Patton, 2002). Through triangulation the accuracy of judgements and results can be improved and enhance the validity of the research (Ghuari *et al.*, 2002). Denzin (1978) identifies four different types of triangulation: data triangulation, where different sources of data are used; investigator triangulation involves the use of different researchers; theory triangulation uses multiple

perspectives and methodological triangulation uses multiple research methods. The research used multiple sources of data allowing *data triangulation* (Denzin, 1978; Yin, 2003), which helps to address concerns that subjective judgments are used to collect the data (Yin, 2003). Corroboration of the interviews through the use of CAMTIC, firm cases website and other secondary data was used to validate the interview data (Yin, 2003). Public sources of information gathered from newspapers and other publications and company websites. This enhanced the validity of the research through corroboration, crosschecking and provided a more complete and holistic portrait of the phenomena (Ghauri et al., 2002).

#### **4.3.5 The process of analysing data**

This research starts as an inductive and deductive process with a business insight into data collecting and analysing, and continues more abductively following the leads that were clearly identified from the data; the findings are being sorted and analysed. The inductive approach aims at comprehending the meaning of text or action and uses reflections to let theory emerge out of data analysis using analytic strategies such as analytic induction, grounded theory, and narrative analysis (Bryman, 2001). The deductive approach commences with existing theory by formulating the research questions, objectives, propositions, and a conceptual framework using strategies such as, pattern matching and explanation building (Yin, 2003). In this approach, data categories and codes to analyse data are derived from the theory and the conceptual framework developed by the researcher (Saunders et al., 2009). These inductive and deductive strategies are not mutually exclusive (abductive strategies); it is possible to combine these strategies to analyse qualitative data (Saunders et al., 2009).

The development of social capital and its content function as key construct to structure the study. The study did not follow any theoretical framework in the beginning. In the more mature stage the literature review and theoretical framework was built selecting the approaches relevant to the empirical data and the development of the final focus of the study. In the final stage of the study a theoretical-empirical analysis is prepared.

Individual case descriptions were developed using specific analytical techniques suggested by Ghauri (2004) and Yin (2003), as presented in Table 15, these were extended to cross-case synthesis.

**Chronologies:** In the social capital development and the internationalisation process analysis is important to identify the critical incidents and key actors. The narrative description and analysis is organised chronologically in the form of historical reconstruction.

**Table 15 Case study analysis techniques**

Techniques for case study analysis	Explanation
<i>Chronologies</i>	Narratives of the events that took place, organised by date.
<i>Coding</i>	Sorting data according to concepts and themes.
<i>Clustering</i>	Categorising cases according to common characteristics.
<i>Matrices</i>	Explaining the interrelationships between identified factors.
<i>Pattern matching</i>	Comparison between a predicted and an empirically based pattern. Patter model emerged from the single cases (within-case) are compared to each other (literal and theoretical replication across cases) and to pattern models described in the extant literature (analytical generalisation).

Sources: Ghauri (2004) and Pauwels and Matthyssens (2004)

**Coding:** This process entails the researcher retrieving, interpreting, organising quickly, and clustering data to draw conclusions (Miles & Huberman, 1994) and in relation to research questions and frameworks (Ghauri, 2004). This coding for events was primarily based on the chronological map. From the data recognised it was needed to separate between different phases, and thus the phases of pre-founding, pre-internationalization and post-internationalization came into the analysis and also the separation into social capital dimensions and internationalisation events. The concept of domestic tie is applied to insert a firm's social capital development process into its context, interlinking it to the forces that have formed the process. The coding process was carried out using the NVivo 10 software. The coding process has been done deductively and inductively. Deductive coding is about coding data based on a pre-determined framework, whereas in inductive coding themes, categories and patterns are

discovered from the data (Patton, 2002). The main part of the coding has been inductive and then categories have emerged from the raw data collected through interviews and documents.

Pattern matching: This is one of the most desirable techniques in case study research for analysing cross-cases (Yin, 2003). It is a process where several pieces of information or empirically based patterns are compared with predicted (theoretical predictions or conceptual framework) ones. This matching was done using a mixture of specific analytic methods such as matrices, data clustering, and identifying systematic patterns, using the initial conceptual framework as the foundation.

The multiple case study analysis uses both within-case and cross-case methods as recommended by Miles and Huberman (1994) and Yin (2003). Within-case analysis began with detailed write-up for each case with the objective of becoming familiar with each case as a stand-alone entity and to let the unique patterns of the case emerge through the rich description (Eisenhardt, 1989; Halinen & Tornroos, 2005). Cross-case analysis was conducted based on the themes and constructs identified in each case. Fact and evidence were compared and contrasted in order to search for cross-case patterns. To increase the thoroughness and sophistication of the cross-case replications, different mixes of cases were grouped to compare similarities and differences in different dimensions.

#### **4.3.6 Validity and Reliability**

Qualitative researchers have also tended to apply reliability and validity in similar ways (Bryman & Bell, 2007), although neither is directly applicable in qualitative research. As pragmatism is also focusing on qualitative methods as one form of gathering and analyzing data, these criteria can well be applied also here as they are all essential to qualitative concerns. Credibility ensures that the study has been carried out according to good practice and that the subjects, who were studied, may confirm that the investigation actually reflects their own social world (Bryman & Bell, 2007). Dependability, which is closely related to reliability, means ensuring that the results can be the same if a study is repeated at another point in time (Guba & Lincoln, 1994).

Since case study research is an empirical social research, Yin (2003) suggested using four commonly used tests in social science research: (1) Construct validity; (2) Internal; (3) External validity and (4) Reliability.

In order to establish construct validity (credibility) as suggested by Yin (2003), this study used multiple sources of evidence from interviews, documentation, and observation in order to facilitate data triangulation. In addition, some interviews were conducted with multiple respondents (when possible) and within the same company on the same issues. Yin's (2003) internal validity falls into the positivistic approach and is mainly applicable to explanatory case studies where an investigator is trying to explain a causal relationship between constructs. As this study includes explanatory internal validity is applicable to the present study. External validity was achieved using the replication logic. The contextual uniqueness and the significance of the social capital development and internationalisation process provided critical issues of details of the phenomenon under study, which made every case a 'whole' study. These individual case descriptions provided an output for cross-case analysis that led to propositions a conceptual model of social capital development that may replicable. Reability is to minimise the errors and biases in a study (Yin, 2008). The research outcome was a result of an iterative process where the researcher made a conscious effort to capture the lived experiences of the participants and to minimise the influence of his personal values and theoretical inclinations.

#### **4.4 Summary**

This chapter describes the research methodology selected in this study in order to explore the social capital development and its influence on internationalization process. The methodological approach used is summarized (see Table 16 below).

**Table 16 Summary of research methods**

<b>Philosophies</b>	Pragmatism
<b>Approach</b>	Abduction (Inductive/Deductive)
<b>Research strategies</b>	Qualitative Longitudinal case studies of software firms
<b>Data collection</b>	Multiple sources of evidence provide data triangulation: <ul style="list-style-type: none"><li>- Interviews with Owners/Founders</li><li>- Firm managerial team (when possible)</li><li>- CAMTIC website</li><li>- Public sources of information; newspaper, firm's website.</li></ul>
<b>Data analysis</b>	Within-case and cross-case analysis <ul style="list-style-type: none"><li>- Narrative</li><li>- Coding</li><li>- Clustering</li><li>- Matrices</li><li>- Patter matching</li></ul>





# **CHAPTER FIVE: DESCRIPTION AND INDIVIDUAL WITHIN-CASE ANALYSIS**

## **5.1 Introduction**

In this chapter the seven cases are described in order to develop comprehensive descriptions, following the guidelines suggested by Yin (2003). The qualitative case studies are conducted to derive exploratory insights into the research questions. Within-case analysis is performed case-by-case. The findings for each case-study firm are presented in terms of the three phases that were identified during the research. In addition a brief review of the entrepreneurs' backgrounds is presented to introduce the explanation of the development of social capital, and how it influences the internationalization process. The three phases are: 1. Pre-start-up/venture creation: from opportunity discovery to venture creation. 2. Pre-internationalization: from venture creation to initial internationalization activities, assuming the internationalization phase may be parallel to both the pre-founding and the venture creation phase. 3. Post-internationalization: from initial internationalization to 2012.

## **5.2 Case study 1: Firm Alpha**

Alpha firm started in 1995 with headquarters in Silicon Valley, California, and a software engineering centre in San José, Costa Rica. Today, the company has expanded its engineering centres across Costa Rica and into Peru. Alpha has been profitable from its inception and has averaged 30% annual growth since 1995. From the start, this firm has specialized in collaborating with both start-up and established software companies in the rapid creation of innovative software. The company's commercial partnerships are often long term.

### **5.2.1 Founders' background**

The founders of Alpha are two brothers (Founder and Co-founder). The founder holds a degree in computer science and an MBA, both from Costa Rican universities. Before the firm's creation he was the Chief Technology Officer (CTO) of a leading commercial bank in Costa Rica and was responsible for the bank's software development, IT operations and technology strategy for over 12 years. He had over 20 years of

experience in software development and systems architecture. While he was working at the bank he had a second job. The co-founder (his brother) was CTO at Babcock & Brown, a leading investment banking firm in the USA, where he led a worldwide team and was responsible for all technology strategies and implementations. Before Babcock & Brown, he was Director of Product Development for Intuit, where he led the development of new products for the Quicken product line and managed the development of Intuit's international products. Before that, the co-founder worked at software Publishing Corporation, where he created Harvard Graphics, which redefined the presentation graphics software category. He earned a Master of Science in Electrical Engineering from the University of California at Davis, USA.

### **5.2.2 Pre-start up/venture creation/ pre-internationalization**

Alpha, which was founded by Costa Rican entrepreneurs, began activities in 1995. It was a personal project of two brothers: one (the founder) was working as the CTO director of a private bank in Costa Rica, while the other (co-founder) was working as the CTO for a software company in the USA. The latter, in the course of his work, found that the company needed to acquire some “customs forms” for an Indian company, and he decided to ask his brother in Costa Rica if he could do the customs forms.

*“I wanted to have my own business and my brother gave me the opportunity.”*  
*(Founder of Alpha)*

The Alpha founder was interested in this business opportunity, so he took a week off his bank job to consider it. His brother (the co-founder) advised him about the possibilities of producing the customs forms so he looked for the financial and human resources needed. The bank for which he had been working gave him a loan, and he contacted some recent graduates who were available to work in Costa Rica. After that, he realized he could do it. Immediately he hired four of the new graduates as employees to fulfil the requested order. At this initial stage also, Alpha bought a firm based in San Francisco because it considered it was good for the relationship and business with the (US) customer. A head office close to the customer, with local workers, seemed to be the right strategy. However, this office had some problems with local employees. The

founders could not maintain a good relationship with US workers, thus the bad labour environment and the expensive cost to keep the office abroad was not acceptable or assumable. The decision was made to close the San Francisco office seven years later, in 2002.

The founder leveraged the initial business opportunity in 1995 but at the same time he kept his job at the bank.

*“For a while, my bank job was my safety net” (Founder of Alpha)*

The customs form work consisted of an outsourcing business. The US Company sent Alpha the “raw materials” to do the customs forms and Alpha had to return the final product, which means the customs forms ready to use, as requested. After the first order was satisfactorily accomplished, the software company offered Alpha a four-year contract to continue with this work.

Four years later, with the initial international contract almost complete, the founder was prepared to quit his bank job and diversify the firm’s services. He consulted with his brother about going to the USA to search for other business opportunities to gain more contracts for the firm. By this time, Alpha specialized in providing software engineering services (outsourcing) in a broader sense with customers that included both start-up and established software companies. This new service allowed software producers to scale their development and testing capabilities quickly. The US-based brother arranged some meetings with friends and colleagues from the software sector in California, giving him some options to match. The founder benefitted from his brother, who due to his position in an important software company, had contacts and influence, acting as a bridge to yield opportunities. Additionally, that software company was Alpha’s most longstanding customer, which helped as a reference.

As a result of these contacts, Alpha gained a considerable business contract with another software company from the USA. In June 1999, when the firm was created formally (in a legal sense) the founder finally quit his job at the bank. The co-founder (the brother in the USA) did not yet quit his job. They hired two more employees to do business with

the two software companies in the USA. Alpha was formally created by the two owners/founders with headquarters in Silicon Valley, San Francisco. The firm had six employees in Costa Rica.

By the end of 2001 the brother in the USA wanted to be a full-time manager of Alpha, so he also quit his job. He became the new CEO of Alpha in 2002, because of his experience as a top manager of a large international company. Hence, at the beginning of 2002 there were two owners and six system engineering employees in Alpha, doing outsourcing in network project (in-line services) as their main business with two software companies from the USA as customers. Alpha started to think about the Costa Rican domestic market because, although it was not as developed as that of the USA, there was scant competition in this niche market. In 2002, Alpha decided to move the headquarters from Silicon Valley to Costa Rica.

*“Domestic market is a complement and also used as a development centre”. (Co-founder of Alpha)*

After the move of Alpha’s headquarters to Costa Rica, the founders started to plan to reopen its operations on the West Coast, this time in Los Angeles, through a joint venture. The founders therefore utilized another strategy this time and hired a representative agent. Alpha had started up as an international firm, providing software engineering services (outsourcing), but after 2002 it started paying attention to internet services. The main target market was and still is the USA, due to the growth potential there and because it was easier does business in a known market. Later there was a possibility to expand to Florida, but these plans were not totally accomplished because of lack of capital (the firm had to write off a loan and ended with financial loss).

The product development continued: the company launched a new venture, a personnel recruitment service called Professional People. By the first half of 2002, this division was already earning almost 30% of the group’s total revenues, and it had started developing a recruitment software program. In 2003, Alpha hoped to increase the sales of the Professional People service, but this did not happen. In that year the firm’s founders realized that Alpha had grown too fast and too large for efficient management. Moreover, it was not able to sell enough in the USA, as the firm needed more time to

customize its services to the needs of each state. Additionally, the economic slowdown in the USA due to 9/11 was also a problem, as it reduced the demand for traditional offline recruitment services.

In 2004, the firm restructured the Professional People service and employed more staff for developing and selling it. As a result, the sales of this service increased by 31%. The software engineering service was also reinforced with interest from several local firms and also foreign firms in the USA. Thus, Alpha started to consider opening subsidiaries in Peru and Texas, but decided not to do so at this time.

Instead, in May 2004 Alpha decided to start operations in the domestic market because the founders saw the potential for a good business contract with a Costa Rican government institution. Thus they decided to participate in the public bid and the project was awarded to Alpha. The firm started a new line of products locally. The Costa Rican domestic market is important because it is where the headquarters is located. Alpha decided to expand its offices in the country and buy two firms in different cities. By this time it was considering a new representative office in the USA (in New York) but South America was the focus as a potential future market.

### **5.2.3 Post-Internationalization**

In 2005 one of the founders attended a high school activity at his daughter's school where he met an old friend who was the CEO of UNISYS Andean Region. He was a Costa Rican citizen but had been living in Peru for over 12 years. Thus, in 2006, with few resources (human or financial), Alpha opened a new office in Peru. The founders offered their friend an equity stake in the company to generate his commitment to the development of the Peru subsidiary.

*“The firm needed a contact in South American market in order to expand our activities; our friend was exactly what we were looking for“ (Co-founder of Alpha)*

This new office outside Costa Rica allowed the firm to enlarge its staff, particularly skilled workers. At the same time the new office allowed Alpha to grow in terms of international sales.

*“Each target market needs a different business model in order to enter; it cannot be an exact replica of others”. (Founder of Alpha)*

In 2006 just two persons worked in the Peru office which for four years was just a development centre. The production of that office was for the USA market, until 2010 when it started to sell in the Peruvian domestic market also. However, it still had no real interest in markets other than the USA.

The software labour market in Costa Rica is swamped with IT firms and there are not enough skilled employees. Hence, the limited supply of skilled workers in Costa Rica was an important constraint on the firm’s development. This excess of demand over supply of labour pushed wages up. When the firm needed to recruit skilled workers it was necessary pay more and more. Alpha’s target annual revenue growth was between 15 and 20%, so it wanted to expand to other countries in order to find more resources and develop more products (or services). Software engineering services, quality assurance, mobile products, and bank products and services were in the new portfolio for international and local markets. The US market still represented 80% of Alpha’s sales and the remaining 20% were from the Costa Rican market by the time Peruvian office was opening.

As the firm needed additional investment to grow, Alpha sought new investors to raise the firm’s efficiency and to participate in forming strategy. The two founders decided give some key employees the opportunity to buy shares in Alpha. Nowadays Alpha has 28 shareholders all of whom, except one, still work for the firm. Additionally the CEO has invested in some software firms to expand his personal portfolio (i.e. Beta). Sometimes, Alpha works with other firms in Costa Rica (i.e. Kappa), particularly, when a specific skill does not exist within Alpha. This partnership is usually because one of the co-founders recommends a firm to work with. The Alpha brand is part of these partnerships, and this type of exchange is reciprocal. As part of the firm’s strategy

sometimes it will outsource a specific part of a project to another Costa Rican software firm.

*“Long-term relationships mean personal relationships and if any relationships turn into personal ones I feel more confident because of the trust between us.”*  
(Founder of Alpha)

By the end of 2012 only the New York subsidiary managed to earn a profit. Additionally there was another global economic slowdown which affected the firm’s business.

Alpha works with customers from Europe as a part of its regular activities in the USA market. It saw an opportunity to expand these relationships with European firms in order to expand Alpha’s markets in the future. In 2012, it had also decided to expand its share of the USA market, entering different cities. It saw a potential for growth in different geographical areas of US territory. The decision was made to trade on the West Coast without creating new representative offices. Alpha needed financial resources to expand its sales further in different cities of the USA, but the market was too big for its capacity, thus it had to do it slowly and in a less costly way, guaranteeing positive results. As a result, the growth of Alpha is constant but slow. Each of Alpha’s USA representative offices has just one worker.

The relationships developed with customers or partners are at different levels; the owners, management teams and engineering team are responsible for this strategic issue. They generally have problems when one or many of the employees leave the firm, because the “trust team” changes. For the owner/founder or CEO, the probability of ending a relationship if one of the “trust team” leaves is very high. The firm has had some troubles with customers and some of these relationships have ended. New personnel mean no trust to share the knowledge or activities of the team. Alpha usually has better relationships with its older customers, especially with those who have developed personal relationships, but the CEO recognizes that the development of these relationships has to be mutual. Every new relationship is considered a formal (“business”) relationship. Alpha tries to develop long-lasting relationships with its partners and customers. If any customer or supplier experiences a merger, however, in



the beginning it is considered a positive development, because the employees go from one firm to another firm and Alpha's network is thus enlarged. These relationships are possible only if Alpha maintains the high quality of its services and products. By 2013 the firm had 400 employees in three different countries: 5 in the USA, 125 in Peru and 270 in Costa Rica.

### 5.2.4 Analysis of case study 1: Firm Alpha

**Table 17 Description of the development of social capital and the internationalization process of Alpha**

Stages	Social capital	Sources	Effects on Internationalization
<i>Pre-start up/venture creation//pre-internationalization</i>	<p><i>Structural</i> -Social capital is mainly based on the founder's relationships with his brother and job mate</p> <p><i>Relational</i> -Based mainly on long-time family and current job interaction. Trust due to long-time interaction with family</p> <p><i>Cognitive</i> -Both founder and brother are from ICT sector. Shared experience and frame of mind</p>	<p>-Strong international tie<sup>●</sup> (brother/personal)</p> <p>-Strong domestic tie<sup>●</sup> (workmate/personal)</p> <p><u>New ties:</u></p> <p>-Strong international tie<sup>●</sup> (MNE/business)</p> <p>-Weak international ties<sup>●</sup> (staff of acquired company/business)</p>	<p><u>First International OI (USA,1993)</u> <i>Discovery:</i> His brother offered to do business in U.S.A. (enabler: by pre-founding strong tie located abroad)</p> <p><i>Evaluation:</i> He needed human and financial resources as well as specific market knowledge. His workmate facilitated the financial resources and his brother the specific market knowledge. (Facilitator: by pre-founding strong ties, domestic and abroad)</p> <p><i>Exploitation:</i> Influenced by network position of the counterpart and his support</p> <p><u>Resources Acquisition and social capital</u> Three dimensions together help him to acquire a USA firm, the FMK and IK.</p> <p><u>Entry mode:</u> export (through outsourcing)</p>

Stages	Social capital	Sources	Effects on Internationalization
<i>Post-internationalization</i>	<p><u>Social capital changes</u></p> <p><i>Structural</i> -The social capital was enlarged through the grafting of the new co-owner. Social capital is based on the founder's relationships with his former job partners in USA and both founders with close Costa Rican friend in Peru, the firm with its representative offices in USA, the firm with another software firms in Costa Rica and old MNE customer in USA. Many domestic companies and one company in Peru.</p> <p><i>Relational</i> -Personal relations abroad: Limited interaction- limited trust Friendship of long term interaction-trust -Business relations abroad: Old customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness -Business relations domestic: Based mainly on long business interactions, generating trustworthiness and trust.</p> <p><i>Cognitive</i> -All social relationships are from software sector. They share similar working background and similar frame of mind. Reputation and legitimating</p>	<p><u>Strength ties:</u></p> <p>- Brother/personal: ● stronger (he becomes co-owner)</p> <p>-Workmate/personal: ● weaker because lost of contact (eventually disappears)</p> <p>-MNE/business: ● stronger</p> <p>- Staff of acquired company/business: ● ended, subsidiary was closed because problematic relationship with employees.</p> <p><u>New ties:</u> Plenty of them, mostly business ties (local and weak), and personal (mostly local and weak). Strong personal international ties are those used to access the international markets. Pre-founding personal tie (●) and initial business tie (●) lead to new business</p>	<p><u>Subsequent International OI (Peru, 2005) with 220</u></p> <p><i>Discovery:</i> Alpha was looking for a new market to produce. A friend of the founders in Peru was the trigger (Facilitator: by strong tie)</p> <p><i>Evaluation:</i> Analysis if the environment of the country was appropriate.</p> <p><i>Exploitation:</i> Firm's shares offered to their friend. Friend was in charge of getting skilled workers and financial funds. (Enabler: by strong tie)</p> <p><u>Resources Acquisition</u> Three dimensions together help the firm on learning process + acquisition of financial resources</p> <p><u>Entry mode:</u> FDI (eventually, direct sales)</p> <p><u>Learning processes:</u></p> <p><i>Market learning:</i> Yes, the firm acquired specific market knowledge (of Peru) grafting a friend as a new partner to avoid uncertainty. In U.S.A. market development, the MK is obtained by direct experience. The founders learned of the past decisions, its expansion to the East Coast and other West Coast cities went through a representative office since FDI did not work for Alfa.</p> <p><i>Technological learning:</i> Yes, Alpha started with outsourcing activities and then develops its own products and services. Outsourcing activity allowed to extract and transfer to Alpha, knowledge about process and trending (vicarious and grafting learning)</p>

Stages	Social capital	Sources	Effects on Internationalization
		relationships in the international markets. In domestic market, new business relationships provide new domestic opportunities, and potentially some internationals. From all those networks Alpha tries to manage the useful ones in order to obtain growth.	<p><i>Internationalization learning:</i> No, the firm had limited knowledge of FDI. The firm needed a production centre outside Costa Rica, not sale in other market. They did not know how to do it, that is the reason they add a new partner to implement investment decisions. Their most important market, and sometimes the only, is the U.S.A.</p> <p><u>Alliances practices:</u> One of the founders has a diversified portfolio of stocks of Costa Rican software firms. With these firms usually to do outsourcing, rental brand and direct reference activities.</p>

● = Long-time personal relationship

● = Long-time business relationship

## **5.3 Case study 2: Firm Beta**

Beta is a game development studio located in Costa Rica whose business is the development of casual and engaging game titles, in particular, the software development and the artwork. The firm has achieved success in the design and development of games, with particular emphasis on game play and the overall player experience.

### **5.3.1 Founder background**

The founder and CEO of Beta used to live in USA as well as having studied in that country. He has a postgraduate degree in systems engineering and previously he created another software firm. By the time he left his former firm to create Beta, he had worked there for 17 years and the software firm exported to 14 different countries, with headquarters in LA and offices in North and South America.

### **5.3.2 Pre-start up/venture creation**

Beta began informally in 2003. The idea of creating his own video game came to the founder when his son wanted a new video game to play. He worked on it at home (outside work hours) while still working in his software firm. He decided look for two partners in order to raise some money to develop the video game he wanted. Hence, at the start there were three persons working a few hours on weekdays and weekends while keeping their regular jobs. This way of running the business did not work.

### **5.3.3 Pre-internationalization**

The founder decided to start again in 2005 with new partners although he kept the majority share of Beta. The new two partners had experience in the software sector but not in the game sector. They set to work to develop a new video game. By 2005, they realized that the firm needed certification as a developer, in order to obtain the tools necessary to develop games for Microsoft or Nintendo, for example.

In January 2007 Beta formally commenced operations with three full-time employees, offering software engineering services (outsourcing). During the first (formal) year of trading, the idea of being a video game developer was just a project; the outsourcing of software engineering services was the way to support the firm. Because of his previous

background and the particularity of the video game sector, the founder/CEO knew the orientation of the firm had to be international from the beginning. Moreover the domestic market was small and did not offer any potential to grow, even to survive.

*“Costa Rica [as a market] is very small to expect a continuous growth and the potential local customers do not pay a fair price for our products.” (Beta CEO and founder)*

Through the Information Technology Chamber of Costa Rica (CAMTIC), Beta was matched with a firm from the USA which was looking for a Costa Rican partner. This company sold educational video games, videos for children, and photography editing software. This company had the licence of IP agreement from entertainment firms to sell their products in supermarkets. Beta therefore was very interested to do business with them because it meant cash flow and work with a company near to the video sector. The two firms made contact at the end of 2007.

The foreign firm had a choice of partner firms to work with and was not initially sure enough to choose Beta, because it was a new firm without any experience or references. The management team of this company was invited by the Beta founder to Beta’s office in Costa Rica in order to show them how the firm worked. After this business trip, they offered Beta the business. The Beta founder explained that his firm had a differentiation strategy which is not about cost but about near-country advantages. Beta did the first job for free just to generate goodwill.

*“We invited the managerial team to visit Costa Rica; we went out to do some tourism and also some ‘business lunch’ in our building. We were new [in the business] so we did not want to give the wrong impression about working for free. It had its cost, but it worked.” (Beta founder)*

Beta developed and maintained this relationship until 2009 when the US Company went into liquidation due the global financial crisis. In early 2008 the US Company represented 100% of Beta’s sales, although by the time it went out of business in 2009 this had reduced to about 60%. In 2007 Beta had 100 employees but this had decreased to 60 by 2009.

Between 2008 and 2009 Beta started to do business with other US firms, through outsourcing and some small joint projects. However, its first customer (the US company) still represented its most important customer. In 2008 a new large company wanted to do some business with Beta. Beta had been recommended to this new company by another Costa Rican software firm (Alpha). The Alpha founder and the Beta founder met in consequence of a fundraising drive by the Beta founder in 2007 and, as an investor in Beta, the Alpha founder recommended Beta to this new company.

Although neither was from video game sector, they were related to it, specifically with retailers from the sector. That is why Beta staff tried to develop relationships on the personal level and to obtain some references in order to work with game sector firms. It finally happened when the first customer, the US Company, went out of business. The owners of the two firms had developed a personal relationship. Because of that, the owners of the folding US Company recommended Beta to some video game firms. This is how Beta started in the video game sector.

When Beta started in the video game sector, outsourcing was its main and only service, but the original idea was always to enter the gaming industry. The firm needed the tools to develop games for Nintendo, Sony or Microsoft, which verify the experience and the quality of each video game firm before giving them the necessary tools.

The Beta founder usually attended the most important events in the video games sector, one in the USA, one in Europe and the last one in Asia, each year. Those events are for game developers. They would first do an online match-making and then meet the firms to know their needs (sales, develop, trends) in relation to video games. This connection with the video game industry is the best way to sell products, but also is also very expensive.

Once Beta had expertise, qualifications and some relevant references, it redefined its strategy in order to acquire the tools and develop its own video games. Meanwhile the firm had to survive until it was ready to enter the video game market. Beta started to develop its own video games, while it looked for new customers in the sector.

Each video game is a new history that represents the boundaries of a video game firm. This outlook means that the resources needed to develop profitable video games and look for the next big hit are considerable. Beta had participated in different programmes of financial support with commercial and non-commercial banks, and had issued some shares in the firm to new partners.

*“One video game could cause big losses to the firm or could make you a millionaire.” (Beta CEO)*

The best marketing for Beta is references from word-of-mouth or business to business, because some of the most important companies in the market (e.g. Disney Company) do not give any credit to the game developers. A game developer cannot mention that it has worked with a big company like Disney because of this policy, and Disney cannot give any information about its suppliers (including game developers), and thus no one can confirm the relationship.

The game developer conferences produced many relationships in the video game sector, every year there were new opportunities. Beta now works in video games for its customers' portfolios as well as working on its own video games and outsourcing. The interactions between Beta and its customers are usually through e-mail, personal interactions are very scant in this type of business.

By 2013 Beta's sales were 50% from outsourcing and 50% from video games. The customers were gained from business fairs (30%), and the other 70% from references.

Most video games have intrinsic cultural issues integrated within them; this means that during the development phase of the video game, the engineers have to be aware of the cultural setting in order to absorb the right knowledge of country values. Thus Beta adopted the strategy of near-shore market with cultural similarity, and prefers to do business all over the USA instead of Central America.

Beta now has a global reach (via Apple store, Google store or downloads from internet). Beta has developed four of its own games; two of them have produced losses and the



other two have had a moderate success. The firm is still trying to develop its big hit. It is considering a merger with its main customer in order to fund more video games.

#### **5.3.4 Post-Internationalization**

By 2013, 90% of Beta's customers were from the USA and 10% from Europe but the relationships with these European customers were established in the USA through US companies. The project in Spain consists in developing a video game for a football team and the one in the UK consist in developing a video game for a company. Once the game are produced and implemented, it is unclear what would happen with those two businesses. Beta has undertaken some small and unimportant projects in the domestic market, but does not want to get involved in any national project.

### 5.3.5 Analysis of case study 2: Firm Beta

**Table 18 Description of the development of social capital and the internationalization process of Beta**

Stages	Social capital	Sources	Effects on Internationalization
<b>Pre-start up/venture creation</b>	<p><i>Structural</i> -Is mainly based on the founder's relationships with their colleagues and relatives</p> <p><i>Relational</i> -Scant interaction with colleagues and the extended family. Limited trust</p> <p><i>Cognitive</i> -They all are from software sector with similar work background.</p>	-Domestic weak ties (colleagues-partners/personal)	
<b>Pre-internationalization</b>	<p><i>Structural</i> -Is mainly based on institutional, personal relationships and one business relationship.</p> <p><i>Relational</i> -Based mainly on occasional personal interaction and daily interaction with client. Limited trust</p> <p><i>Cognitive</i> -Similar interesting. Similar frame of mind. Reputation</p>	<p><u>Strength ties:</u> - Colleagues and partners/personal: weaker and deleted. No progress at work, scant interesting in the firm. (former partners)</p> <p><u>New ties</u> - Domestic weak ties (personal): the new co-owners bring their previous relationships</p> <p>-International weak tie (first customer/business)</p>	<p><u>First International OI (USA, 2007)</u> <i>Discovery:</i> An institution linked U.S.A. company with Beta. Beta agreed to evaluate the opportunity. (No relation with pre-founding social capital)</p> <p><i>Evaluation:</i> Employees skills according to the outsourcing project. (No relation with pre-founding social capital)</p> <p><i>Exploitation:</i> The Costa Rican firm (Beta) had not enough trustworthiness according to USA firm. The founder invited the managerial team to Costa Rica and worked for free on the first project in order to generate trust. (No relation with pre-founding social capital)</p> <p><u>Resources Acquisition</u> No relation with social capital in this stage. FMK, IK and Product/Tech knowledge are related to prior knowledge of the founders</p> <p><u>Entry mode:</u> Direct sales (through outsourcing)</p>

Stages	Social capital	Sources	Effects on Internationalization
<i>Post-internationalization</i>	<p><u>Social capital changes</u></p> <p><i>Structural</i> - Social capital is mainly based on business relationships with USA companies partner and one domestic software firm, institutions and two European partners</p> <p><i>Relational</i> Friendship of long term interaction-trust -Business relations abroad: Customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness Business relations domestic: Based mainly on long business interactions, generating trustworthiness and trust</p> <p><i>Cognitive</i> -Almost all social relationships are from video game sector. They share similar working background and similar frame of mind. Legitimizing</p>	<p><u>Strength ties</u></p> <p>- Co-owners (personal) : stronger</p> <p>-First international customer: became strong, but ENDED due to bankruptcy years later.</p> <p><u>New ties:</u> Mostly international business ties (weak). The firm tries to change the key business relationships to a personal one. The founder fell more comfortable and thinks is more beneficial in order to obtain new references. The firm had domestic business relationships that lead to potential international business. The founder creates new network through the fairs.</p>	<p><u>Subsequent International OI (Spain, 2013)</u></p> <p><i>Discovery:</i> Beta had an unexpected relationship with a company of Spain (Facilitator: by weak tie)</p> <p><i>Evaluation:</i> The firm will accept the opportunity only if is a video game.</p> <p><i>Exploitation:</i> Skype meetings to learn about the product and culture.</p> <p><u>Resources Acquisition</u> Three dimensions together help the firm on learning process + financial resources</p> <p><u>Entry mode</u> Direct export</p> <p><u>Learning processes:</u> <i>Market learning:</i> No, culture is critical component of video games they have plenty knowledge of USA market but not from another two countries, the language results irrelevant. MK is sourced by internal information. New MK leads to new products and techniques.</p> <p><i>Technological learning:</i> Yes, Delta started with outsourcing activities and then develops its own video games. Direct search through the fairs, keeps Delta updated in video game trending. They also learn through its networks with its outsourcing customers (vicarious).</p> <p><i>Internationalization learning:</i> No, this type of firm generally interact through electronic media</p>

Stages	Social capital	Sources	Effects on Internationalization
			<u>Alliances practices</u> : Outsourcing and direct reference for foreign projects with another CR software firm

● = Long-time personal relationship

● = Long-time business relationship

## 5.4 Case study 3: Firm Gamma

Gamma specializes in custom software development for private and public companies. It used to work with diverse technology platforms and decided to introduce integrated software solutions to traditional systems looking for competitive advantages which became the main target of Gamma's business.

### 5.4.1 Founder background

The only founder is a systems engineer with postgraduate studies in software. He has previous experience in the software sector; he used to work for a firm located in Costa Rica. He worked in the Research and Development department, creating share tools for different technologies. This firm belongs to his university professor so he was both the professor's student and his employee.

### 5.4.2 Pre-start up/venture creation/ pre-internationalization

The founder considered that the graphic environment should be the niche market for the firm that he was working for, however, the owner, and his former professor, disagreed. The Gamma founder strongly believed in his idea and decided to create his own firm. Gamma, therefore, was born producing environment graphics for customer solutions.

*"I had a technical disagreement with my boss, so I started to think about creating my own firm." (Gamma CEO)*

Created in 1993 Gamma provides custom software development with environment graphics solutions. The financial resources were initially provided by the founder with two employees as well as himself as CEO. In its first project, Gamma collaborated with another Costa Rican firm to develop a telephonic consult tool. This first project was possible thanks to a reference from a former workmate who mentioned Gamma to the other Costa Rican firm. Both firms matched and they started to work together.

Soon after Gamma's foundation, a multinational company from the USA was looking for a Costa Rican software firm to develop a new project. An employee of Gamma's first customer linked Gamma with the US Company. They started to work together on a

pilot programme in Panama, consisting in bring technology to every banana plantation in Latin America, including hardware and software services. Gamma started the project in Panama. Once they developed the product (new production processes), they must implement it in any Latin America subsidiary. Gamma collected statistical data, financial information, employees' profiles, etc., from every banana plantation in every Latin American country. This project enabled sustainable growth for Gamma.

*“The first two projects had not anything to do with environment graphic customer solutions, but at the beginning you take any kind of project.” (Gamma CEO)*

In fact, in its second year Gamma started growing rapidly, so fast that it became an obstacle for its performance. Gamma did not have the organizational structure and it could not meet the challenges derived from fast growth. The firm hired four more employees during the second year. In 1996 Gamma added to its problems of performance, problems of product quality and of organizational management. Because of its rapid internationalization, there were high profits at the beginning, due to the low operating cost that was the characteristic of Gamma. After a few years, however, these problems, mixed with a highly competitive industry, implied deteriorating profits. In 1996 the firm had 20 employees.

The relationship with the US Company lasted seven years (until 2000) until due to internal crisis of this company, the project was closed and the relationship ended. At the end, the relationship between the firms was distant.

*“The relationships had to be developed in order to improve the product and hopefully it would help to find another client, but it never happened.” (Gamma CEO)*

#### **5.4.3 Post-internationalization**

Gamma immediately started other project. This new project was possible because of university friends of the founder. It was a domestic project.

In 2003 Gamma had 30 employees and this number became a problem. The rotation of employees is common practice in the ICT sector, so the cost of training is very high and

Gamma could no longer afford it. In 2005 the firm lay off 20 employees, and hired a new team management to improve its competitiveness. From 2000 to 2008 Gamma had other crises which almost ended in bankruptcy. The founder started to rethink the business organization with new employees and new strategies. Gamma did not have any more foreign activities. The CEO did not know if as a part of the solution the firm had to avoid international markets or not.

*“It was a critical situation, the firm did not have any monitoring of its business performance and I did not know what was important and what was not.” (Gamma CEO).*

Moreover, as a personal matter, the founder wanted to keep a balance between family and work so this became a hard decision for him. He preferred to trade only in the domestic market and decided to do business only with companies in Costa Rica. To achieve this new strategy he explored new products in different market niches (e.g., bank software). He rebuilt the whole firm in 2008, hired more managers and created separate departments: projects department, financial department, and CEO. The new team and the new way of taking decisions within the firm gave a critical importance to foreign markets, utilizing past social networks to increase foreign sales again.

In the domestic market Gamma started to prefer institutional customers, because they are easier to grow and easier to handle. However, with the global financial crisis hitting hard the firm and the team managers needed to attempt internationalization again as soon as they were ready.

*“The software market nowadays is hyper-competitive, it is harder and harder to obtain profits if no innovations are launched and/or new market niches reached.” (Gamma CEO)*

The pursuit of internationalization started again in 2010, but with a different strategy. Gamma created a holding firm to enter foreign markets, while the original firm kept the domestic business. The managerial team decided to separate their activities; they implemented performance evaluations, objectives and budgets for each department of the firm.

By the time of the interview the holding firm has three employees working in the mobile sector, undertaking joint ventures with their foreign partners and sharing marketing. The firm changed from custom software development to consume massive products because custom software proved too expensive and complex for the firm in overseas markets. The founder was very careful and concerned about this new process because he did not know much about how to do international business in the mobile sector or the market regulations existing in each market. This new organizational change was supervised by the CEO and the project manager. This second internationalization process was different because the software business had changed considerably, among other things.

*“In the software industry when the firm reaches the international markets again it is necessary not only to find a brand new niche but also different forms to do business.” (Founder of Gamma)*

In 2013 Gamma had 55 employees, the holding company was in the red but the original firm subsidized it, as expected. It sells package software, expecting profits on 2014.

In the new business model, Gamma has specific resources for internationalization and the CEO prefers to do it slowly, thinking about the new niche market and the size of the business. The international strategy includes using its overseas personal networks as well as new alliances in the domestic market to look for foreign markets. The domestic market is highly competitive because not only Costa Rican firms but also foreign firms are present.



#### 5.4.4 Analysis of case study 3: Firm Gamma

**Table 19 Description of the development of social capital and the internationalization process of Gamma**

Stages	Social capital	Sources	Effects on Internationalization
<i>Pre-start up/venture creation//pre-internationalization</i>	<p><i>Structural</i> -Social capital is mainly based on relationships with workmates</p> <p><i>Relational</i> -Based mainly on daily-interaction but limited trust</p> <p><i>Cognitive</i> -They are workmates with similar skills in environmental graphics. Shared similar work experience</p>	<p>-Domestic weak ties: (workmates/personal)</p> <p>-International weak tie (MNE/business)</p> <p>-Domestic weak tie (firm/business)</p>	<p><u>First International OI (Panama, 1993)</u> <i>Discovery</i>: His workmate linked him with U.S.A. MNC (enabler: by pre-founding weak tie)</p> <p><i>Evaluation</i>: He needed human and financial resources before accept the opportunity (No relation with pre-founding social capital).</p> <p><i>Exploitation</i>: All employees of the firm moved to Panama to start the project (No relation with pre-founding social capital).</p> <p><u>Resources Acquisition</u> -FMK and IK acquisition from current activities. Product/Tech knowledge mainly acquired from prior experience.</p> <p><u>Entry mode</u>: direct sales</p>

Stages	Social capital	Sources	Effects on Internationalization
<b><i>De internationalization</i></b>	<p><i>-Structural</i> The structural dimension depended totally on USA MNE relationship by that time, no new ties added after this one.</p> <p><i>-Relational</i> The ended of the relationship with MNE, due to the world economical crisis and lack of trust was the end of their international relationships. In domestic market he firm had only one client. The internal organization of Gamma was characterized by scant direct interaction between managerial team, with limited trust.</p> <p><i>-Cognitive</i> Similar frame of mind but not enough trustworthiness.</p>	<p><u>Strength ties:</u></p> <p>-Domestic firm tie: decay because scant interaction.</p> <p>-Workmate personal tie: disappearance, no interaction at all.</p> <p>-International business tie: ended</p>	<p>(De-Internationalization: 2000)</p> <p>Scant social capital, sourced by just one actor; once economic crisis arise, the relationship ended. There was no reaction margin due to the absence of organizational structure of GAMMA.</p>
<b><i>(Re) internationalization</i></b>	<p><i>Structural</i> -The structural dimension based on one domestic relationship. Then, enlarged with two new managers with previous experience and previous relationships in domestic and foreign markets</p> <p><i>Relational</i> -Close interaction- trust</p> <p><i>Cognitive</i> -Based on domestic reputation</p>	<p><u>New ties:</u></p> <p>-Domestic weak tie (former university mate/personal)</p> <p>-Domestic weak tie (firm/business)</p>	<p>(2013)</p> <p>The firm still face organizational problems that arise when firm start to growth again. This second time, Gamma, almost went to bankrupt. Thus, the saving process began. The founder though about closes the firm at all, but he changed his mind and reorganised it. Two new managers were added to the firm. The new managerial team creates a holding firm to back international activities and divides the firm into departments. By the time of the interview the firm were on its way to do business with a firm in different countries of Central America</p> <p><u>Resources Acquisition</u> FMK, IK and Product/Tech knowledge. Mainly trough new managers and direct search.</p>

## **5.5 Case study 4: Firm Delta**

This Latin America firm has Information Technology Solutions and Environmental sustainability in order to improve a comprehensive competitiveness.

### **5.5.1 Founders' background**

Delta was founded by two brothers. The current CEO created the firm when he was aged 23 and his brother was aged 20. Both are systems engineers trained at a technology university in Costa Rica. The CEO also obtained an MBA in Spain. After he finished postgraduate studies he returned to Costa Rica. In 2001 he was teaching at a Costa Rican university. There, one of his students told him about a business opportunity in the firm the student had been working in which was looking for software firm to do business with.

### **5.5.2 Pre-start up/venture creation/ Pre-internationalization**

The two brothers founded the firm, leveraging this first opportunity. The main founder did not quit his job as a university teacher. They hired two advanced students to start the work. They succeeded and by the end of the first year, there were eight employees working in the firm. The initial product was software engineering services developing customer software solutions that could be integrated to every firm's needs. The first two projects were possible because of the brothers' personal networks.

The second project (the first international one) was an outsourcing business for a Mexican company. Delta did not produce any product at the beginning; it offered software engineering services only.

Since Delta had a rapid development of its domestic customer portfolio, including multinational companies located in Costa Rica, Delta took those relationships (especially with MNEs) as its way to internationalize.

In 2007, the two founders invited a family member to invest in Delta. The firm needed new ideas, financial resources and a strategy for growth. Previously, both regarded internationalization as a main issue. The new member accepted the invitation and all three decided how and when to continue the internationalization.

*“The period between when the market decision is made and the business starts, should not last more than three weeks since then.” (Main founder of Delta)*

Delta started specializes in Microsoft technologies. This means that every single employee had to pass tests in order to obtain certification. After fulfilling the professional certification requirements, Delta became a Microsoft partner. On reaching a specific level, Microsoft would invite the firm to do business with them and link with new partners. Microsoft tries to link a certified firm with domestic or foreign partners, inside and outside Costa Rica.

While Delta was on its way to the highest level of Microsoft certification, the opportunities for the firm were growing, in both international and domestic markets. However, the domestic market did not represent a big change for Delta’s business because its market niche was narrow. In the other hand, the domestic market was very useful for its internationalization and growth.

Microsoft organized meetings with other gold members (the highest level of Microsoft certification). The founders of Delta meet and do business with other gold partners from other countries; however, Delta has to do business with the countries that Microsoft suggests.

*“One distinctive feature in MNCs is although they are global, they do regional business.” (Delta founder)*

*“Each MNC has its own regional ecosystem and it is important to recognize it.”*  
(Delta Founder)

The MNCs have a lot of negotiation power so Delta was obliged negotiate in one of two bands, one band is to accept a fixed price for its services or products, and the other band is to receive market prices. The choice depends on the global politics of the MNC.

In 2004 Delta developed a product for Costa Rican bars, but two years later it cancelled production to concentrate on software services. However, the firm still gave pubs support for that product as well as support for other software products.

### **5.5.3 Post-internationalization**

The Mexican customers suggested to Delta it should make an incursion in the niche of business intelligence (BI). Due to the scant human resources in the Costa Rican ICT sector, Delta decided to look for qualified foreign employees. One of the CEO's university friends was from Ecuador. He told him the new idea to expand Delta's business outside Costa Rica. The Ecuadorian friend agreed and became a partner in Delta, running the new office. The Ecuadorian office is not a production centre but just an outsourcing centre. Delta needed the new office to keep its competitive advantage in outsourcing and to increase the skilled human resources available. This is a key issue. Delta decided to explore the opportunity because in Costa Rica skilled employees are expensive compared with the rest of Latin America. That is why the firm had to go abroad and create new offices with local employees. When it opened the new production centre in Ecuador the number of employees increased to 100. In Ecuador, Delta started to do business in the domestic market until the end of 2010.

At the same time, in 2010 a Dominican firm proposed an alliance to share customer names information and explore work together in that country. The Delta CEO knew this firm from an export promotion meeting years ago, so they finally decided to open a new office in the Dominican Republic. Just before the opening of the Dominican Republic office, Delta change its partner doing another alliance, this time with a Costa Rican software company. The new alliance included software implementation, the partner selling the software and Delta providing the implementation service. The relationship with the Dominican partner did not last, however, because there was no trust between them.

Also in 2010, Delta bought a firm and turned into a corporative group in 2011. Although Delta had to take out of the market two brands (from Oracle platforms), the firm gained new services customers and could think about growth. Delta opened two more offices outside Costa Rica: one in El Salvador and one in Panama. The one in El Salvador started with domestic employees just providing services for the local market. The one in Panama has Costa Rican employees to provide services just for the domestic market. Delta went to El Salvador because of the lack of skilled available employees in Costa Rica and to avoid paying extra money to hire employees from other software

firms in Costa Rica, which are already expensive. Thus, Delta entered to those markets through a friend.

As noted above, Delta also has a partnership to implement Microsoft software and has obtained gold-level certification in learning services, the highest award possible for Microsoft partners. Delta has developed its business in three market niches: corporations (MNEs), mid market (no institutional domestic firms)—small market (outsourcing), and finally institutional customers. It has three offices located in different cities Costa Rica. The firm uses MNEs to expand its international activities, and has done so since 2009 as a strategy. The development of the relationship between Delta and its key partners has multiple levels: it begins with a personal relationship with the general manager, followed by the relationships of the each member of the work team with their colleagues. Delta has invested in a spin-off, a firm from a university incubator. One-fifth of Delta sales are from abroad. MNEs are quite important in the domestic market and Delta also has a relationship with Alpha firm.

The relationships of Delta with other firms are long lasting (8 or more years); time enough to turn business relationships into personal ones. There was just one exception to this rule for them.

*“I prefer personal relationships but there is always an exception and the exception would be in case we [the firm] need to survive.” (Delta Founder)*

Delta does not yet have a presence in the US market; its main markets are Central America and the Caribbean (95% of the international sales). Mexico and Colombia are the most important potential markets for growth. In the near future the firm is planning to enter the US and Canadian markets. For Delta, the Costa Rican Export Promotion Agency has played an important role, linking it with foreign firms when the firm started to expand its international activities. Later Microsoft arranged Delta business meetings in different countries. Central America countries are the neighbour markets.

*“The Central American region is our natural market” (Delta, founder).*

### 5.5.4 Analysis of case study 4: Firm Delta

**Table 20 Description of the development of social capital and the internationalization process of Delta**

Stages	Social capital	Sources	Effects on Internationalization
<i>Pre-start up/venture creation//pre-internationalization</i>	<p><i>Structural</i> -Personal relationships with friends and students of the founder</p> <p><i>Relational</i> -Based mainly on occasional interaction between founder and counterpart. Limited trust</p> <p><i>Cognitive</i> -They were friends at the University and his students. They have similar experiences and concerns</p>	<p>-Weak domestic ties: (student and friends/personal)</p> <p>-International weak tie (Mexican firm/business)</p> <p>-Domestic weak tie: (firm/business)</p>	<p><u>First International OI (Mexico, 2001)</u> <i>Discovery:</i> A student of the founder linked him to a Mexican firm (Facilitator: by pre-founding weak tie)</p> <p><i>Evaluation:</i> He needed skilled employees (No relation with pre-founding social capital).</p> <p><i>Exploitation:</i> after some meetings there was final agreement about financial issues (No relation with pre-founding social capital).</p> <p><u>Resources Acquisition</u> General MK and Product/Tech knowledge sourced by prior knowledge. Specific MK and IK from current activities</p> <p><u>Entry mode:</u> outsourcing</p>

Stages	Social capital	Sources	Effects on Internationalization
<b>Post-internationalization</b>	<p><u>Social capital changes</u></p> <p><i>Structural</i> -The structural dimension based on firm relationships with domestic firms (locals and MNC subsidiaries), international firms (clients), the friends in charge of the subsidiaries (Ecuador and Salvador) and institutional organization.</p> <p><i>Relational</i> -Personal relations abroad: based on long-term interaction: trust Friendship of long term interaction-trust -Business relations abroad: Old customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness Business relations MNC subsidiaries: business relationships that generates trustworthiness and trust</p> <p><i>Cognitive</i> - Personal relations share similar frame of mind and they work together. Business reputation and legitimating</p>	<p><u>Strength ties:</u></p> <p>-Student and friends/personal ties: decay because scant interaction.</p> <p>-Domestic firm tie : become strong</p> <p>-International firm tie : unchanged</p> <p><u>New ties:</u> Most of the ties are business ones, and some personal to enter and develop foreign markets. MNE subsidiaries in Costa Rica bring Delta knowledge through its certifications and international business opportunities. Initial business ties (●) lead to new business relationships in domestic and international markets. In domestic market, MNE relationships provide new opportunities as well as</p>	<p><u>Subsequent International OI (Ecuador 2008)</u></p> <p><i>Discovery:</i> Delta needed a new production centre and an university friend from Ecuador was the trigger (Enabler: by strong tie)</p> <p><i>Evaluation:</i> Analysis if education level and professional expertise.</p> <p><i>Exploitation:</i> Firm's named his friend as regional director. Delta reaches for offices and skilled workers. (Facilitator: by strong tie)</p> <p><u>Resources Acquisition</u> FMK and IK acquired through friend, incorporated to the managerial team in SA. Three dimensions together help the firm on Product/tech K + financial resources, particularly the relational dimension (Trust)</p> <p><u>Entry mode:</u> FDI</p> <p><u>Subsequent International OI (Dominican Republic 2010)</u></p> <p><i>Discovery:</i> Public Institution linked Delta with partner from that country so they decided to do business in DR. However Delta changed its decision and they enter to DR market with a Costa Rican software firm. (Enabler: by weak tie)</p> <p><i>Evaluation:</i> Market research.</p> <p><i>Exploitation:</i> quickly agreement with CR firm. They sell the product and Delta implements it. (Facilitator: by weak tie)</p>



Stages	Social capital	Sources	Effects on Internationalization
		international. Through outsourcing activities the firm had learn to extend the relationship with clients to all level (managerial team, and operational team).	<p><u>Resources Acquisition</u> Three dimensions together help the firm IK and product/tech K, they do the research for FMK acquisition</p> <p><u>Entry mode:</u> Joint Venture</p> <p><u>Subsequent International OI (Central America, 2011)</u></p> <p><i>Discovery:</i> Delta needed to enlarge their production capacity and in CR there are no more inexpensive skilled workers. Delta opens a production centre in Salvador and Panama. Friend in each country helped to did it (Enabler: by weak ties)</p> <p><i>Evaluation:</i> Analysis if education level and professional expertise.</p> <p><i>Exploitation:</i> Their friend had to find the skilled workers. (Facilitator: by weak ties)</p> <p><u>Resources Acquisition</u> Three dimensions together help the firm on FMK, IK and product/tech knowledge</p> <p><u>Entry mode:</u> FDI, direct sales</p> <p><u>Learning processes:</u></p> <p><i>Market learning:</i> Yes, firm acquired specific market knowledge by graft new friend-partners.</p> <p><i>Technological learning:</i> Yes, Delta started with outsourcing activities and now develops its own</p>

Stages	Social capital	Sources	Effects on Internationalization
			<p>products and services. Also have certifications from MNE to certify their level of technological/product knowledge.</p> <p><i>Internationalization learning:</i> Yes, delta has entered different markets and in some markets have been used different entry modes.</p> <p><u>Alliances practices:</u> Join venture and sales agreement with MNE.</p>

● = Long-time personal relationship

● = Long-time business relationship

## **5.6 Case study 5: Firm Epsilon**

Epsilon is a software company with experience in business intelligence (BI) development; designing and providing technical support for its own tool called the BI Manager which is an administrative tool that transforms data into information and information into knowledge, and thus facilitates decision making.

The BI Manager provides an answer to a question as soon as the question is asked; this allows taking a big leap in the analysis quality that can be executed, giving as a result a better control of the business. Epsilon expects to implement the BI Manager in mobile systems and dashboards.

Epsilon also develops and implements indicators for the financial sector – accounting, production and inventory – that are vital for strategic decisions at the management level. Its work team is certificated by Microsoft, ITIL v 3.0 and Testing.

### **5.6.1 Founders' background**

Epsilon has three founders. One of them was, at the time, aged 33, a graduate in systems engineering from Colombia. He used to work for Oracle Colombia, and through his work, he discovered an unexplored niche market in some countries. He planned to create a software firm in Costa Rica. The second founder is a systems engineer (then aged 23) with no previous experience in software business sector. The third founder (then aged 39) had studied marketing, and had marketing experience but no software business experience.

### **5.6.2 Pre-start up/venture creation/ pre-internationalization**

As an Oracle employee, the first founder realized there were opportunities in different countries and markets, and so the idea of creating a software firm arose. Thus in 2007 Epsilon was created and located in Costa Rica. The firm started doing outsourcing and customized software products. However, the firm did not have any activity for six months until the first customer arrived.

The first customer was a US company located in Panama. Because of this, Epsilon decided to move to Panama. Epsilon was in Panama for six months until it found

another client, this time in Costa Rica. It decided to move, once again, to Costa Rica, which had better market potential than Panama. The office in Panama remains open as a representative office.

In the first year Epsilon hired three more employees. The firm is a Microsoft partner in Business Intelligence Management. Epsilon is related to other multinational companies in Costa Rica. The relationships with MNEs in the domestic market happened as a matter of Epsilon's survival, rather than from plans to internationalize.

In the second year Epsilon had nine employees

### **5.6.3 Post-internationalization**

In 2011 Epsilon opened an office in Ecuador, on the recommendation of an Ecuadorian firm with which it did business in Costa Rica. The firm decided to go to Ecuador without a contract but expecting to gain one. Epsilon expected to work with the same Ecuadorian company that it used to work with in Costa Rica. The firm decided to introduce the same domestic product as in Costa Rica: BI.

The high salaries in the Costa Rican software sector were a challenge for Epsilon. They tried to make a product with quality above the Costa Rican average, in order to meet the standards of any sophisticated market (e.g. the USA). This high quality product is essential to Epsilon to obtain references and to establish new business projects. Epsilon tries to keep its employees (and attract others) with a policy of increasing salaries, related to the quality of its products. The firm needs skilled workers in order to create high quality products that are above the local market requirements. Also it is very important to keep the employees well trained to take care of customer satisfaction.

Later Epsilon entered the US market, because of a recommendation from an MNE in Costa Rica. The Costa Rican subsidiary talked about Epsilon to another US company. This was an unexpected opportunity that Epsilon took with confidence, knowing its product was developed enough for the US market. The employees of Epsilon have international certification for innovation.

*“Most of our project opportunities are possible because of reference business; our exceptional quality goes mouth to mouth.” (Main Founder of Epsilon)*

The firm has an office in Florida and expects to open more offices in different cities across the USA. The production office would be located in Costa Rica. The US market fulfils all of Epsilon’s expectations for developing and growing. The best way to approach the US market of USA and achieve growth is to open offices in different places around the US territory, in this firm’s view.

Outsourcing is not its goal for the near future. Epsilon expects to develop products or services. Foreign sales were 20% when it started by now it represents about 15%. By now there are 20 employees and a managerial team. Epsilon used to keep long-term relationships but already had short ones because of its products.

### 5.6.4 Analysis of case study 5: Firm Epsilon

**Table 21 Description of the development of social capital and the international process of Epsilon**

Stages	Social capital	Sources	Effects on Internationalization
<i>Pre-start up/venture creation//pre-internationalization</i>	<p><i>Structural</i> -Based on the current relationships with acquaintance of the founder</p> <p><i>Relational</i> -Based on current interaction- low trustworthiness</p> <p><i>Cognitive</i> -They are colleagues with similar working activities</p>	<p>-International weak tie : (Panamanian firm/business)</p> <p>-Domestic weak ties : (MNE subsidiaries and local firm/business)</p>	<p><u>First International OI (PANAMA,2007)</u> <i>Discovery</i>: Direct search through marketing (No relation with pre-founding social capital).</p> <p><i>Evaluation</i>: Conditions of Panamanian market and its potential (No relation with pre-founding social capital).</p> <p><i>Exploitation</i>: He needed to move to Panama (No relation with pre-founding social capital).</p> <p><u>Resources Acquisition</u> FMK direct search trough the web and institutions, Product/Tech knowledge from previous experiences and IK from current activities</p> <p><u>Entry mode</u>: direct sales</p>

Stages	Social capital	Sources	Effects on Internationalization
<i>Post-internationalization</i>	<p><u>Social capital changes</u></p> <p><i>Structural</i> -The structural dimension is mainly based on the firm relationships with USA MNE and its subsidiaries, representative offices in Panama, another MNE subsidiaries and local firms.</p> <p><i>Relational</i> -Business relations abroad: MNE clients based on trustworthiness. New ones with interaction but not enough trustworthiness Business relations domestic: Based mainly on long business interactions, generating trustworthiness and trust</p> <p><i>Cognitive</i> -All social relationships are business ones. Reputation and legitimating</p>	<p><u>Strength ties:</u></p> <p>-International business tie<sup>●</sup>: become strong</p> <p>-Domestic weak ties<sup>●</sup>: become strong</p> <p><u>New ties:</u> Most of them business ties (local or international). Scant personal ties. Initial business ties<sup>●</sup> lead to new business relationships in domestic and international markets. In domestic market, MNE provides new domestic and international opportunities. Epsilon tries to establish and maintain long-term relationships through their high quality products.</p>	<p><u>Subsequent International OI (Ecuador, 2011)</u></p> <p><i>Discovery:</i> Unexpected advice from Ecuadorian MNE to enter in that market. (Facilitator: by strong tie, MNE subsidiary)</p> <p><i>Evaluation:</i> Analysis of the general environment of the country.</p> <p><i>Exploitation:</i> Firm was very confident of their product (BI, Business Intelligence) and opened an office in Ecuador without any contract. MNE finally started a business relationships with them (Enabler: by strong tie, MNE subsidiary)</p> <p><u>Resources Acquisition</u> Three dimensions together help the firm on IK, FMK acquisition through direct search. Product/tech knowledge was acquired internal to the firm, new process and techniques.</p> <p><u>Entry mode:</u> direct sales</p> <p><u>Subsequent International OI (USA, 2011)</u></p> <p><i>Discovery:</i> Unexpected advice from USA MNE that linked Epsilon with USA company in USA (Facilitator: by strong tie MNE subsidiary)</p> <p><i>Evaluation:</i> Analysis of the quality of their products.</p> <p><i>Exploitation:</i> Firm was very confident of their product (BI, Business Intelligence) and make different contact with USA company. (Enabler: by strong tie MNE subsidiary)</p>

Stages	Social capital	Sources	Effects on Internationalization
			<p><u>Resources Acquisition</u> Three dimensions together help the firm on learning process + financial resources</p> <p><u>Entry mode</u>: export</p> <p><u>Learning processes</u>:</p> <p><i>Market learning</i>: Yes but limited because market knowledge acquisition was through MNE.</p> <p><i>Technological learning</i>: Yes, Epsilon based its relationships on high quality products. This allows the firms a product partnership in USA market</p> <p><i>Internationalization learning</i>: Yes, The firm mainly uses direct sales.</p> <p><u>Alliances practices</u>: Active looking for a product development partner in USA.</p>

● = Long-time personal relationship

● = Long-time business relationship



## **5.7 Case study 6: Firm Kappa**

Kappa has carried out numerous projects since 2002 in the areas of digital marketing, website design and optimization, online marketing studies and traffic analysis, software and systems architecture for web-based systems, and high-level strategic consulting.

### **5.7.1 Founder's background**

Kappa was formed in 1997 by three partners although they did not launch the business until 2002. Two of the partners were US citizens who had been living in Costa Rica for more than five years, and the third was Costa Rican. None of them were from the business sector and their ages were between 27 and 33. One of them has a postgraduate degree in systems engineering, the other US citizen has graduate studies in sociology (main founder) and new technologies. The Costa Rican partner studied graphic design in Costa Rica.

### **5.7.2 Pre-start up/venture creation**

The three founders met in Costa Rica and proposed to create a firm. They believed that the best way was to buy a company that was not in use and thus avoid the red tape of formalization. Kappa was created as a firm of web developers offering infrastructure for websites. They worked with NGOs in Costa Rica, improving their visibility to the world in order to obtain financial resources.

### **5.7.3 Pre-internationalization**

During the first year in operation, 2002, Kappa worked with NGOs located in Costa Rica, giving them visibility and facilitating their fundraising. Many of these funds came from the US government and when it began to reduce the transfer to NGOs around the world, including Costa Rica, things began to change.

In 2003 Kappa changed its brand and created a new one with a new management team. There were six partners in 2003 instead of three. The Costa Rican partner left the firm and four new partners joined. This change also involved human resources; the number of employees dropped from 20 to 11 in 2003. Kappa kept producing the same product

(web development) but started moving from institutional customers to commercial customers.

In 2006 Kappa, as a member of the ICT Chamber of Costa Rica, accepted a business opportunity to start exporting to the USA. Firm Alpha recommended the firm to a US company in order to undertake a specific project.

*“This way to reach the US market was very useful for us [Kappa] because we did not know much about the US software market.” (Main founder of Kappa)*

The firm had some knowledge about the US market, but not of the software market in that country. This was an opportunity to gain market knowledge and eventually make some alliances in the near future.

#### **5.7.4 Post-internationalization**

By 2010 Kappa had 15 employees and had created a firm in the USA, representing sales and management accounts. All the products sold through this company were produced by Kappa. The management team considered having a subsidiary was important in order to sell their products and doing it with employees from the USA.

*“Working with USA employees in our subsidiary firm in USA, we may improve the relationships with the local customers.” (Main founder of Kappa)*

Kappa is still a web developer, but this niche market had changed. Web developer services were the most attractive part of the business of Kappa. Today the company is changing partners again, because one of the partners left the firm. Therefore, the rest of the team thinks it is a good opportunity to reorganize the company again.

International development was not spontaneous, better to say it occurred casually. The organization of the company was not suited growth through international activities.

Sales in the USA accounted for about 20% when the company began its international activities, current sales to that market are around 35%. It is trying to push its strategy through an intermediary that allows it to reach all USA market.

The relationship with Alpha still stands and is a good idea, but Kappa has been developing other partnerships. The relationship between Kappa and Alpha was possible due to the relationship with Beta. This relationship started as the business relationship which allowed Kappa to achieve internationalization. Kappa did not then have the skills to do business abroad.

*“The way to reach [entry mode: firm acquisition] in the target country [USA] was because we had a ‘role model’, that is the only way we knew it.” (Main founder of Kappa)*

The first international business was in alliance with Alpha. Then another firm joined Kappa as partners to start selling its product as “white products”.

The development process had a growth phase and then a decline because Kappa did not know how to handle two firms in two different markets. At the beginning the option was to separate the firms to improve the performance management of the USA office. Moreover the managerial team had different points of view about how to manage the internationalization.

Kappa is also trying to do business in Germany, it has found a similar business to the one it has in the USA and is negotiating. It is a different type of business, however, because in the USA, Kappa sells and develops the product, while in German it will be a sales representative.

The domestic market is not big enough for Kappa to grow (or survive) so it had to seek and remain in the international markets. The USA is a big country and to manage the office there produces management “exhaustion”, but above all it is very important to do it.

The main founder thinks that the size does not matter to do international business; but it does matter to do it with a firm of the same size, through dealer or brokers. The culture distance is important for the foreign partner. In terms of the US market, the business environment and how to do business is quite different from Costa Rica. The US is more proactive, formal and prompt. The business with US companies is better in terms of

price; they pay higher prices than in Costa Rica or other Latin America countries. A good product has a lot of potential to be developed in a fair period of time.

Certifications are necessary for Costa Rican firms if they want to succeed in the USA. There are good business opportunities in the US market within the US Latin community. These opportunities, as well as language, caused some US firms to look for relationships with Latin American firms. While the USA is the most important partner of Costa Rica there is a high probability that some US companies give preference to another US companies located in Costa Rica.

The domestic market is important but it is not enough. Some day the international sales will be more important than domestic sales. The Kappa CEO is not very sure about what a firm needs to succeed in its internationalization (to the USA): installed capacity or culture.

### 5.7.5 Analysis of case study 6: Firm Kappa

**Table 22 Description of the development of social capital and the internationalization process of Kappa**

Stages	Social capital	Sources	Effects on Internationalization
<b>Pre-start up/venture creation</b>	<p><i>Structural</i> -Based on the personal relationships with acquaintance of the founder</p> <p><i>Relational</i> -Based on personal interactions. Some trust</p> <p><i>Cognitive</i> -They are new friends in the country and have similar vision of the world.</p>		
<b>Pre-internationalization</b>	<p><i>Structural</i> -Social capital is mainly based on firm relationships with NGOs and other software firm</p> <p><i>Relational</i> -Based mainly on sporadic business interaction and limited trust</p> <p><i>Cognitive</i> -Similar frame of mind and experience</p>	<p><u>New ties</u> -Domestic weak ties (domestics firm/business)</p> <p>-International weak tie (USA company/business)</p>	<p><u>First International OI (USA, 2006)</u> <i>Discovery:</i> An institution liked Alpha and Kappa. Alpha in turn linked Kappa with USA company. (No relation with pre-founding social capital)</p> <p><i>Evaluation:</i> Financial resources requirements. (No relation with pre-founding social capital)</p> <p><i>Exploitation:</i> Kappa bought a USA firm in order to do business with his counterpart. (No relation with pre-founding social capital)</p> <p><u>Resources Acquisition</u> FMK and IK acquisition: two of managerial team were from USA (but no software sector) + acquisition of a USA firm (with local employees). Product/tech K from daily activities.</p> <p><u>Entry mode:</u> FDI</p>

Stages	Social capital	Sources	Effects on Internationalization
<i>Post-internationalization</i>	<u>Social capital changes</u> <i>Structural</i> - Social capital is mainly based business relationships with domestic firms, institutions and one USA company <i>Relational</i> -Business relations abroad: Client with long interaction based on trustworthiness, limited trust. -Business relations domestic: Based mainly on long business interactions, generating trustworthiness and limited trust <i>Cognitive</i> -Similar frame of mind. Reputation	<u>Strength ties</u> -Domestic weak ties: Unchanged -International weak ties: Unchanged <u>New ties:</u> Mainly business, they have to change their main product because rapid change in their niche market. That change caused the search of new clients.	<u>Subsequent International OI (None)</u> <u>Learning processes:</u> <i>Market learning:</i> No, according to the managerial team culture is critical component for doing business in USA. However they reach that market linked by a Costa Rica firm and due to the scant knowledge of software business in USA they decided to buy and then sell an USA firm. <i>Technological learning:</i> Yes, Kappa had been adapted its products and services to the market needs. <i>Internationalization learning:</i> No, they had to sell their subsidiary in USA because it was too expensive to handle. This entry mode was its “role model”, therefore there is no role model anymore and they confront problems with its internationalization. <u>Alliances practices:</u> No

● = Long-time personal relationship

● = Long-time business relationship

## **5.8 Case study 7: Firm Omega**

Omega is a multinational company that designs and provides integrated information technology and communication solutions to enhance the activities and business of its customers. Omega's offers are innovative and consistently delivered with quality.

### **5.8.1 Founder's background**

There were four founders – three engineers and one economist – all from the ICT sector and Costa Rican. One of them discovered a business opportunity while he worked for IBM in 1995. He had discovered a good opportunity in a niche market with a lot of potential: so-called protocol network administration and implementation.

### **5.8.2 Pre-start up/venture creation**

Thus Omega was created in 1997. There were four partners and two employees. The first contract was with a government institution, which was operating in monopoly conditions. Omega grew very fast during this period, the number of employees increased from 40 in the first year to 300 at the end of the second year. Also its customers in Costa Rica suggested replicating the successful business model in other Central American countries.

### **5.8.3 Pre-internationalization**

Omega used different strategies to do business with the companies in Central America (i.e. alliances, partnerships, etc.). The firm has a regional alliance with Cisco and with another firm that does regional business. The decisions about where and how to internationalize were taken by the founder team. This region has a lot of potential for the firm. It was the only firm offering that specific product (and its services). Thus, it started to expand as quickly as possible to take advantage of being the only firm in that niche market.

Omega had problems with availability of skilled employees, thus it decided to overcome this obstacle by creating a learning centre. As Omega is a Cisco learning partner and is certified by Hewlett Packard (HP), it has the skills to train employees to turn them in qualified employees.

#### **5.8.4 Post-internationalization**

In 2003 Omega decided to go to the USA and replicate its model. It looked for someone who managed an IT firm in the USA, someone with market knowledge, sector knowledge and relationships in the USA. Omega also created a holding company for its international activities; its foreign sales are about 50% of total sales, and still growing. The firm has an office in Texas but offers the service for all of the USA.

*“If Omega pretends to be in the front line of the industry we should be in the US market, our target market, to know about preferences and tastes and the latest in the market.”*  
(Omega CEO)

MNEs are a good way to achieve internationalization:

*“There are many people from the same company in different countries that is an easy way to do it.”* (Omega CEO)

Omega also decided to go to Colombia, wanting to do its business differently and with more commitment. The firm found a Colombian partner who was the former CEO of a Colombian communications company. Omega gave him some shares in order to gain his collaboration. One of the Omega founders knew him, because they met in a Cisco meeting when the contact was working for Orange Colombia. This new partner had experience in the sector and many relationships with other firms inside and outside Colombia.

In 2007 Omega decided to go to the Caribbean and Puerto Rico, which has a similar culture. The Caribbean is quite different but the firm decided to work with known partners.

Omega had started as small firm, but in 2007 after very fast growth, particularly in its internationalization, the firm needed to change its whole organization. Nowadays the firm has an external board of directors. It has three types of funding (venture fund, private funds, and equity funds) and in addition has corporate government policies and external audit. The original founder keeps his chair at the firm on the board.



Omega decided to exploit its relationships outside Costa Rica. The firm did not enter any country without a partner. The Cisco gold certification allows the firm to do business in 10 different countries (in the same region). The MNEs suggest the country and the moment to do business. For instance, Hewlett Packard divides the Latin America market into four regions – Mexico, Brazil, South and Central America and the Caribbean – and each region has its own CEO.

Omega's internationalization strategy has been different in each country because it took advantage of its relationships with MNEs. If needed, the firm would create an alliance with another firm before entering a specific market. The firm's growth depends on the necessities of the alliance or the requirements of the MNEs. Omega starts with a low commitment of resources in each market and gradually increases its commitment.

If any firm wants to do business outside the regions that Cisco or HP have established, it must be certified again. But if it does business in the countries where Cisco or HP has subsidiaries, it does not need other certification. However, the politics of the MNEs are global.

MNEs are good partners to make (or look for) alliances within foreign countries.

Omega had to close one of its offices outside Costa Rica but re-opened the office with a different strategy. Nowadays Omega has 1200 employees in eight different countries, 700 of them in Costa Rica.

### 5.8.5 Analysis of case study 7: Firm Omega

**Table 23 Description of the development of social capital and the internationalization process of Omega**

Stages	Social capital	Sources	Effects on Internationalization
<b>Pre-start up/venture creation</b>	<p><i>Structural</i> -Based on the personal relationships with friend and colleagues of founder</p> <p><i>Relational</i> -Based mainly on social interaction between founders and counterpart. Trust</p> <p><i>Cognitive</i> -There are friend in the sector and colleagues with similar frame of mind and work experience</p>	- Domestic weak ties (friends and colleagues/personal)	
<b>Pre-internationalization</b>	<p><i>Structural</i> -Is mainly based on business relationships of the firm with their local client and regional companies. Also is based on personal relationships of their founders.</p> <p><i>Relational</i> -Is based mainly on strong-interaction between founders and their domestic client and sporadic interaction with other firms and people.</p> <p><i>Cognitive</i> -Work experience and trust</p>	<p><u>Strength ties:</u> - Personal domestic weak ties</p> <p><u>New ties</u> -Domestic strong ties (former workmates/personal)</p> <p>-Domestic strong tie (first domestic client/business)</p> <p>-Domestic weak ties (regional firm/business)</p> <p>-Strong international tie (new partner/personal)</p>	<p><u>First International OI (Central America, 1998)</u> <i>Discovery:</i> The lead founder discover a niche market while he was working for IBM (no relation with social capital)</p> <p><i>Evaluation:</i> They needed human and financial resources</p> <p><i>Exploitation:</i> after some meetings with their potential clients there was final agreement about the project, they needed a partner to take charge in Central American region in order to exploit the opportunity</p> <p><u>Resources Acquisition</u> FMK, IK; prior work experience and partner in each country. Product/Tech knowledge acquired from current activities.</p> <p><u>Entry mode:</u> direct sales</p>

Stages	Social capital	Sources	Effects on Internationalization
<i>Post-internationalization</i>	<p><u>Social capital changes</u></p> <p><i>Structural</i> -The structural dimension is mainly based on firm relationships with domestic firms, international firms and founder team with their counterparts</p> <p><i>Relational</i> -Personal relations abroad: based on long-term interaction: trust Friendship of long term interaction-trust -Business relations abroad: Old customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness Based business relationships, generating trustworthiness and trust</p> <p><i>Cognitive</i> - They work together and share similar frame of mind. Reputation and legitimating</p>	<p><u>Strength ties:</u></p> <p>-Former workmates ties: unchanged</p> <p>-First domestic client: strong</p> <p>-Domestic regional firms: decay</p> <p>-International partner:</p> <p><u>New ties:</u> Many business ties (local) and personal ties (mostly abroad). Strong personal international ties are those used to access and develop international markets. Pre-founding personal ties (●) and initial business ties (●) lead to new business relationships in the international markets. In domestic market, relationship with MNE provides new product/technological knowledge and domestic and international opportunities. From all those networks Omega uses personal ones in order to enter new</p>	<p><u>Subsequent International OI (USA 2003)</u></p> <p><i>Discovery:</i> Omega found (direct research) a niche market in some states of USA.</p> <p><i>Evaluation:</i> Analysis if it is possible to obtain a profitable project.</p> <p><i>Exploitation:</i> Firm replicates the business strategy in this market. They looked for a partner</p> <p><u>Resources Acquisition</u> FMK and IK acquired through partner. Three dimensions together help the firm on Product/tech K + financial resources, particularly the relational dimension (Trust)</p> <p><u>Entry mode:</u> joint venture</p> <p><u>Subsequent International OI (Colombia 2007)</u></p> <p><i>Discovery:</i> Costa Rica firm linked Omega with MNE in that region (Enabler: weak tie)</p> <p><i>Evaluation:</i> Market research.</p> <p><i>Exploitation:</i> quickly agreement with CR firm to develop its products. (Facilitator: by weak tie)</p> <p><u>Resources Acquisition</u> Three dimensions together help the firm IK and product/tech K, they do the research for FMK acquisition</p> <p><u>Entry mode:</u> Commercial agreement</p> <p><u>Learning processes:</u></p>

Stages	Social capital	Sources	Effects on Internationalization
		markets.	<p><i>Market learning:</i> Yes, firm acquiring specific market knowledge by graft new friend/partner in each market</p> <p><i>Technological learning:</i> Yes, Omega started to develop a unique product and extend the business across many countries. Also have certifications awarded by MNE for level of technological knowledge.</p> <p><i>Internationalization learning:</i> Yes, delta has entered different markets and in some markets have been used different entry modes.</p> <p><u>Alliances practices:</u> Join venture and commercial agreement with MNE.</p>

- = Long-time personal relationship
- = Long-time business relationship

## 5.9 Summary

**Table 24 Summary of seven case studies**

<i>Case</i>	<i>Alpha</i>	<i>Beta</i>	<i>Gamma</i>	<i>Delta</i>	<i>Epsilon</i>	<i>Kappa</i>	<i>Omega</i>
<i>Founded and</i>	1993	2005	1993	2001	2007	2002	1997
<i># of employees</i>	5	3	4	4	3	20	6
<i>Initial International</i>	1993	2007	1993	2001	2007	2006	1998
<i>Market and</i>	USA	USA	PANAMA	MEXICO	PANAMA	USA	Central America
<i># of employees</i>	5	100	4	4	3	11	300
<i>Subsequent</i>	2005	2011	-	2008/10/11	2011	-	2003/2005/2007
<i>Foreign Market(s) and</i>	Peru	Spain/UK		Ecu/DR/CA	Ecuador/USA		USA/Colo/Carib-PR
<i># of employees</i>	220	65		100/135/165	14		550/650/970
<i>No of countries</i>	2	3	-	4	3	1	8
<i>Entry mode</i>	Export( outsourcing) and FDI	Direct sales (outsourcing) and export	Direct sales	Export (outsourcing)/FDI/Joint venture/FDI and direct sales	Direct sales and outsourcing	FDI	Representative office/ direct sales/joint venture and commercial agreement
<i>Production centres(countries)</i>	Peru	-	-	Ecuador, El Salvador	Ecuador	-	Costa Rica: learning centre



## CHAPTER SIX: CROSS-CASE ANALYSIS AND FINDINGS

The analysis in this section is based on the seven firm case studies and seeks to generate propositions that can be tested.

### 6.1 Introduction

An analysis of the cases by group and across the groups was performed. The seven firm cases were categorized into two groups: 1. international start-ups (Alpha, Gamma, Delta and Epsilon) and 2. early international firms (Beta, Kappa and Omega). These groups emerged naturally and the categorization into two groups remained largely to simplify the analysis of cases, instead of providing a basis for comparison in the thesis (see Table 25). International start-up is a firm that from inception, engage in international markets (McDougall, 1989). They have also been named global start-ups (Oviatt & McDougall, 1995), born internationals (Kuivalainen et al., 2007) or born regionals (Lopez et al., 2009). Early international is a firm that target international markets at early stages of their life cycle and reach international activities after inception and before the first six years (Oviatt and McDougal, 1997). Such firms have also been named international new ventures (Oviatt & McDougall, 1994, 1997).

**Table 25 Internationalization of case-study firms**

Firm cases	Start year	Internationalization year and market entry mode	Pace of internationalization
<i>Alpha</i>	1993	1993 export	International start-up
<i>Gamma</i>	1993	1993 direct sales	International start-up
<i>Delta</i>	2001	2001 export	International start-up
<i>Epsilon</i>	2007	2007 direct sales	International start-up
<i>Beta</i>	2005	2007 direct sales	Early international
<i>Kappa</i>	2002	2006 FDI	Early international
<i>Omega</i>	1997	1998 representative office	Early international

The findings for each case and for each of the two groups are presented in terms of major general themes which were identified during the research. The new themes emerged from the case findings. The analysis and development of propositions will be segmented in stages. The firms did not fit those stages accurately because some of them have followed a nonlinear process and the stages cannot be clearly identified. Therefore, it is necessary to include

certain assumptions and light modifications in the definition of stages. Additionally, other themes are presented in each stage: the sequential processes of social capital development, the influence of social capital on international opportunity identification processes, the social capital and access to other resources, and the outsourcing activities. These are outlined below.

#### *A. Social capital and pre-start-up/venture creation*

This section explores the firms' social capital, from discovery of initial opportunity until venture creation. The time when the founders mentally decided that they would create a firm is underlined to be important, rather than the time of the legal registration of the company (not perceived as important in any of the cases of the firm), since this mental activity is undertaken in order to work for the venture creation. Thus, the point of time when the mental decision was taken (equal to the discovery of initial opportunity), until the point of time when the first contract (domestic or international) was signed, is considered to be the pre-founding stage (equal to venture creation). Also, this section describes the nature and characteristics of pre-founding social capital according to its dimensions. The relationships involved during this phase are identified according to the strength, type and location of those relationships. The influence of pre-founding social capital on the first international opportunity is described, as well as its influence on acquisition of other resources. Outsourcing activity in the initial internationalization activity is also discussed.

#### *B. Social capital and pre-internationalization*

This section explores the dimensions of social capital from the point of venture creation, which is defined as from the point in time when the first contract (national or international) was signed until the start of the international activity. It is assumed that the initial phase of internationalization may be parallel to the pre-founding and the venture creation phase. The transfer of pre-founding (or personal-level) to the firm-level social capital is outlined for the firms. Later, the influence of firm-level social capital on identification of international opportunities for early international firms is described, as well as its influence on resource acquisition. Then, this section explores the role of pre-founding social capital in the initial internationalization of early international firms. Finally, the role of outsourcing activity in initial internationalization is discussed.



### *C. Social capital and post-internationalization*

This section explores the dynamics of social capital, and discusses the development of social capital after initial internationalization to any given point of time (2012). The influence of social capital development on subsequent internationalization and resources acquisition is analysed. The influence of social capital development on the pace of international expansion of firm is presented. Outsourcing activity in the post-internationalization phase is also discussed. Each theme is organized around the above mentioned phases:

#### *A. Social capital and pre-start-up/venture creation*

- *Composition of social capital by dimension*
  - ✓ *Ties classified by strength, type and location*
- *Influence of social capital on international opportunity identification process*
  - ✓ *The role of the dimensions of social capital*
- *Social capital and resources access*
  - ✓ *External (Financial, human, knowledge)*
- *Outsourcing*

#### *B. Social capital and pre-internationalization*

- *Composition of social capital by dimension*
  - ✓ *Ties classified by strength, type and location*
- *Influence of social capital on international opportunity identification process*
  - ✓ *The role of dimensions of social capital*
- *Social capital and resources access*
  - ✓ *External (Financial, human, knowledge)*
- *Outsourcing*

#### *C. Social capital and post-internationalization*

- *Composition of social capital by dimension*
  - ✓ *Ties classified by strength, type and location*
- *Influence of social capital on subsequent international opportunity identification process*
  - ✓ *The role of dimensions of social capital*
- *Social capital and resources access*
  - ✓ *External (Financial, human, knowledge)*
- *Outsourcing*

## **6.2 International start-ups**

In this group, the creation of the firm occurs at the same time as its internationalization. This means that the pre-internationalization period is during the pre-founding stage. The cross-case analysis, therefore, is from the point of time when the mental decision was made to the point of time when the first international contract was signed. That is, for international start-up cases the initial internationalization is parallel to the pre-founding phase and the venture creation phase.

### **6.2.1 Social capital and pre-start-up/venture creation/pre-internationalization**

The literature describes the critical influence of social ties at start-up phase, and the need to understand INV networks not only during internationalization and pre-internationalization, but also in the pre-founding phase (Coviello, 2006).

#### **6.2.1.1 Composition of social capital by dimensions**

In the genesis of social capital of the international start-up firms, Alpha, Gamma, Delta and Epsilon, the structural dimension is characterized by relevant relationships of the lead founder. The relational and cognitive dimensions are based on the interaction of the founder with his counterparts (see Table 26). It is obvious that the pre-founding social capital of entrepreneurs originates within their personal networks. Gamma and Delta had few relationships that formed their original social capital and those ties are defined as weak. Epsilon had no relevant relationships. Alpha had strong ties, associated in this stage to close friends and/or family relationships. The content (type) of those relationships was identified as personal (see Table 26a). As mentioned, this truism lies in the stage at which the firm is. All except one relationship (Alpha) are located in the domestic market. Alpha and Beta pointed out that they considered their family members as ties that can be passive. This means not activated for the moment, although potentially activated when needed. However, when they were asked about relevant family ties that supported the firm's creation, the founder of Alpha said one and the founder of Beta said none.

The social capital involved in the pre-start-up/venture creation phase is sourced from existing relationships of entrepreneurs, formed in previous or current workplaces, university or family environment, and enlarged by the relationships obtained through other partners (if any).

Basically, the relevant people related to the founders are family, friends and colleagues from the ICT sector. In the cases of Alpha, Gamma and Delta the content of their ties is completely personal. For those cases, the finding is similar to what was found in the literature, which argues that personal ties have critical influence on the start-up phase.

**Table 26 Composition of social capital at pre-start-up/venture creation/pre-internationalization**

	Alpha	Gamma	Delta	Epsilon
<i>Structural</i>	Based on relationship with family and workmate of the founder	Based on relationships with workmates of the founder	Based mainly on personal relationships with friends and students of the founders	-
<i>Relational</i>	Based mainly on long-time family interaction. Trust	Based mainly on daily-interaction but limited trust	Based mainly on occasional interaction between founder and counterpart. Limited trust	-
<i>Cognitive</i>	They are brothers and both from ICT sector. They share experience and frame of mind	They are workmates with skills in environmental graphics. Similar work experience	They are former class mates from university and a student. They have similar experience and concerns	-

**Table 27a Characteristics of relationships associated with social capital at pre-start-up/venture creation/pre-internationalization**

Relations/Case	Alpha	Gamma	Delta	Epsilon
<i>Type</i>	Personal	Personal	Personal	-
<i>Strength</i>	Strong	Weak	Weak	-
<i>Location</i>	International and domestic	Domestic	Domestic	-

### 6.2.1.2 Influence of social capital on international opportunity identification process

This section analyses the influence of social capital on the process of identification of initial internationalization opportunities for the cases of Alpha, Gamma, Delta and Epsilon. These four firms began the process of internationalization in the pre-founding stage. These international start-ups had their international opportunity identification process parallel to pre-start-up and venture creation. Within this group, Alpha, Gamma and Delta were influenced by their pre-founding social capital on their first international OI. Epsilon had a different process and it was not influenced by pre-founding social capital.

#### Discovery

The founder of Alpha was able to gain access to networks of importance to him, as well as market knowledge, when starting the business. A relationship with his brother was of particular importance, as it provided opportunities to gain international distinction. The relationship with his brother (and later co-owner) was critical to discover the first international opportunity. Moreover, this relationship proved to be important in other ways too. His brother gave him moral support and convincing arguments to persuade him to start doing business with the company in which he was working. This was probably a big step to make the firm visible, and gain legitimacy.

*“My brother worked in a multinational company located in Silicon Valley (USA) as part of the management team. After searching various suppliers around the world, he offered me [the opportunity] to do business with that company. The business consisted in software engineering services (outsourcing). I did not expect this opportunity, but at the same time I had in mind to create my own firm at some point in my life. Starting a firm doing business with a big company located in Silicon Valley was a very high point.”*  
(Founder of Alpha)

In the case of Gamma, a workmate of the founder connected him "across the holes". Thus, Gamma was linked to a new network. This brokerage action with a bridging connection was a potentially valuable situation for the business. However, the interaction between the founder of Gamma and his potential client was an unequal relationship. The latter was a MNE and the proposed opportunity was the “take it or leave it” kind. The MNE needed him to develop a

customized product in Panama; the budget was given, as well as the time to do it. Almost all information he needed to know about this business opportunity was in the business pre-contract.

*“I was working for a software firm, and within my activities I developed new products and/or services that the firm would offer. I had proposed graphical environments as a good option to sell, but the boss rejected the idea. Because of that, we had technical disagreements; even so I was convinced that graphical environments could be a success in the market. One day, my workmate told me that a MNE was looking for a firm to develop a project. I decided that it was my opportunity to start a firm and I contacted the company. The project was very specific and seemed very attractive.” (Founder of Gamma)*

A similar case is Delta. There are situations in which brokerage is valuable precisely because both actors do not connect directly. In fact, the brokerage action connects people on opposite sides of the structural hole. The founder of Delta discovered his first opportunity in the workplace. This new network gave the lead founder of Delta almost all the information he needed.

*“When I returned from finishing my MBA in Spain, I felt a great desire to create a firm. Meanwhile I was working as a university professor. In one of my courses, one of my students told me that a Mexican company was looking for a domestic firm to do business. I made contact with the company and we had some meetings. Later we had an agreement to begin activities. The Mexican company required software engineering services (outsourcing)” (Main founder of Delta)*

The founders of Epsilon moved to Costa Rica in order to start their business. The founders did not know any relevant people. They had to create their opportunities through marketing. The first opportunity came from Panama. The founders of Epsilon were interested to start business activities as soon as possible and enlarge their relationships.

*“I worked for Oracle in Colombia, and because of my duties I had to travel by some Latin American countries. During these trips I discovered that there was a market niche that was not yet covered. I decided, with my brother and another partner, to create a firm in Costa Rica, where I saw great potential for this niche. We started to announce ourselves and send brochures to different places, offering our services in BI” (Main founder of Epsilon).*

### Evaluation

The main concern of Alpha, Gamma, Delta and Epsilon was the resources they considered necessary in order to exploit their opportunities (see Table 27). The founder of Alpha relied on his personal ties to obtain the necessary knowledge to evaluate this opportunity and financial resources. The employees were available in the job market. Gamma and Delta could not obtain any other resources from their personal ties except the information about their opportunity. They, therefore, mostly relied on their personal, background knowledge to evaluate their opportunities. That is, prior market knowledge, prior international knowledge and/or prior technical knowledge influenced the evaluation process. The founders of Gamma and Delta used their own funds. Like Alpha, the job market was the source of the workers. The founders of Epsilon did an opportunity evaluation, using direct search to obtain the needed information and knowledge. They needed more country information and they did a market study. This was done through an agency in Costa Rica that promotes exports. That market study was more informative than evaluative (the founder of Epsilon explained: “We needed to start to do business in order to obtain cash flow, we did some research on the country just to obtain more information about the country in general”). Like Gamma and Delta, the founders of Epsilon used their personal funds.

**Table 28 The role of prior ties and prior knowledge on key resources to evaluate**

Firm/Resources	Key resources	Prior knowledge	Prior ties (relevant for evaluation)
<i>Alpha</i>	Financial	-	The founder had a workmate in the bank that may be useful for financial issues.
	Human	-	-
	Market knowledge and regulation issues	Founder was working for a domestic bank as CTO. Thus, he had prior product/technological knowledge, but he did not have prior FMK or IK because it was a domestic job.	Co-founder who studied and was working in USA in a multinational software company, as a member of managerial team has important relevant knowledge.
<i>Gamma</i>	Financial	-	-
	Human	-	-
	Regulation and taxation issues of the market	The founder had previous experience in domestic software firm as a member of product development team.	-
<i>Delta</i>	Financial	-	-
	Human	-	-
	Taxation issues of the market	The main founder had MBA in Spain but no work experience in software or IT activities.	-
<i>Epsilon</i>	Financial	-	-
	Human	-	-
	Country information, client, regulation, competition and taxation issues	The main founder had previous experience working for a USA MNE in Latin America	-

The absence of a systematic evaluation of alternative opportunities is a remarkable characteristic of this process. Another characteristic is that the entrepreneurs had prior knowledge which they had already developed while they were working for a software MNE (Epsilon, Alpha), in interaction with current workmates, clients and suppliers from the

software sector in the home market (Gamma), in international markets (Alpha), in MBA studies abroad (Delta), or while working in the IT department in a bank (Alpha). In consequence, background knowledge of foreign markets, international knowledge, and technological/product knowledge, in conjunction with prior ties, provided the basis for venture creation. In addition, as a result of the adaptation of background knowledge to the initial requirements and/or accessing new knowledge through social capital, the international start-ups reached international markets. In this adaptation, the initial service/product appears to play an important role.

### Exploitation

Analysis of the case studies reveals that contractual mode (Alpha, Gamma, Delta and Epsilon) is preferred as a form of exploitation of their initial activities abroad. Social capital alone could not explain the exploitation of the opportunity. In the absence of social capital, personal knowledge is an important factor in the exploitation phase, as well as the firm's initial product/service. The data suggests that the whole process largely depends on the lead founders, including their personal knowledge and their social capital, which enable and constrain its ability and willingness to exploit international opportunities and to overcome uncertain outcomes. The initial product/service also seems a significant factor.

In brief the initial process of identification of the international opportunity was influenced by pre-founding social capital, as presented in Table 28.



**Table 29 Social capital and its influence on international opportunity identification process**

Case	Venture creation/Pre-internationalization			
	Tie type, strength and location involved	Role of pre-founding ties on discovery	Role of pre-founding ties on evaluation	Role of pre-founding ties on exploitation
<i>Alpha</i>	Discovery: <i>personal strong international tie</i> Evaluation: <i>personal strong domestic international tie</i> Exploitation: <i>personal strong international tie</i>	<b>Enabler.</b> His brother offered a business opportunity (Reactive)	<b>Facilitator.</b> His brother advised him about the needed resources and gave him moral support. A workmate facilitated the financial resources	<b>Enabler.</b> The position (of his brother) in the contracting company was decisive
<i>Gamma</i>	Discovery: <i>personal weak domestic tie</i> Evaluation: - Exploitation-	<b>Facilitator.</b> A work mate acting as a bridge. (Reactive)	<b>None.</b> The evaluation of needed resources was made by himself	<b>None.</b> The transfer of the operations and personnel of the firm to another country
<i>Delta</i>	Discovery: <i>personal weak domestic tie</i> Evaluation: - Exploitation-	<b>Facilitator.</b> A student of the founder acting as a bridge. (Reactive)	<b>None.</b> The evaluation of needed resources was made by himself	<b>None.</b> Final agreement between the parties after agreeing a price
<i>Epsilon</i>	Discovery: - Evaluation: - Exploitation-	<b>None.</b> Direct search (Proactive)	<b>None.</b> The evaluation of country conditions was made by himself	<b>None.</b> The decision to move the firm to another country

### 6.2.1.3 Social capital and resources access

All the firm cases had access to some form of financial and human resources in the pre-start-up phase. Gamma, Delta and Epsilon were based on the personal knowledge (previous experience) of their founders to meet the challenges and achieve their goals. The firms required access to financial and human resources in order to seize the opportunity identified. As the firms had not yet been established, human resources were provided just by the labour market. Alpha was the only case where the social capital influenced the acquisition of financial funds and knowledge (see Table 29). Access to the resources required to support this international opportunity were important. The findings indicate that Gamma, Delta and Epsilon started with a minimal resources base. Except for Alpha, the rest of the cases gradually built up an asset base.

**Table 30 Social capital and access to resources**

Firm/Resources	Financial Resources	Human Resources	Knowledge
<i>Alpha</i>	Bank loan <i>(through strong tie)</i>	Job market	Direct and indirect experience (FMK, IK and P/T K) <i>(through strong tie)</i>
<i>Gamma</i>	Personal funding	Job market	Prior knowledge
<i>Delta</i>	Personal funding	Job market	Prior knowledge
<i>Epsilon</i>	Personal funding	Job market	Prior knowledge

#### 6.2.1.4 Outsourcing

Most of the cases (Alpha, Delta and Epsilon) started their commercial activities by offering outsourcing services (see Table 30). This was critical in the development of the firm. The outsourcing services (for initial internationalization) do not require any product/technological knowledge in advance or prior international knowledge (even foreign market knowledge is not always needed). The founder of Alpha mentioned: *“I did not have to think about product or market research; they [the contracting firm] give me almost everything.”* The founder of Delta said: *“I did not have much money to start a firm; I was kind of surprised when opportunity showed up. The software engineering services [outsourcing] is a simple business, I do not need any building or any significant spending. This is a good way to start a business.”* The founder of Epsilon, which mixed outsourcing services and software products, explained that: *“It was the easier way to obtain money to fund our product development and implementation activity.”*

**Table 31 Initial products and services of case-study firms**

Firm	Initial product/service
<i>Alpha</i>	Outsourcing
<i>Gamma</i>	Customized software solution
<i>Delta</i>	Outsourcing
<i>Epsilon</i>	Customized software products/ Outsourcing

#### 6.2.2 Social capital and post-internationalization

The firms’ social capital development and its influences on post-entry internationalization is also an interesting topic. However, to date little attention has been paid from IE scholars (Maurer & Ebers, 2006; Prashantham & Dhanaraj, 2010).

### 6.2.2.1 Composition of social capital by dimensions

Alpha, Gamma, Delta and Epsilon all had changes in their structural social capital. Alpha and Delta began to increase the number of ties and diversify their type (personal/business ties located in domestic or international market) (see Table 31a). This change began once the firms were created and internationalized. The change is mainly characterized by the incorporation of business ties and an increasingly important role of firm-level social capital. The structural dimension is no longer based solely on the relationships of the lead founder. The social capital involved in the post-internationalization stage is sourced from the founders' personal relationships and inter-organizational relationships (see Table 31). Epsilon increased (by one) its number of business ties, located in domestic and international markets, without developing any personal ties. Gamma did maintain and then decrease its ties; consequently, the firm did not diversify those ties. Its social capital was mainly based on one relationship with an MNE.

The relational and cognitive dimensions, which were based on the interaction of the founders with their counterparts, now start to be mainly based on the interaction of the firm with its counterparts. Alpha and Delta had to deal with personal and business ties, and each type of tie requires different interactions. Usually a long-term relationship with a personal or business tie generates trust. The new ties (most of them business ones) between the actors did not rely on the lead founder solely; the managerial team and sometimes low level employees are involved in maintain and develop those relationships. Gamma based its social capital mainly on one tie, which was entirely led by the founder. This tie ended because of the scant interaction between the firms and the economic crisis. Epsilon with only business ties had different kinds of interaction with its counterparts. This is mainly based on its product. All the firms try to convert the most important relationships into personal ones in the domestic market; however, just Alpha and Delta have achieved this goal. Those firms used their personal relationships to expand their international activities.

Alpha and Delta have similar cognitive levels sourced by similar types of ties. Gamma did not generate enough trust to perpetuate the benefit of its key relationship although they had similar frames of mind. Epsilon has only business relationships that need its complete attention, they need to legitimate their activities and their product is the way they found to obtain legitimating and reputation.

**Table 32 Composition of social capital post-internationalization**

	Alpha	Gamma	Delta	Epsilon
<i>Structural</i>	Based on personal (domestic and international) and business (domestic and international) relationships	Totally based on USA MNE relationship by that time, no new ties added after that one.	Based on firm relationships (domestic and international), firms (clients), personal relationships (domestic and international) and institutional ties.	Based on the firm's relationships with US MNE and its subsidiaries, representative offices in Panama, another MNE's subsidiaries and local firms.
<i>Relational</i>	Personal limited interaction-limited trust. Long term interaction-trust Business long interaction based on trustworthiness. New ones with interaction scant trustworthiness Business long business interactions- trustworthiness and trust.	The end of the relationship with MNE, due to the world financial crisis and lack of trust, was the end of their international social capital. Domestic social capital was limited to one tie. The internal organization of Gamma was characterized by scant direct interaction between managerial team and limited trust	Personal relations abroad: based on long-term interaction: trust Friendship of long-term interaction-trust Business relations abroad: Old customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness Business relations MNC subsidiaries: business relationships that generates trustworthiness and trust	Business relations abroad: MNE clients based on trustworthiness. New ones with interaction but not enough trustworthiness Business relations domestic: based mainly on long business interactions, generating trustworthiness and trust
<i>Cognitive</i>	They share similar working background and similar frame of mind. Business relationships: reputation and legitimating	Similar frame of mind but not enough trustworthiness.	Personal relations share similar frame of mind and they work together. Business reputation and legitimating	Reputation and legitimating

**Table 31a Characteristics of relationships associated with social capital post-internationalization**

<b>Relationships/case</b>	<b>Alpha</b>	<b>Gamma</b>	<b>Delta</b>	<b>Epsilon</b>
<i>Type</i>	Personal and business	Business	Personal and business	Business
<i>Strength</i>	Personal: weak and strong Business: strong	Business: weak	Personal: weak; business: weak	Business: weak and strong
<i>Location</i>	Domestic and international	Domestic	Domestic and international	Domestic and international

### 6.2.2.2 Influence of social capital on international opportunity identification process

This section analyses the influence of social capital on the process of identification of post-internationalization opportunities for the international start-up group: Alpha, Gamma, Delta and Epsilon. These firms became international from inception but they took many years to reach a second foreign market. Alpha needed 12 years for the second market, Gamma suffered a de-internationalization process in 2000 and in 2013 (13 years later) they were ready to re-internationalize their activities. Delta took seven years to reach its second foreign market. Epsilon took four years to reach a second market. Clearly, among other things, the domestic market played an important role for those firms.

#### Discovery

The founders of Alpha needed to expand their production in order to grow in the US market. The firm expanded its operation in the domestic market and acquired a domestic firm to face the increasing demand in the USA and the increasing importance of the domestic market. Qualified personnel had become scarce and very expensive in Costa Rica because of the small labour market and the large number of high-tech foreign companies. So they decided to open a production facility in a South American country. This was done through an old friend. He was put in charge of the entire process of the new production centre in Peru.

*“One day, we were in a school activity of my daughter and we met an old friend, he was working for a high-tech multinational company in Peru. We had planned to open a production office in a country of South America but we had not decided which specific country yet. When we saw him, we talked about our idea and he offered himself as the way to do it in Peru. We thought he was the right person to do so. We talked again; we offered a shareholding in our firm and the responsibility of the office in Peru.” (Founder of Alpha)*

In the case of Delta, it was growing and needed more qualified human resources, thus the firm decided to open a production office in South America. It did this through a former university classmate of the founder, who was from Ecuador. Delta contacted him and proposed some business for him.

*“Qualified employees at a reasonable cost no longer exist [in the high-tech sector in Costa Rica]. It was very difficult to find workers available, if you need qualified employees you should look for them in another company paying higher salaries. It was important to get qualified workers at a lower price. In Ecuador I had a former university classmate who worked in a bank. We spoke about opening a production office in that country.” (Founder of Delta)*

Two years later Delta continued to expand its activities, this time in the Dominican Republic (DR). Once the firm had a new production centre in Ecuador, it was able to increase its offer. DR was an unexpected international opportunity. A public institution contacted Delta to inform them that someone from DR was trying to find a Costa Rican firm to do business in that country. Delta was interested in that region so they accepted the opportunity. However, they change their partner just before entered DR.

*“PROCOMER [public export support institution] linked us to a business man from the Dominican Republic. We were interested in expand our activities, and in the beginning we agreed to do it with him. However, we did not trust him enough. The business culture in that country is not similar to ours and we did not feel very comfortable. We decided, just days before the schedule time, to change the partner, we talked with another Costa Rica firm and decided to reach that market with a joint venture.” (Co-founder of Delta)*

Finally, three years later, Delta reached the Central American market. It wanted to grow, which meant having to open new production centres. The firm decided to open in El Salvador and Panama.

*“We expanded the local market and wanted to keep the staff in a production centre outside Costa Rica. We opened a production centre in Panama with Costa Rican staff to provide services to the local market. At the same time we needed to expand our staff to continue to grow and it was necessary to find qualified personnel but relatively inexpensive. Thus, we opened our office in El Salvador, where all the staff was Salvadoran. In both countries we use a friend to open up and develop the production centre.” (Co-founder of Delta)*

The founders of Epsilon received an unexpected business suggestion in Ecuador. The office of this company in Costa Rica told them about the possibility of doing business in Ecuador. Epsilon set up an office in that country to negotiate this business opportunity.

*“We worked with this company in Costa Rica, when they said they liked our product. Later they offered us the chance of doing business with them in Ecuador. We did not have a signing a contract but Epsilon opened an office in Ecuador as soon as the firm could. Later we started to do business with them. We did not make any changes to our product as we sold [it] in Costa Rica.”(Founder of Epsilon)*

The same year Epsilon entered the US market. A subsidiary of an MNE in Costa Rica linked Epsilon with the MNE in the US market. This was an unexpected opportunity Epsilon decided to take because they were very confident about the quality of their products.

*“A subsidiary of a multinational company in the domestic market recommended us to a company in the US market. We were interested in doing business with a US company. We made contact and started to negotiate about a convenient contract for us. Then we reached an agreement and did business.”(Founder of Epsilon)*

### Evaluation

The main concern of Alpha, Delta and Epsilon was the resources they considered necessary to exploit the opportunities taking into consideration the development of the firms (see Table 32). Alpha relied on the founders' social capital to obtain the resources it needed in order to support its business development in the US market, human and financial resources. The financial resources were obtained in the domestic market. The firm was looking for new, affordable, skilled employees in South America and their friend was the vehicle to open the new production centre. The evaluation mostly relied on their friend. Delta needed to increase its production and keep its profits in some stable form. Thus, it needed to find a new production centre outside Costa Rica. A former classmate of the founder was source to evaluate and exploited this opportunity. The founders of Epsilon conducted an opportunity evaluation, using direct searches to obtain the needed resources. They needed country information and financial resources.



**Table 33 The role of social capital on key resources to evaluate**

Firm/Resources	Key resources	Social capital (as source of new knowledge, financing and workers)
<i>Alpha</i>	<ul style="list-style-type: none"> <li>-International tie in South America</li> <li>-Financial resources</li> </ul>	<p>A friend of the founders of Alpha, who was working as a part of the managerial team for a MNE in Peru was the trigger for the production centre. He had the FMK, IK and necessary skills to succeed. Alpha decided to increase their commitment with him and gave him a share in the business. He should arrange the opening of the office and find the employees in order to support USA market development. The headquarters office supplied the financial resources.</p>
<i>Delta (E)</i>	<ul style="list-style-type: none"> <li>-International tie in South America</li> <li>-Financial resources</li> </ul>	<p>The firm wanted to establish production centres in an affordable country. The founder of Delta contacted a former class mate who was working for a bank in Ecuador to talk about the plans. He agreed to participate and they decided to open the new facility in Ecuador. The friend quit his job at the bank, opening the Delta office and finding the employees in order to support a product development. The financial resources were obtained in Ecuador (bank loan).</p>
<i>Delta(DR)</i>	<ul style="list-style-type: none"> <li>-Reliable partner</li> </ul>	<p>The firm was not feeling comfortable with the partner and they looked for another partner in order to enter that market. The evaluation process was made with the new firm (partner).</p>
<i>Delta(CA)</i>	<ul style="list-style-type: none"> <li>-International tie in Panama and El Salvador</li> </ul>	<p>The firm needed to expand their production centres in order to develop. The founder of Delta did it in the same region (Panama and El Salvador) through friends in each country. Delta did the evaluation process with their friend.</p>
<i>Epsilon(E)</i>	<ul style="list-style-type: none"> <li>Product</li> <li>FMK</li> <li>IK</li> <li>Financial</li> </ul>	<p>A regional firm invited them to do business in Ecuador; Epsilon opened an office in that country, previous market research and waited to sign the contract. The firm did the market research without had a formal agreement. Also the firm financed the office in Ecuador.</p>
<i>Epsilon (USA)</i>	<ul style="list-style-type: none"> <li>Product</li> <li>FMK</li> <li>IK</li> <li>Financial resources</li> </ul>	<p>Epsilon was linked to a US company by a MNE subsidiary in Costa Rica. The firm was confident about its product and tried to find an inexpensive form of doing business in USA. They proposed and decided to negotiate an alliance. The firm was founded by external financial resources.</p>

The firms' needs were different. Alpha and Delta did not plan to sell in the local markets of their production centres. All the production there would be for outside markets (Costa Rica or USA). Epsilon entered a new market by opening an office in Ecuador through a product development agreement in the USA.

### Exploitation

The case-study firms used contractual modes and foreign direct investment (FDI) as their preferred forms of exploitation in their post-international activities.

The data suggests that the process largely depends on social capital, sourced by business or personal ties, which both enables and facilitates a firm to exploit international opportunities and to overcome uncertainty of outcomes. Some of those opportunities were taken in order to develop the business. The product/service involved in exploitation of post-internationalization opportunities seems again like a significant factor for some of the firms (Alpha and Delta).

**Table 34 Social capital and its influence on international opportunity identification**

Case	Post-Internationalization			
	Tie nature and characteristics	Role of ties on discovery	Role of ties on evaluation	Role of ties on exploitation
<i>Alpha</i>	Discovery: <i>personal weak international tie</i> Evaluation: <i>personal weak international tie</i> Exploitation: <i>personal weak international tie</i>	<b>Enabler.</b> Their old friend's location decided the country (Reactive)	<b>Facilitator.</b> He advised them and took the responsibility of opening the production centre	<b>Enabler.</b> The old friend was in charge of the office
<i>Delta(E)</i>	Discovery: <i>personal weak domestic tie</i> Evaluation: - Exploitation-	<b>Enabler.</b> His old classmate's location decided the country (Reactive)	<b>Facilitator.</b> The evaluation of needed resources was made by him and the firm	<b>Enabler.</b> The old friend was in charge of the office
<i>Delta(DR)</i>	Discovery: <i>institutional weak domestic tie</i> Evaluation: <i>business weak tie</i> Exploitation: <i>business weak domestic tie</i>	<b>Facilitator.</b> A public institution linked Delta with foreign partner (Reactive)	<b>Facilitator.</b> The evaluation of needed resources was made by both actors	<b>Enabler.</b> A "last minute" joint venture with domestic firm helped Delta
<i>Delta(CA)</i>	Discovery: <i>personal weak international tie</i> Evaluation: <i>personal weak international tie</i> Exploitation: <i>personal weak international tie</i>	<b>Enabler.</b> The friend's location decided the country (Reactive)	<b>Facilitator.</b> The evaluation of needed resources was made by him and the firm	<b>Enabler.</b> The friend was in charge of the office
<i>Epsilon(E)</i>	Discovery: <i>business strong domestic tie</i> Evaluation: - Exploitation-	<b>Enabler.</b> Regional firm suggested they do business in Ecuador (Proactive)	<b>None.</b> The evaluation of country conditions was made by the firm	<b>Enable.</b> The firms started to do business
<i>Epsilon (USA)</i>	Discovery: <i>Business weak domestic tie</i> Evaluation: - Exploitation: <i>Business weak international tie</i>	<b>Facilitator.</b> MNE subsidiary linked them to USA company (Proactive)	<b>None.</b> The evaluation of country conditions was made by the firm	<b>Enable.</b> The firms started to do product research together

### **6.2.2.3 Social capital and resources access**

Alpha and Delta mostly relied on their social capital to meet the challenges of development and achieve their growth objectives. Both firms required access to human resources. They decided to obtain this resource in the South American market. They did it through personal ties. Having made a contact, the firms obtained the information and knowledge in order to succeed. They supported the implementation of the subsidiary with financial support and product/technology knowledge. Delta continues with its expansion in different regions (Caribbean and Central America). In the Caribbean, Delta wants to do business with a reliable partner; it needs the trust that flows through the relationship. Delta changed partner and finally entered that market with a Costa Rican firm. This alliance allowed Delta to implement the product that its partner was selling in the Dominican Republic (see Table 34). Epsilon decided to enter the Ecuadorian market. An Ecuadorian company (with a Costa Rica subsidiary) wanted to do business and proposed this international opportunity to Epsilon. The financial resources to support this opportunity were provided by the firm itself. The knowledge was obtained from diverse sources (internal and external).

**Table 35 Social capital and access to resources**

Firm/Resources	Financial Resources	Human Resources	Knowledge
<i>Alpha</i>	External	FDI <i>(through international personal strong tie)</i>	FMK and IK <i>(through international personal strong tie)</i> Product/tech K (internal information)
<i>Delta(E)</i>	International bank loan <i>(through international personal strong tie)</i>	FDI <i>(through international personal strong tie)</i>	FKM and IK <i>(through international personal strong tie)</i> Product/tech K (internal information)
<i>Delta (DR)</i>	-	-	FMK, IK and P/TK <i>(through domestic business weak tie)</i>
<i>Delta (CA)</i>	Internal	FDI	FMK and IK <i>(through international personal weak tie)</i> Product/tech K (internal information)
<i>Epsilon(E)</i>	Internal	Internal	FMK, IK and P/T K (internal information and direct search)
<i>Epsilon (USA)</i>	External	Internal	FMK, IK (internal information and external search)  P/T K (Direct experience and indirect experience)

#### 6.2.2.4 Outsourcing

Outsourcing activities continue to evolve and increase in sophistication. In addition, these activities become intentional according to the objective of each firm, even if firms develop new products. In the post-internationalization phase, the increasing competition that firms face requires new competences (new knowledge). At the same time, the supply of skilled

workers in Costa Rica is lower than the number that firms demand. In this scenario the outsourcing activities turned into a new service. The highly specialized workers provide the firm's core competences. They learn (in the contracting company) about new processes, new products and market trends and they establish front-line relationships that could be develop. In the case of Alpha, it began as an outsourcing firm and the firm then developed a new portfolio of products while still offering outsourcing services, reducing the risk of the high cost of product/service development. Delta used outsourcing in a deliberate way, to acquire product/technological knowledge and to start relationships with some relevant firms. The relationships were expected to be stronger because the managerial team as well as skilled workers are involved in such relationships.

**Table 36 Subsequent products and services of case-study firms**

<b>Firm</b>	<b>Products/services</b>
<i>Alpha</i>	Outsourcing - new products
<i>Delta</i>	Outsourcing - new products
<i>Epsilon</i>	BI (sporadic outsourcing activities)

### **6.3 Early internationals**

This section presents the analysis of the second group of case-study firms (Beta, Kappa and Omega). The internationalization of these firms occurred after the pre-start-up/venture creation phase. This means their pre-internationalization period is from the after first domestic contract was signed until initial internationalization. The cross-case analysis, therefore, is from the point of time when the mental decision was taken until the point of time when the first domestic contract was signed, and from the first domestic contract until the first international contract. This means that there is an analysis of the pre-start-up/venture creation phase and pre-internationalization stage. Early international firms were internationalized after having been created; they had no commercial activity during their pre-foundation stage. Therefore, the analysis of this stage is limited to the composition of its social capital.

#### **6.3.1 Social capital and pre-start up/venture creation**

Social capital may facilitate access to entrepreneurial opportunities (Shane & Venkataraman, 2000), which may lead to new venture creation (De Carolis et al., 2009).

### 6.3.1.1 Composition of social capital by dimensions

In the genesis of social capital for Beta, Kappa and Omega, the structural dimension is characterized by relationships of the lead founder. The relational and cognitive dimensions are based on the interaction of the founders with their counterparts (see Table 36). Similar to the international start-ups, Beta, Kappa and Omega had few relationships that formed their social capital. All firms of early international group possessed weak ties. The content (type) of those relationships was identified as personal (see Table 36a). All the relationships belong to the domestic market.

The social capital involved in the pre-start-up/venture creation phase was sourced from the entrepreneurs' existing personal relationships formed through previous or current workplaces, and enlarged by the relationships gained through the other partners (if any).

Beta and Kappa have a similar cognitive level sourced by similar types of ties. Epsilon has more partners and consequently more ties. The findings indicate that the founders of Omega did not feel the need to enlarge their network base beyond the relationships gained through friends, acquaintances or colleagues. Beta and Kappa had just a few ties and they may enlarge their networks in order to obtain business opportunities.

**Table 37 Composition of social capital in pre-start up/venture creation phase**

	Beta	Kappa	Omega
<i>Structural</i>	Based on relationship with colleagues and family of the founders	Based on personal relationships with acquaintances of the founders	Based on personal relationships with friend and colleagues of the founders
<i>Relational</i>	Based mainly on scant personal interaction. Limited trust	Based on personal interactions. Some trust	Based mainly social interaction between founders and counterpart. Trust
<i>Cognitive</i>	They are workers from software sector interested in software business, but with different frames of mind	They are "new" friends in the country and share similar vision of the world	They are friends in the sector and colleagues with similar frames of mind and work experience

**Table 37a Characteristics of relationships associated to social capital at pre-start-up/venture creation**

Relationships/Case	Beta	Kappa	Omega
<i>Type</i>	Personal	Personal	Personal
<i>Strength</i>	Weak ties	Weak ties	Weak ties
<i>Location</i>	Domestic	Domestic	Domestic

### 6.3.2 Social capital and pre-internationalization

There is scant knowledge about the nature and type of relationships in the home market that either help firms in moving overseas (Prashantham & Birkinshaw, 2015; Fernhaber et al. 2008)

#### 6.3.2.1 Composition of social capital by dimensions

The initial social capital is now built on business and personal relationships (see Table 37). The domestic market brings the firms different options in terms of relationships. Once the firms were in business, the transfer of social capital from personal level to firm level started. The social capital of the founders started to become institutionalized as firm-level social capital. The founder(s) influenced the transfer of their social capital. Kappa started to develop its social capital once the firm was created; all the domestic opportunities were discovered after the creation of the firm. Omega started to do business with a public institution and the relations between these two actors were firm-to-firm. The structural dimension, therefore, is based on mostly business, mostly weak ties, and located in the domestic market (see Table 37a).

As mentioned above, Kappa and Omega had interactions with domestic firms, which mean local business or potential international business. Beta had a particular issue, which is the absence of a video game market in Costa Rica. It therefore needed to obtain an international contract in order to begin sales. The firm mainly based its social capital on personal and institutional relationships and one business relationship. There is occasional interaction with their counterparts, however, with its only client Beta had to generate some trust before starting to do business. This networking activity of Beta allowed it to generate some trust and start its activities (internationally).



Beta and Kappa had similar cognitive levels. Both did not generate enough trust with their counterparts and they needed to enlarge their networks in order to obtain and international opportunities. Omega developed plenty of business relationships that implied potential international opportunities and activities; the product is the key issue for this firm which had a monopolistic niche market in Costa Rica and the region (Central America).

**Table 38 Composition of social capital pre-internationalization**

	Beta	Kappa	Omega
<i>Structural</i>	mainly based on personal relationships and one business relationship	Mainly based on firm relationships with NGOs and other software firms	Mainly based on business relationships of the firm with their local client and regional companies. Also based on personal relationships of founders
<i>Relational</i>	Based mainly on occasional personal interaction and daily interaction with client. Limited trust	Based mainly on sporadic business interaction - limited trust	Based mainly on strong-interaction between founders and their domestic client and sporadic interaction with other firms and people.
<i>Cognitive</i>	Similar interesting. Similar frame of mind. Reputation	Similar frame of mind and experience	Work experience and trust

**Table 38a Characteristics of relationships associated with social capital pre-internationalization**

Relations/Case	Beta	Kappa	Omega
<i>Type</i>	Personal and business	Personal and business	Personal and business
<i>Strength</i>	Personal: weak ties Business: weak ties	Personal: weak ties Business: weak ties	Personal: weak and strong ties Business: weak and strong ties
<i>Location</i>	Business: international and domestic Personal: Domestic	Business: international and domestic Personal: domestic	Business: international and domestic Personal: domestic

### 6.3.2.2 Influence of social capital on international opportunity identification process

This section analyses the influence of social capital on the process of identification of the initial internationalization opportunity for the group of firms Beta, Kappa and Omega. These three *early international* cases began the process of internationalization soon after their creation. Within this group all three were influenced by social capital in their first international OI. The internationalization process of Beta, Kappa and Omega begins near to the start-up phase. The process of discovering the opportunity for each firm is described below:

#### Discovery

Beta did not sell anything at all during its first two years. The firm was trying to develop a video game but this activity requires important financial resources and knowledge of the video game sector. Initially the lead founder of Beta partnered with two other people in order to develop a video game. All three partners agreed with the business idea, however, and despite them having the time and financial resources for this activity the project was not good enough for the lead founder.

*“It (the business) did not work; we were not connected at all. All of us wanted our own firm but this (firm) in particular went nowhere.” (Beta founder)*

He repurchased the shares of the company that had been their partner and sought new partners. By this time he realized they would need the “tools” to develop a profitable video game. Therefore, over two years, Beta was developing its own video game, but with no chance to sell it to a renowned distributor. A video game firm needs to be connected to a big company like Microsoft, for example, to obtain the tools to develop a video game under the required parameters. By that time, the firm’s need for funds was critical. Later, the new partners provided financial resources to the firm. Until the pre-internationalization phase, the colleagues and family ties were the source of the entrepreneurs’ social capital. The new partners did not enlarge the social capital of Beta, which still relied mainly on the lead founder. As the firm had no commercial activity and there was a necessity to sell product, the founder explored some public and non-public institutions in order to participate in business match programmes. A USA-based MNE was looking for a software company in Costa Rica

and the institution linked both companies. This brokerage action with bridge connection caused by an institution was a potentially valuable opportunity for business.

*“Someone from the Information Technology Chamber called me to inform me there was a USA firm looking for a Costa Rican software firm and my firm fit the profile they were looking for” (Main founder of Beta)*

Kappa was formed by two immigrants (US citizens) and a Costa Rican. The latter (a sociologist) wanted to make the NGOs in Costa Rica more visible to the world. New forms of communication worldwide created new opportunities, and the vehicle to be in the new wave (of communication) was a software firm. After a few years in the domestic market the firm had some organizational changes and they were exploring the opportunity to internationalize their activities through a business match programme. An institution (the IT Chamber) linked Kappa with Alpha, which in turn linked Kappa to a US firm. Alpha usually recommended different domestic software firms to foreign firms. This triangulation, which “spans the hole” bridged the firm to a potentially valuable business opportunity.

*“Through the Information Technology Chamber I met him (founder of Alpha) and he linked us with the US market.” (Main founder of Kappa)*

Omega had considered the domestic market as its most important market since its inception. The firm started with just one client, which in turn was a monopolistic firm. Omega developed the infrastructure and the software for IP voice services. Omega has a privileged position within its niche as the only firm that sells its particular product and service. Moreover, it sells it to a large monopolistic firm in the domestic market. Omega started to relate with other firms (IT regional firms) in the domestic market. Those regional firms suggested Omega do business in the Central America region. Omega thus decided to expand its activities. The firm started in Central America countries: Guatemala, Honduras, El Salvador and Nicaragua, all at the same time.

*“One of founders (the lead founder) worked for a MNC in Costa Rica, he knew about global trending products and he realized the potential of IP voice products and services, which did not exist in our country at that time. Later some regional firms which we were doing business in Costa Rica suggested we*

*do business in the countries of Central America and so we did it.” (Omega CEO)*

Evaluation

The main concern of Beta, Kappa and Omega was the resources they considered necessary in order to exploit their opportunities (see Table 38). The company interested in Beta was not confident at all about doing business because Beta was new and lacked experience. Thus, the most important resource needed for Beta was trust. The firm had to convince the US Company to do business and look for the employees. Also, with some urgency, Beta needed cash flow. In a second line of needs, Beta was looking for business contacts related to the video game sector through the new company. Kappa was concerned about the financial resources needed in order to exploit this opportunity, FMK, IK and P/T K, also about human resources. For Omega, the diversity of its relationships and the quality of its product gave them confidence. The firm’s main concern was to find partners in Central America.

**Table 39 The role of prior knowledge and social capital on opportunity evaluation**

Firm/resources	Key resources	Prior knowledge	Social capital (as sources new knowledge, other intangible resources, financing and worker)
<i>Beta</i>	Financial	All three had experience in software firms but not in game developer sector. Lead-founder was part of managerial team in his previous job.	n/a
	Human		*The lead-fonder deliberately developed a networking as a strategy to generate trust and sign the contract to obtain the other needed resources.
	Trust		
<i>Kappa</i>	Information	None of them had business background, but sociology and system engineering degrees. But two were US citizens.	n/a
	Financial		
	Human		
<i>Omega</i>	IK	Three systems engineers and one economist. One of them with previous experience in USA MNC.	n/a
	Financial		
	FMK		
	IK		

Similar to international start-ups, the firms did not conduct any research of the international markets. The absence of a systematic evaluation of alternative opportunities for Beta, Kappa and Omega is also a remarkable characteristic of this process. The prior experience of the lead founder of Kappa helped in the evaluation process regarding internationalization. Omega and Beta did not benefit from previous experience in order to evaluate the international opportunity.

Exploitation

In the case-study firms, partnership (Kappa and Omega) and contractual mode (Beta) are the preferred forms of exploitation. Kappa relied on the relationship with Alpha and the acquisition of a US company to start its activities in that market (USA). Omega relied on its business relationships (representative offices) to exploit its opportunity. Beta relied on outsourcing services as a way to obtain cash flow and new relevant relationships. However, the US Company was not sure about doing business with Beta due to its lack of experience. To overcome this situation the founder of Beta invited the managerial team of the US Company to Costa Rica. They visited the firm and afterwards agreed to work together. Beta also offered to do their first project for free.

**Table 40 Social capital and international opportunity identification**

Case	Pre-internationalization			
	Tie nature and characteristics	Role of social capital on discovery	Role of social capital on evaluation	Role of social capital on exploitation
<i>Beta</i>	Discovery: <i>Weak business</i> Evaluation: - Exploitation: <i>networking on new tie</i>	<b>Facilitator.</b> An institution acting as a bridge (Reactive)	<b>None.</b> The necessary resources were considered by the firm itself	<b>Enabler.</b> Networking activities and worked for free in order to obtain the contract
<i>Kappa</i>	Discovery: <i>Weak business</i> Evaluation: - Exploitation: <i>Weak business and acquisition</i>	<b>Facilitator.</b> An institution and a firm acting as a bridge (Reactive)	<b>None.</b> The evaluation of needed resources was made by the firm itself	<b>Facilitator.</b> Alpha and firm acquisition to start internationalization
<i>Omega</i>	Discovery: <i>weak business</i> Evaluation: - Exploitation: <i>strong personal</i>	<b>Enabler.</b> Domestic regional firms suggested regional business to Omega (Proactive)	<b>None.</b> The evaluation of needed resources was made by the firm itself	<b>Enabler.</b> The new markets were encompassed together with its new partner

Some firm cases were able to internationalize their activities due to their pre-internationalization social capital. The strength of the relationship (strong and weak ties), the type of ties (business and personal) and the location (domestic or international) did play a role in some of the initial foreign activities of the case-study firms.

The results show that social capital influenced identification of the internationalization opportunities of Beta, Kappa and Omega. However, this social capital was sourced from different types of relationships compared with the other group of firms. These early international firms relied on business relationships to reach their first international market.

### 6.3.2.3 Social capital and resources access

In this stage the entrepreneurs' personal background knowledge and new knowledge sourced from business ties were necessary for the firms to face the challenges of internationalization and reach their goals in the international markets, supporting the opportunity identification process. Financial and human resources obtained were not related to social capital. The cross-case analysis shows that having access to resources that are internal to the firm as well as externally facilitates exploitation of early international opportunities for these firms. Beta had previous FMK, IK and product/technological knowledge. Kappa had previous FMK. Omega had prior FMK and IK; its current product/technology is one of its strengths.

**Table 41 Social capital and access to resources**

Firm/Resources	Financial Resources	Human Resources	Knowledge	Other (information/trust)
<i>Beta</i>	Financial  (New partners)	Job market	-	Networking activities  Information of contacts in video game sector through new client
<i>Kappa</i>	Financial (bank loan)	Internal and acquisition	Prior knowledge	n/a
<i>Omega</i>	Financial (bank loan)	Internal and new partners	Vicarious learning Grafting experiential knowledge (FMK)  Internal information (IK)	n/a

### 6.3.2.4 Outsourcing

The early international firms Kappa and Omega started out by offering high-tech products/services. Beta started offering outsourcing services (see Table 41).

**Table 42 Initial products and services of case-study firms**

Firm	Initial product/service
<i>Beta</i>	Outsourcing
<i>Kappa</i>	Web services
<i>Omega</i>	IT communication services and infrastructure

Outsourcing is not particular to the software sector. However, when it used in this sector it offers an endless number of features that could be of relevance in the present research context. Outsourcing may be an instrument to obtain knowledge, an activity that allows firms to maintain their skilled workers, and an instrument to start relationships with industry counterparts, to keep good relationships and to develop those relationships.

### 6.3.3 Social capital and post-internationalization

Networks result into the accumulation of social capital (Sobel, 2002), which facilitates access to key information and resources for the exploitation of entrepreneurial opportunities (Gulati et al., 2000; De Carolis and Saporito, 2006; Ahuja et al., 2012), the ability of firms to form networks and benefit from them is a crucial element for their survival and success (Gulati et al., 2000).

#### 6.3.3.1 Composition of social capital by dimensions

The structural dimension of social capital in the early international group is characterized mainly by business relationships and some important personal relationships. The relational and cognitive dimensions, therefore, are mainly based on the interaction of firms with their counterparts (clients, suppliers and other firms) (see Table 42). Kappa and Omega had personal and business relationships while Beta had mainly business relationships (see Table 42a). Beta had only weak ties; its only strong tie went out of business. Kappa had only weak ties as well. Omega had weak and strong ties. The relationships were located in both the domestic market and international markets.

In the relational level of social capital trust emerges as an important issue at the individual level. These social ties or networks should be generating the building of trust between actors and the flow of information and communication.

Beta needed to start selling, and the networking activities were expected to bring other components the firm needed to develop (i.e. legitimating). Kappa had its niche market and exploited their similar cognitive characteristics. Omega expanded its international business through personal ties and trust is then used to perpetuate the benefit of the relationship.

**Table 43 Composition of social capital post-internationalization**

SC	Beta	Kappa	Omega
<i>Structural</i>	Based on international business relationships	Based on personal (domestic and international) and business (domestic and international) relationships	Based on personal (domestic and international) and business (domestic and international) relationships
<i>Relational</i>	Friendship of long term interaction-trust. Business relations abroad: Customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness. Business relations domestic: Based mainly on long business interactions, generating trustworthiness and trust	Business relations abroad: Client with long interaction based on trustworthiness, limited trust	Personal relations abroad-long-term interaction: trust Friendship of long-term interaction-trust Business relations abroad: Old customers with long interaction based on trustworthiness. New ones with interaction but not enough trustworthiness Based on business relationships, generating trustworthiness and trust
<i>Cognitive</i>	Almost all social relationships are from video game sector. They share similar working background and similar frame of mind. Legitimating	Similar frame of mind. Reputation	They work together and share similar frame of mind. Reputation and legitimating



**Table 43a Characteristics of relationships associated with social capital pre-internationalization**

Relations/Case	Beta	Kappa	Omega
<i>Type</i>	Business	Personal and business	Personal and business
<i>Strength</i>	Weak ties	Weak ties	Strong and weak ties
<i>Location</i>	International	Domestic and international	Domestic and International

### 6.3.3.2 Influence of social capital on international opportunity identification process

This section analyses the influence of social capital on the process of identification of post-internationalization opportunities for the early international group. Beta and Omega had subsequent international activity. Kappa did not enter an additional country.

#### Discovery

Beta began its relationships with video game companies and managed to get the “tools” to develop and distribute games through a major company. After that, the founder attended video game fairs just to gain customers in this segment. The firm obtained some US customers through these fairs, in the video games sector. Later, through this US Company, it worked with a football team in Spain.

*“One of my clients in the US, with which I have a good relationship, linked me to a football team in Spain.” (Founder of Beta)*

Omega decided to expand its activities into the USA, in a geographical area determined by one of its partners. This partner has a company that Omega used to enter that geographical market.

*“The decision to expand in the US was already taken and one of our partners had a friend who owned a company in Texas, he was a personal friend of him.” (CEO of Omega)*

Then, Omega decided to enter the Colombian market. The firm looked for a Colombian partner; the partner was a former CEO of a Colombian communication company.

*“Once we found the partner we decided to offer shares in the firm to obtain a higher commitment from him. He was a former colleague of one of the founders.” (CEO of Omega)*

### Evaluation

The main concern of Beta and Omega was the resources they considered necessary in order to exploit their opportunities (see Table 43). Beta’s client was an important football team, with potential to link Beta to new networks. Thus, the most important resource needed for Beta was product/technological knowledge. Omega decided to enter big markets, and because of that financial resource was the main issue.

Table 43 provides a summary of access to resources for entrepreneurs (firms) and its relevance to the process of identification of international opportunities.

**Table 44 The role of social capital on opportunity evaluation**

Firm/resources	Key resources	Social capital (as source of new knowledge, other intangible resources, financing and workers)
<i>Beta</i>	P/T knowledge	The firm entered the video game sector through current activities and outsourcing (with video game companies)
<i>Omega(USA)</i>	Financial	Internal (venture capital fund)
	Partner	FMK, IK (through a strong tie) indirect experience and P/T K (internal information and indirect experience)
<i>Omega (C)</i>	Financial	Internal (venture capital fund)
	Partner	FMK, IK (through a weak tie) indirect experience and P/T K (internal information and indirect experience)

As Table 44 indicates, new ties, in terms of individuals or firms, can lead to discovery of a focal firm to fulfil their specific needs leading to important subsequent internationalization. For example, Omega found a US company for a sales opportunity leading to the development of a long-term commitment. The actions of *new ties*, who become the firm's new stakeholders in foreign markets, are critical in the growth of internationalization. New ties can also expose a firm to new opportunities through their network ties, or refer and pass them on to others they know to co-exploit an opportunity. For example, a potential US firm brought together their connections to another firms leading to extra sales and a new distributor in that country.

**Table 45 Social capital and international opportunity identification**

Case	Post-Internationalization			
	Nature and characteristics of ties	Role of social capital on discovery	Role of social capital on evaluation	Role of social capital on exploitation
<i>Beta</i>	Discovery: <i>Weak business</i> Evaluation: - Exploitation:	<b>Facilitator.</b> A firm linked Beta to a new client	<b>None.</b> The necessary resources were considered by the firm itself	<b>None.</b> The firm interact directly to its client
<i>Omega(USA)</i>	Discovery: Evaluation: <i>strong personal</i> Exploitation: <i>strong personal</i>	<b>None:</b> The firm decided to expand into USA	<b>Facilitator.</b> The evaluation of needed resources was made by the firm consulting its partner	<b>Enabler.</b> The firms work together in USA market
<i>Omega (C)</i>	Discovery: Evaluation: <i>international strong personal</i> Exploitation: <i>international strong personal</i>	<b>None:</b> The firm decided to expand to Colombia	<b>Facilitator.</b> The evaluation of needed resources was made by the firm consulting its partner	<b>Enabler.</b> Omega opened a new subsidiary in Colombian market

The firms subsequently engaged in more intensive and *deliberate searching* guided by the initial formulation of the international opportunity and growing knowledge. There is a clear pattern whereby the intensity of the search increased as the firms understood better what they needed for their business development. For example, following its initial success in Central America, Omega put more effort into searching for opportunities in more sophisticated markets and bought an office in the USA. However, this experience taught them that the US market was much harder to penetrate than Latin American markets, so they changed to the

sales representative mode known by the managerial team, and focused the search and business development in one region of the USA.

The dynamics in the types of relationships were analysed to capture change over time. Each relationship was evaluated at two different points of time: during the event in question and at the time of the interview. The dynamics in the types of international relationships show that most relationships have not changed in strength. Of those that have changed, some have developed into a personal relationship. These mainly developed from being entirely business relationships to become personal as the parties had got to know each other better and talked about personal things.

#### **6.3.3.3 Social capital and resources access**

Omega used its social capital to enter subsequent markets as well as to access the required knowledge for each market. The firm developed a learning centre, where it trains staff in the different tasks of the software business. Thus, this firm has avoided the problem of the lack of supply of skilled workers in Costa Rica by creating its own human resources. In terms of employees, the firm has grown from less than ten to more than one thousand. Beta tried other markets in order to obtain more ties in the video game sector. The firm did business with European companies but the relationships ended after the contracts. The founder of Beta explained that the cultural component in its products is significant, and the firm did not have much knowledge of the European market. In the other hand, it felt comfortable with the USA Company in term of this variable (see Table 45). The financial resources to support this opportunity were provided by the firm itself. The knowledge was obtained from diverse sources (internal and external).

**Table 46 Social capital and access to resources**

Firm/Resources	Financial Resources	Human Resources	Knowledge	Other (information/trust)
<i>Beta</i>	Financial  (New partners)	Job market	-	Networking activities  Information of contacts in video game sector through new client n/a
<i>Omega(USA)</i>	Financial (hedge fund)	Internal and new partners	Grafting experiential knowledge (FMK)  Internal information (IK)	
<i>Omega (C)</i>	Financial (hedge fund)	Internal and new partner	Grafting experiential knowledge (FMK)  Internal information (IK)	Firm share were offered

#### 6.3.3.4 Outsourcing

At the time of this research, Beta was waiting for its “big hit” video game. In the meantime, outsourcing activities keep the firm profitable. This firm entered the video game sector with zero knowledge of the sector and eventually it was capable of producing its own video games. Beta used outsourcing activities to learn about certain processes. The firm used this activity deliberately in order to obtain knowledge relevant for its development. Omega did not do outsourcing activities; instead it created a learning centre to produce skilled workers for itself and for other ICT firms.

**Table 47 Products and services of case-study firms**

Firm	Subsequent product/service
<i>Beta</i>	Outsourcing - Video games
<i>Omega</i>	IT communication services and infrastructure + Learning Centre

## 6.4 Cross-case social capital development

This section is about the differences and similarities of social capital development and its influence on the internationalization process across the two groups of firms. The differences are described and highlighted.

The cross-case analysis traces the evolution of social capital and its influence on the internationalization process. Given the extensive number of internationalization events in many cases, the analysis highlights major internationalization events only. However, it is pointed out that there is evidence that pre-founding social capital influences initial internationalization and consequently impacts on subsequent internationalization events. The cases show that discovery of the first internationalization opportunity provides new ties, and international social capital through its foreign networks which further develops the firm's international activities. Subsequent internationalization was the result of accessing, exchanging and extracting knowledge with strong and weak ties and the new personal ties who enlarge the firm's knowledge and provide new information, and also the deliberate or passive (through institutions) search for new information and active opportunity development, which in turn can lead to unexpected discoveries.

In the dynamic, rapidly changing markets in which software firms operate, there are challenges connected to the usefulness of individuals' social capital during pre-start-up/venture creation and pre-internationalization. As is evident in all the cases presented in this study, the firms exploit their individual and later their firm-level social capital as they develop business activities in international and local markets. If the existing social capital does not provide sufficient knowledge (and other resources) for internationalization, more social capital is required. The cross-case analysis show that, depending on the firms' ability to change existing social capital and find new, more useful social capital, their internationalization either proceeds or does not. The existing social capital leads as well as regulates the firm's behaviour. The three different dimensions of social capital are needed to acquire resources (financial, knowledge and/or human). The structural dimension should be supported by relational and cognitive dimensions. Otherwise firms are left with sufficient quantity but not quality of resources in the foreign markets. The firms in the study were characterized by activities to develop structural, relational and cognitive social capital dimensions because they were able to expand the existing social capital in all dimensions.

When the firms require the necessary social capital they access the resources of international partners through (e.g.) outsourcing activities. Different sources allow the firms to change the usefulness of social capital and during the internationalization processes of firms the social capital changes. It should also be mentioned, however, that the social capital cannot be observed always to have positively effects on the internationalization process of software firms, the firms have to react (in time) to avoid the negative effects of the social capital, otherwise they may suffer significant detrimental consequences.

#### 6.4.1 Pre-start up/venture creation/ pre-internationalization stage(s)

Alpha, Gamma, Delta and Epsilon (the international start-up cases) had their initial internationalization parallel to the pre-founding and venture creation stage. The domestic market played an important role for these firms. Alpha was only international (only foreign sales) from inception, but the other three firms, Gamma, Delta and Epsilon, started to sell domestically and then a few months later they initiated international activities. The early international firms, Kappa and Omega, discovered their first international opportunity a few years after commencing activity in the domestic market. Beta did not have any domestic activity. This firm was in the video game sector, which is not a profitable business in Costa Rica and so the founder did not want to do any related activity domestically. This firm did not sell, either internationally or locally, for two years. These differences are summarized in Table 47.

**Table 48 Timing differences of international opportunity exploitation**

International opportunity exploitation	Case firms
<i>From inception (international start-ups)</i>	Alpha, Gamma, Delta and Epsilon
<i>After few years (1-4) in domestic market (early internationals)</i>	Beta*, Kappa and Omega

*\*This firm did not sell anything. Beta was just trying to develop its product*

After Alpha, Gamma, Delta, Epsilon, Kappa and Omega entered their first foreign markets, all of them were involved in both domestic and international markets. The Costa Rican domestic market has a significant number of foreign companies including Central American regional companies, Latin American regional companies and MNEs which are global, even

when acting regionally. Business in the domestic market supported the survival of the firms as their “safety net”; the local market smoothes the business cycles of the more developed markets. Similarly, the decision of Alpha, Delta, Epsilon and Omega to establish production facilities abroad was to support their development. The countries chosen for the production centres were mainly used to produce and support the development of other markets, particularly in the North America region. Alpha, Beta, Epsilon and Omega felt more comfortable doing business in that market because of their culture and values. The respective culture and values of surrounding countries were indeed found to be quite similar, according to the firms (as expected), because of the same ethnic origin. The US market (the most important for firm cases) has different ethnic origins, but Costa Rican relationships or local relationships in the USA made no significant difference in the development of Alpha, Beta, Epsilon and Omega. A very important issue is that the firms studied had very limited sales in the countries where there had production centres.



#### **6.4.1.1 Social capital composition by dimension**

The international start-ups (Alpha, Gamma, Delta and Epsilon) based their pre-founding structural social capital on few personal relationships and their initial structural social capital on new relationships (mostly business), including some personal ones derived from pre-founding ties. Gamma and Delta were linked (through a pre-founding tie) to a firm that was the only relationship they created through this tie. Epsilon did not obtain any new relation through pre-founding ties. The exception was Alpha; the founder had his relationship with his brother, as the source of plenty of new personal and business ties in the US market. Once the international start-ups started their activities there was a change in the type of new relationships created. Business ties arose and became an alternative source of social capital for those firms. For example, Alpha, Delta and Epsilon started to relate to and establish new ties with their counterparts (suppliers, clients and partners). Gamma did not enlarge its relationships significantly, only having one new local client. However, for the firms Alpha and Delta, personal relationships still represented an important source of (international) social capital, specifically when they entered new markets.

The early internationals (Beta, Kappa and Omega) based their structural pre-founding social capital on few personal relationships. No new relationships were derived from those ties in their initial internationalization. For example, Omega had few (domestic) relationships derived from pre-founding ties, and obtained new domestic business because of these ties, but pre-founding ties were not related with its initial internationalization. Kappa had some pre-founding ties but few relationships were derived from these ties. Kappa's pre-founding ties were not related to its initial internationalization. Beta is solely an international firm, with no domestic business. The firm's pre-founding domestic ties did not generate new ties. Beta was not influenced by its pre-founding social capital in its initial internationalization. Once Kappa and Omega were created they started to do business with domestic firms and those domestic ties enlarged their networks locally (and later internationally). Beta obtained its first client through a business match programme from a public institution.

The cross-case findings indicate that Alpha, Beta, Gamma, Delta and Omega did not feel the need to enlarge their network base beyond the relationships gained through friends, family, workmates, acquaintances or colleagues at the pre-start-up/venture creation stage. A possible explanation is that all of the founders of those firms were Costa Rican, and they felt confident

with the relationships they had made by that time. Kappa and Epsilon needed to enlarge their pre-founding relationships as they were immigrants. Kappa incorporated a Costa Rican partner and Epsilon had a lot of trouble obtaining their first contract, which came from marketing. Alpha, Kappa and Omega used existing personal relationships to build new relationships (networks), as emphasized by Andersson and Wictor (2003). During the pre-internationalization stage Alpha, Delta, Epsilon, Kappa and Omega enlarged their relationships mostly with business ties.

The international start-ups' (Gamma, Delta and Epsilon) relational pre-founding and pre-internationalization social capital is characterized by limited trust (Alpha is an exception). The early internationals' (Beta, Kappa and Omega) relational pre-founding and pre-internationalization social capital is characterized by limited trust. Omega developed strong ties (trust) in the pre-internationalization stage. At pre-start-up stage most of the firms – Beta, Gamma, Delta, Epsilon, Kappa and Omega – had weak ties, associated with replaceable, passive or invisible relationships. Only Alpha had a strong tie, associated with close friends and/or family relationships. During the pre-internationalization stage Alpha and Omega had some strong ties. Epsilon had a strong tie. For both groups, the generation of trust is important, even before firm's creation. They started to delete, create or reconfigure their ties. In terms of cognitive dimension, the founder of Alpha had a lifelong interaction with his brother and they shared comprehension and similar frames of mind (both from the ICT sector) which made it easy for resources to flow through their relationship. The cognitive dimension facilitates interactions among individuals and affects resource exchange within the network (Tsai & Ghoshal, 1998; Maurer & Ebers, 2006).

**Proposition: The cognitive dimension of personal-level of social capital at pre-founding is positively associated with facilitating the share of the resources through ties of an international start-up.**

**Proposition: The cognitive dimension of initial firm-level of social capital is positively associated with facilitating the share of the organizational resources for an early international venture.**

Trust may emerge from social capital at the individual level (personal or business relationships). This characteristic is identified as distinct and important. In the context of a

small developing country, generating trust is particularly relevant as key issue affecting business development. In the case-study firms, most of the founders' ties were weak (pre-founding and pre-internationalization), which means scant interaction with their counterparts. The founder of Alpha had strong ties and one of them was his brother.

There are different levels of trust. This means that the strength of relationships (strong or weak) is important for the quality of the resources flowing through the network. An example of how a strong relationship (with high level of trust) is advantageous in the pre-founding phase relates to Alpha. The founders are brothers, so they have known each other their whole lives. They were previously working in different countries; while one of them had an important job in a US-based MNE, the other was working in a Costa Rican bank. One recommended the other, and thus created a business opportunity. The one who worked in the USA told his brother about the business and gave him all the information, the knowledge and emotional support needed to succeed in this opportunity. Moreover, the fact of the brothers having similar frames of mind facilitated the flow of resource sharing. Together they developed a strong commitment to the decision to create an international start-up.

**Proposition: The relational dimension of personal-level of social capital at pre-founding stage is positively associated to the quality of the resources acquired for an international start-up.**

**Proposition: Greater relational dimension of initial firm-level social capital is positively associated with the quality of the resources acquired for an early international venture.**

Illustrative examples of the resources flowing from a weak relationship in the pre-founding stage are found in the cases of Gamma and Delta. Their counterparts (as a broker) connected both actors (the founder and the companies). Interaction between the counterpart and the founder was scant so there was not a high level of trust. While it is true that the weak tie bridged the gap it is clear that no other resource flowed through this tie, to help the firm exploit this opportunity or to support its internationalization. This (limited) exchange is explained by their similar experiences or concerns.

These findings are in accord with the literature which postulates the critical influence of personal ties at the start-up phase. Three out of the four international start-ups in this research were supported in their creation and internationalization by personal ties. In contrast, the early internationals' social capital in the pre-internationalization stage was based mainly on business ties. Chetty and Wilson (2003), Coviello (2006) and Coviello and Munro (1995, 1997) suggested that the initial network of an INV might be more business based than personal. In general, for all the cases, the cross-case analysis reveals the notion of combined personal/business ties through all stages (Larson & Starr, 1993).

**Proposition: The structural dimension of personal-level of social capital at pre-founding stage is positively related to creation of an international start-up.**

**Proposition: The diversification of structural dimension of initial social capital, in terms of type of relationships, is positively related to the creation of an early international venture.**

The cross-case analysis mainly focused on dimensions of pre-start-up/venture creation and pre-internationalization social capital and its role in initial internationalization activities for both groups. The analysis also involves a cross-level analysis associating the individual level and firm level of social capital. It must be noted, however, that the boundary between individual and firm becomes blurred when one looks at entrepreneur and firm. For example, some long-term social relationships built by the entrepreneur when he was working for another firm become institutionalized once a new venture is formed, and become a part of the new firm's network. The relevant personal relationships established by the founder (and its partners) prior to founding the firm started to transform once the new venture was created, and became part of the firm's social capital. This process is clearer in Alpha and Omega which had a significant amount of pre-founding social capital and therefore they transferred their structural dimensions with few problems. The transfer of the relational and cognitive dimensions was not so easy and took more time and resources.

The social capital of the seven firms during the pre-start-up/venture creation and pre-internationalization stages resided mainly in the founder(s). The resources available through personal relationships were accessed by the founder(s), and later the resources made available through business relationships could be accessed by each of the firms. The cross-case

analysis of internationalization of the seven firms shows that the wider/more diversified the structural social capital of the firm, the more trust and reputation relational social capital holds. The closer the similarity between the actors in the network, the more they share resources through (individual- or firm-level) social capital.

#### **6.4.1.2 Social capital development and internationalization process**

The cross-case findings show that pre-founding social capital had a significant influence on the discovery of international opportunities for Alpha, Gamma and Delta; three out of the four international start-ups. The founder of Alpha depended entirely on his strong personal international tie to enter the overseas market, thus pre-founding social capital influenced the entire process of international opportunity identification. Gamma and Delta were influenced just in their discovery of international opportunity by social capital at the pre-founding stage. Epsilon was not influenced at all by pre-founding social capital in its initial process of international opportunity identification. Personal ties have been recognized as a factor that influences identification of international opportunities using pre-existing social networks (Covelo, 2006; Ellis, 2011; Ellis & Pecotich, 2001), as Alpha, Gamma and Delta did. If the firm does not have any network, building a new network is an option (Loane & Bell, 2006), as Epsilon did.

The firms in the early international group were not influenced in their initial foreign activities by their pre-founding social capital. It seems that social capital at this stage was enough to influence the firm's creation but not its internationalization. However, firm-level social capital influenced their initial international discovery and exploitation phase. That is, their internationalization was influenced by new ties (mostly business), sometimes linked by institutions, instead of pre-founding (personal) ties. Kappa and Beta participated in a business match programme to found international partners, and later they were linked to foreign companies. Omega utilized its business ties to internationalize its activities. Previous insights from the entrepreneurship literature agree that young entrepreneurial ventures tend to rely on personal embedded ties initially and then develop appropriate business ties (Hite & Hesterly, 2001; Larson & Starr, 1993; Ibeh & Kasem, 2012).

**Proposition: After venture creation, domestic firm-level social capital will positively influence the creation of an early international venture.**

Alpha was the only firm that was influenced by an international tie. Beta, Gamma, Delta, Kappa and Omega were influenced by ties located in the domestic market, which is different from the finding of Prashantham and Birkinshaw (2015) that internationalization is in general adversely affected by home-country relationships.

During the process of identification of the initial international opportunity, none of the firms did any systematic identification and evaluation of alternatives or comparison of their second-best opportunity. In every case, the founder(s) wanted to create a firm and they were waiting for the first affordable opportunity. Nowieski and Rialp (2013) argued the entrepreneurs in transition economies rely on market experimentation rather than forecasting. Entrepreneurs having little or no resources to achieve their desired ends will therefore work jointly with their clients (Sarasvathy, 2001; Sarasvathy & Venkataraman, 2011). It would be interesting to explore if venture creation and internationalization may be characterized by the processes described as “improvisation” and “bricolage” by Baker et al., (2003). As the internationalization of all seven firms included hardly any evaluation activities the relationships involved in the initial internationalization mostly belong to discovery or exploitation activities. Nevertheless, to answer the question of why some entrepreneurs finally exploit opportunities (Shane & Venkataraman, 2000) other factors besides social capital ought to be considered. In the case of international start-ups, prior knowledge and/or the outsourcing activities facilitate the creation of the firm in the international context. The early internationals relied mainly on new information and knowledge.

The cross-case analysis traces the evolution of prior and new knowledge and the way that it affects initial internationalization. The findings show that the first attempt at internationalization provides new information, new network ties and tacit experience through learning by doing, which further increases the firm’s international interest and motivation, willingness to accept uncertainty, and ability to recognize and develop the first opportunity recognized. At the same time, entrepreneurs start their businesses in a manner that involves business transactions from the venture’s inception, sometimes in one country only (Kuemmerle, 2002) highlighting the importance of prior knowledge.

**P: At pre-founding stage, in the absence of social capital, prior knowledge would positively influence the creation of an international start-up.**

International start-ups Alpha, Gamma and Delta, and early internationals Beta, Kappa and Omega manifested reactive behaviour in their initial opportunity identification process. Epsilon was the only case-study firm that demonstrated proactive behaviour in the initial opportunity identification process.

On market selection, Bell (1995) found that domestic client followership strongly influenced market selection. This is the case of Omega, which discovered the international opportunity because of a suggestion made by regional clients in Costa Rica, which later became clients in Central American countries. Alpha, Kappa and Epsilon emphasized the importance of being close to customers and partners. For example, Epsilon discovered the international opportunity from them and later decided to enter (and operate in) Panama to be close to its major (and only) customer by that time. In the case of Kappa, the primary influence on discovery of the international opportunity was the partnership (with Alpha), but market potential was an important issue. Actually, Kappa placed most emphasis on market opportunities, and appeared to know from early on which market had the best potential for its product.

Alpha strove to become an international firm from the beginning; and even at the early stage did not sell in the domestic market. The international opportunity discovery was influenced by family network in the target market and the decision to buy a US firm was made because of its importance. Beta, Delta and Gamma discovered the international opportunity through a bridging tie and which market to enter was not the most important issue they had to decide. Creating their own business (Beta, Gamma) and the necessity of cash flow (Delta) were the main considerations for those firms. Firms Alpha, Beta and Kappa were not reluctant to start their internationalization in psychologically or geographically distant markets (Bell, 1995), while firms Gamma, Delta, Epsilon and Omega did choose psychologically or geographically close markets, as proposed by Johansson and Valhne (1977).

Firms Alpha, Beta and Kappa started their foreign activities in the USA, a very asymmetric market compared with Costa Rica. Madsen and Servais (1997) proposed that international experience changes founders' perceptions of distance to other countries. One co-founder of Alpha was working in the USA. Beta had previous experience in doing business in the US market and the founder's university studies were in the USA. The lead founder of Kappa was a US citizen with a few years of living in Costa Rica. Thus, psychic distance has very limited

influence on the foreign business development of those firms, as suggested by Ellis (2000). It seems that a key factor is ethnic ties, considered an important variable by most of the respondents. That is, (bonding) international social capital influenced market entry and development of the firms in each market.

Reaching only domestic markets does not appear to be an option, in fact, only Kappa and Omega started in their home markets while planning to target international markets. Beta has never targeted the home country; so far it has generated negligible domestic sales revenues for its video game activity. The firm has refused to work in any related activity with domestic firms.

Regarding entry mode, the social capital of Alpha, Beta, Gamma, Delta, Kappa and Omega influenced their entry mode. Epsilon's market selection was a response to the firm's direct marketing and the entry mode (direct sales) was decided after it had gained knowledge of the market. Alpha, Beta, Delta and Epsilon used outsourcing activities as a mode of entry.

As mentioned before, the duties related to outsourcing services may be made in the contracting firm or not, it will depend on the necessities and agreements of the firms. Gamma had no chance to choose its entry mode because the MNE required that the project should be developed in its Panamanian offices (*in situ*). Kappa chose FDI as its entry mode. The main founder clearly explains the motivation:

*“We were new in the international markets, even in the USA. We were new to doing web developer services in that country and we did not know which the best way to do it was. Our ‘role model’ was other Costa Rican software firms that, to the best of our knowledge, were doing it fine.*

*“Buying a firm in the USA make sense to me. There are cultural differences between both countries and the behaviour of people from the USA differs a lot compared to the behaviour of people from here, so the USA firm would be run by our USA employees.”*

Kappa “assumed” the role model for its entry mode because it deemed the most appropriate way to enter new markets was through a firm which deals with direct transactions with the



customer in the USA. Kappa worried about its lack of reputation/credibility in the eyes of potential US customers.

A number of empirical studies have demonstrated that a firm is able to acquire relevant international information from its relationships (Chetty & Eriksson, 2002). Managerial ties and inter-organizational relationships allow firms to understand better the demands of customers, to identify new opportunities quickly and to act swiftly on such information (Ellis, 2000). Closer individual relations with foreign partners, such as customers and suppliers, allow the firm to change product attributes more rapidly than competitors can (Bruton et al., 2007).

#### **6.4.1.3 Social capital development and resources access**

Social capital allowed the international start-up firms to access resources not only at the pre-start-up/venture creation stage but also in the pre-internationalization stage. Social capital influences initial internationalization by potentially providing considerable resources, particularly when the level of trust is high (e.g., Alpha). The early international firms had access to resources through their social capital, taking into account that absence of trust was not an obstacle to internationalization of their activities. Beta had to build some trust in order to obtain its first international project. Trust is important, and the higher the better. Key relationships provided valuable business transactions and they were also sources of resources to compensate for the inherent resource constraints of the case-study firms in developing their foreign business.

Pre-founding social capital speeded up internationalization of three out of four international start-ups by making necessary resources available. Similarly, the initial product/service offered is an important factor for the speed of internationalization. Alpha and Delta did it by 100% outsourcing services and Epsilon with 50%. In the case Gamma, which started with customized products, it does not seem that the product offered was an important factor to the speed of internationalization. Moreover, the founder of Gamma did not plan to start with such a product. Pre-founding social capital did not influence the initial internationalization of the early international group but pre-internationalization social capital speeded up their internationalization by making necessary resources available as well. The initial

product/service offered is not an important factor for the speed of internationalization of Kappa and Omega. The case of Beta started with outsourcing services.

One of the most important factors and a common element for all seven firms is the availability of adequate resources, particularly human resources, at pre-founding and pre-internationalization stages. In this sector (high-tech), the availability of human resources plays an important role as an intangible element of the entrepreneurial internationalization process, as suggested by Jones and Coviello (2005).

Reputation and the extended business networks of the clients' partners sometimes facilitated accrual of social capital (Alpha). Referrals provide the firm cases with opportunities to gain initial contacts with the business networks of the key clients/partners. Uzzi (1996) finds that third-party referral networks, together with previous personal relations, are two primary sources through which the embedded ties of an organization can be developed.

Sigmund et al. (2015) found that, regardless of the quality of the institutional environment, entrepreneurs include people with networking skills in their founding teams, or seek assistance and training to improve their own networking capabilities, when trying to successfully operate a newly founded venture. In the cases of Beta and Kappa, the founding team possessed scant relevant ties so they tried to enlarge their firm-level social capital, looked for assistance (the business match programme).

Quality rather than quantity of pre-founding social capital may explain how effective a firm is at obtaining these required resources. Ripolles et al. (2002) found that the size of the personal network and the frequency of the interaction with this personal network during the period of business creation (pre-founding) were positively and significantly related to obtaining both tangible and intangible resources for successful early internationalization. In the same direction, Granovetter (1973) considered that a diverse network of many weak ties may provide the entrepreneur with a larger number of indirect links from which to obtain resources. However, the real insight into the content of the interaction process between the entrepreneur and the personal network may be the key to obtaining the necessary resources to start a business, as mentioned by Chetty and Söderqvist (2013). Certainly an international start-up may require a weak tie or an international tie, but the resources obtained through that

tie are considerably different because trust is directly related to this event. Epsilon, for example, had to create a new network in order to expect to obtain resources from ties.

Some research studies cover the topics of accessing, mobilizing, combining and creating resources through business relationships (Håkansson & Waluszewski, 2007). They explore business interactions that appear crucial for business development in general. Early international firms which discovered their international opportunity because business networks combine resources in the context of business networks that provided business development (Ciabuschi et al., 2012).

**Table 49 Resources and sources for internationalization**

	Initial internationalization	
	Access to resources through social capital (in grey) of international start-ups	Access to resources through social capital (in grey) of early internationals
Alpha	<p>*FMK: Experiential knowledge sourced by direct experience/grafting (dual role of the brother who is contractor/co-owner) → international strong personal tie</p> <p>IK: Mostly international enterprise knowledge sourced by direct experience/experience of external “advisor” (his brother) → international strong personal tie</p> <p>P/T K: Grafting (outsourcing activities)</p> <p>*Financial: through national strong personal tie</p> <p>*Human: job market</p>	n/a
Beta	n/a	<p>*FMK: experiential knowledge sourced by direct experience (prior knowledge)</p> <p>IK: sourced by direct experience (prior knowledge)</p> <p>P/T K: Direct experience and grafting (outsourcing activities)</p> <p>*Financial: new co-owners funds</p> <p>*Human: internal and job market</p>
Gamma	<p>FMK: (none)</p> <p>IK: (none)</p>	n/a

Initial internationalization		
	Access to resources through social capital (in grey) of international start-ups	Access to resources through social capital (in grey) of early internationals
	P/T K: (direct experience-prior knowledge) *Financial: Own funds *Human: Job market	
Delta	*FMK: market general knowledge sourced by direct experiences (prior knowledge) IK: (none) P/T K: Grafting *Financial: Family funds *Human: Job market	n/a
Epsilon	*FMK: market specific knowledge (sourced by external search) IK: market entry (sourced by external search) P/T K: Product (sourced by direct experience-prior) *Financial: Own resources *Human: Job market	n/a
Kappa	n/a	*FMK: (sourced by direct experiences-prior and indirect experience-grafting/acquisition) IK: (sourced by direct experiences-prior + indirect experience-grafting/acquisition) P/T K: Product (sourced by current activities)

Initial internationalization		
	Access to resources through social capital (in grey) of international start-ups	Access to resources through social capital (in grey) of early internationals
		*Financial: firm resources *Human: from acquisition
Omega	n/a	FMK: sourced by indirect experiences-grafting (representative office) → facilitated by a domestic weak business ties. IK: sourced by indirect experiences-grafting-representative office → facilitated by a domestic weak business ties. P/T K: P/T sourced by current activities *Financial: Firm resources *Human: direct experience and grafting (director of external-representative office )

#### **6.4.1.4 Social capital development and outsourcing**

At the pre-start-up/venture creation and pre-internationalization stages, outsourcing activities are related to the creation of the firms. The outsourcing activities seem to be a trigger to create an international new venture. Alpha, Beta and Delta were created mainly because this service that disaggregated their global value chain and creates new low cost (and risk) opportunities as suggested by Mundambi and Venzin (2010). Epsilon used this activity to support other activities when the firm was created.

The potential benefits of outsourcing are quite significant compared with the investment. The analysis of case firms that offered outsourcing services found that was possible to reduce uncertainty (Alpha), to avoid a large investment (Delta), and to support cash flow (Beta) or other activities of the firm (Epsilon). Financial resources are necessary, but not in large quantities, to establish a firm that provides only outsourcing services. An exception would be if the firm considers any other investment, as the case of Alfa. This activity consists in contract tasks of services to an external provider. The contracting company that wants outsourcing services pays the wages and an additional percentage of the employee's salary to the firm, which provides the skilled workers. The investment for the firms offering outsourcing mainly consists in human resources, and the chances of loss are very low or close to zero. While it is true that outsourcing activity is not an example of entrepreneurial activity (Lumpkin & Des, 1996), using it to enter an international market, and in the development of the firm, makes it an entrepreneurial activity (Davidsson, 2004). Case firms that were created offering outsourcing activities reach international markets in a unique form because the entrepreneur/firm does not yet possess enough resources as proposed by Su (2013).

#### **6.4.2 Post-internationalization stage**

Once the initial internationalization/creation of the firm has happened, the new firm starts to combine and integrate the social capital of its members. Thus, this transfer of (team or) individual social capital to the firm-level social capital is possible without losing the individual social capital in the process (Arenius, 2002). It happens as the organization grows (Larson & Starr, 1993). It is quite possible that a founder (or founders) would decide to leave the firm shortly after the firm is founded, because the firm and the founder's goals may become conflicting. Beta lost two of the original founders because of their differences with lead founder, and their social capital was lost. This situation became a liability to the firm

because it slowed down the video game development. The founder of Beta rose as a possible explanation for this situation: “*the lack of the same desire to produce a video game*”. In the case of Kappa the lead founder was the creator of the business idea. He recognized the business opportunity when travelling and observing global trends in social communication. He then created a firm and was willing to do anything for this firm. He understood from the beginning the importance of aligning the interests of the other members of the team with the firm’s objectives. He accomplished this by tying the other founding members to it through shared ownership. The case of Omega was similar to Kappa. The relationships of each firm started to become part of a repeated cycle of exchange with other firms and increasingly independent of the entrepreneurial founder (Katz & Gartner, 1988; Arenius, 2002).

#### **6.4.2.1 Social capital composition by dimension**

The cross-cases analysis shows that the more diversified the structural social capital, the more interaction and trust in the relational level. The social capital transfer for those firms is a never ending action. Both personal-level and firm-level social capital interact for the benefit of the firms’ objectives at different stages. The more common frame of mind the cognitive social capital entails the more resources the firms will acquire. As a consequence firms with a high relational dimension of social capital have a higher level of commitment in foreign markets.

**Proposition: The cognitive dimension of firm-level of social capital at post-internationalization stage is positively associated to share resources for international development.**

The international start-up group (Alpha, Gamma and Delta) diversified their social capital in the post-internationalization stage; personal relationships and business relationships, including some institutional relations, is the type of their social capital. Epsilon did not create any personal relations; its social capital was based on business ties. Personal relationships are crucial for Alpha, Delta and Gamma (in a different sense); the first two firms have long-term ties and have created some more personal ties during the post-internationalization stage. Gamma’s survival after its de-internationalization was further due to a domestic personal relationship. Their potential ties exceed what they can manage and because of that the firms choose the most important ties for their business growth and invest time in developing those



ties. Outsourcing activities help this cause because technical workers together with the managerial team interact with their counterparts.

The early internationals (Beta, Kappa and Omega) based their structural post-international social capital on personal and business relationships, including institutional relationships. However, Beta considered new business relationships very important, particularly those in the video game sector. Kappa had few and not very useful personal ties, and the firm had some problems with business ties because of repeated change (three times from 2002 to 2012) in the managerial staff. Omega has plenty of relationships, business and personal. This firm has a significant number of long-term relationships (business and personal). Beta dedicated plenty of time to networking activities. The firm needs new ties and the managerial team interact frequently with others in the video game sector in order to obtain new relevant ties.

**Proposition: Strong international ties with a high level of trust at the pre-founding stage, shared experiences and similar frame of mind are positively associated with the contribution of social capital to expansion in extant international markets, new international markets, and domestic markets.**

The cross-case findings indicate that both groups enlarge their network base through networking activities. The interaction of each firm varies depending on the needs of the firm.

The strength of personal relationships (weak to strong) is a characteristic of all firms. This is an important issue because through those ties trust must flow in order to obtain the resources needed. The findings are in accord with the literature which postulates the critical influence of social capital to facilitate market entry and therefore international growth. Firms did not develop their social capital uniformly and this is an important source of differential growth outcomes (Prashantham & Dhanaraj, 2010). The cross-case analysis mainly focused on the dimensions of post-internationalization social capital and role it played in subsequent internationalization activities for both groups. The analysis also involves a cross-level analysis associating the personal level and firm level of social capital. In this stage, the boundary between individual and firm social capital may be blurred. For example, personal relationships were needed when some of the firms entered a new market although the process of opportunity identification started due to a business relationship. Alpha and Omega

accumulated a large amount of international and domestic social capital and therefore they grew locally and internationally to become big firms with behaviour similar to MNEs.

**Proposition: Personal relationships in the structural dimension of firm-level social capital at post-internationalization stage are positively associated with business development.**

#### **6.4.2.2 Social capital development and internationalization process**

When a firm has more resources at its disposal, this access opens the door for more discovery, evaluation and exploitation of opportunities. Omega is the only case which internationalized its activities in more than one country from the beginning. By that time Omega had more ties than any other case-study firm, in fact, those ties were the trigger for its internationalization. The firm approached the US because it is the biggest and most sophisticated market, and the lead trending technology market. Epsilon's success depends on the development of constantly improved generations of web design in step with rapid improvements in hardware performance, centred in the US.

Kappa should benefit from low psychic or geographic distance because two of the founders are US citizens. The US market seemed to them the right market for several reasons, including that it was the founders' home market, and that it had huge market potential. At the time of this research, Delta was planning a merger with its main customer and keeping close to the circles in which the technology development is going on.

Social capital provides a means of enforcing norms of behaviour among individuals or corporate actors, and thus acts as a constraint as well as a resource. It contributes to patterns of behaviour, e.g., trust, willingness, and the capacity to cooperate and coordinate, and the habit of contributing to a common effort even without supervision. Successful cooperation cannot be achieved in inter-firm relationships without constraints on the partners to perform according to each other's expectations. Social capital may enable early international ventures to use alternative governance structures and modes of internationalization.

The case-study firms also relied on their social capital to identify potential partners. Not only did they take advantage of social capital for identification of partners, they also used it to gain

access to these partners and to negotiate cooperative agreements, and to speed up the partnering process. Having joint suppliers and customers, and industry associations, or being related through an employee's professional connections, is sometimes beneficial for partner identification and access to them.

Some of the firms continue to focus on their domestic expansion. The focus of this expansion has been on increasing general knowledge to improve domestic organization and business operations. Gamma's experience of unsuccessful overseas activities influenced its future internationalization plans. For a few years it was not proactively planning to reach into overseas markets. Future overseas market expansion will be reactive to retaining its existing customers which have overseas operations. Although Beta's investors have been supportive of the turnaround, it operates within the constraints of the investment firm's focus, which is video games rather than software. The firm's present acquisition of new knowledge in terms of the type and source of new knowledge acquired.

Identification of subsequent internationalization opportunities was the result of accessing, exchanging and co-producing the resources through current strong and weak ties, located domestic or abroad, and/or the actions of new ties which provide new information and knowledge for active opportunity development. The firms acquired *knowledge* from external sources to help grow their domestic business. An important part of the change in management practices was increasing the managerial team and the participation of new members in decision making. The firms increased their *product knowledge* to develop new services. Delta identified customers' needs and developed new products and services. Technical staff and managers worked with MNE to acquire the new knowledge to provide the service. Omega employed a new team leader and combined consumer and corporate teams to combine branding expertise and create a new recruiting service.

As mentioned above, the influence of cultural proximity on the initial and subsequent choices of foreign markets and operation locations was not significant in all the cases. While geographical proximity was regarded as a location advantage that facilitated coordination and control of foreign operations, geographical closeness was not correlated to psychological distance. Three out of seven firms targeted foreign markets that had the largest market potential and represented the global trends of the business sectors in which they operated. This agrees with Arenius (2005), Bell (1995), Crick and Jones (1998), Knight, Bell and

McNaughton (2003), Lindqvist (1997) and Madsen and Servais (1997). All the cases dealt with customers from different region within the same continent and one of the firms was related with markets such as the UK and Spain. Kappa and Omega started out conducting business in both domestic and foreign markets. Business in the domestic market supported the survival of the firms and their accumulation of resources at the early stage. The decision by Alpha to place its business focus on the USA was made in response to the huge potential of the market and perceived cultural proximity. Similarly, the decision by Alpha, Delta and Epsilon to establish production facilities overseas were made because of the latter's location advantages of low cost and high quality human resources. The respective cultures and values of surrounding countries and Costa Rica were indeed found to be quite similar because they shared the same ethnic origin. However, a very important issue is that the firms have very limited business sales in these neighbouring countries – they produce in those countries to sell in North America, particularly the US market. In that market, besides different ethnic origins, the culture and values are not so different. These findings were in agreement with other studies, which find psychic distance to have very limited influence on the foreign business development of firms (Ellis, 2000). It seems that the connection factor defined in terms of ethnic ties is considered the least important by most of the respondents, whereas location-specific advantages (country advantages) were the most important.

#### **6.4.2.3 Social capital development and access to resources**

Social capital is a dynamic resource that needs to be managed carefully in order to access effectively its full potential as an organizational resource. It needs to be developed strategically by entrepreneurs to transform it into an effective resource for the firm. According to Nathalie and Ghoshal (1998), this involves creating new combinations either by combining elements previously unconnected or by developing novel ways of combining elements previously associated. They consider exchange as a prerequisite for resource combination and as one which involves exchange of explicit knowledge which occurs through social interaction and coactivity. Whether the influence of social capital is on internationalization, new product development, funding, or strategic alliance, all these ultimately lead to the creation of new knowledge.

**Proposition: Proper management of firm-level social capital is positively associated with capabilities to support business development.**

It is evident from the case study findings that these entrepreneurs have been able to access network resources because they built their networks based on *trust* and *reciprocity*; and where knowledge played an invaluable role in developing such mutually beneficial network partnerships. However, the three knowledge types discussed in Chapter 2 do not develop automatically; they are an outcome of the network learning of the individual. The cross-case findings indicate that in the post-internationalization stage social capital helps in the learning process of the firms, which is important to their international growth. They were able to acquire knowledge, along with the identification of business opportunities.

**Proposition: The relational dimension of social capital at post-internationalization stage is positively associated to the quality of the resources acquired for international business development.**

In the international start-up group, such learning led Alpha to identify and forge a strategic partnership with a friend to enter a new market (as a production centre). Similarly, Delta had identified its partnerships in foreign markets. These firms obtained useful technological learning outcomes through their outsourcing activities (interaction between technical employees). Epsilon was able to learn about markets and new products/technologies, which it was able to offer to subsequent clients. On the other hand, Gamma was not able to use its social capital to learn, the firm's entrepreneur was more interested in developing just one relationship. The firm was not able to convert these interactions into more business opportunities. Instead of developing more opportunities to expand its activities, Gamma's entrepreneur was only concerned with cash flow. Gamma's lack of learning resulted in de-internationalization.

The early international group reflects similar results. Beta obtained useful technological learning outcomes through its outsourcing activities and experiential knowledge from its partners. Kappa was not able to stabilize its social capital development because of the continued change in its managerial team and the target market (USA) was the home country of two of the original founders (who are still in the firm). Omega also identifies and forges a strategic partnership with a friend to enter every new market. This firm had an important previous product/technological knowledge which it combined successfully with new

knowledge domestically and internationally, for this the firm used MNE certification of their technical workers.

Acquisition of general internationalization knowledge has influenced the domestic operations of some firms. The experience of successful overseas FDI influenced Alpha's USA market expansion. New business and management structures have contributed to the growth of Alpha, Delta, Epsilon and Omega. Those firms increased knowledge to improve the organizational changes of the businesses. Gamma changed its general management practices and business culture; it increased the managerial team, improved financial control and operational efficiency in order to survive and achieve re-internationalization. Beta developed internal management practices, and improved internationalization strategy and negotiation competency to meet the objective of developing a profitable video game. Kappa had problems extracting the benefits of external social capital due to scant internal social capital. Apart from the positive strategic influence network resources have on organizational performance and growth, social capital can also act as an inhibitor of growth if not managed well. There is evidence that it can act as a promoter of organizational performance and growth by way of providing resources, and new (domestic and international) business opportunities.

Alpha, Delta and Epsilon arise out of the notion of mMNE (Dimitratos et al., 2003). The mMNE concept draws attention to how SMEs internationalize, and distinguishes those that adopt higher-commitment entry modes from conventional exporters. The findings show that international social capital is useful in aiding SMEs to become mMNEs (Alpha), in the sense of expanding their production capacity in foreign markets. The relationships are an important facilitator of SMEs' capacity to go beyond conventional exporting (FDI). Prashantham (2011) pointed out that co-ethnic social capital (e.g., Alpha) can be accessed and leveraged within overseas ethnic communities, which could yield outcomes that would not otherwise be as readily achieved due to the peculiar attributes of co-ethnic social capital that appear to lie in the trust that is readily available. Thus, the findings show that a sufficient amount of international social capital sourced by strong ties with high levels of trust enables rapid international growth.

Referring to the experience of the seven case-study firms, proactive networking to develop key relationships and to create access to network resources is identified as a common direction through which the companies compensated for their inherent constraints and

pursued foreign business development. It supports the focus of this research, on defining social capital as a key factor in the internationalization process of SMEs. The access to human resources in the post-internationalization stage is described as similar to that of a MNE.

**Proposition: Social capital is positively associated to support the international production capacity of the firm**

All the firms were able to benefit from their social capital to identify potential partners. Moreover there were no difficulties in identifying partners even when there was a low level of social capital. A low level of international relational social capital may not be a problem, but no international social capital means problems in convincing potential partners to engage in business or cooperation activities. Beta and Kappa faced more difficulties (than Omega) in trying to convince potential partners to do business with them.

Emerging economies are not static but evolve over time and at different rates across countries (Hoskisson et al., 2013). These evolutionary processes initiated by successful entrepreneurship drive changes in the local institutions and cultures. In some regions, the actions of entrepreneurs contributes to the creation of an environment that encourages yet more entrepreneurship and even forms a positive feedback loop (Autio et al., 2014).

**6.4.2.4 Social capital development and outsourcing**

There is evidence that the knowledge acquisition through outsourcing activities may affect firm performance (Li et al., 2010). In addition the use of the outsourcing is a growing phenomenon particularly in emerging (or developing) economies (Su, 2013). Alpha, Beta, Delta used this activity to their international development. Alpha acquired FMK, IK and P/T knowledge that reduced the firm's perception of market uncertainty or risk, which, in turn, impacts on commitment to international markets. Beta needed knowledge about trends, new process and opportunities as a key resources and the analysis has demonstrated that Beta was able to acquire relevant knowledge from contractors or allies firms as proposed by Contractor et al. (2010). Although outsourcing activities let Delta faces the economic cycles, balancing its turnover in conjunction with its product/services activities, this firm took advantage of the new knowledge flowing through the employees. Delta learnt about new process to produce their main product. Thus, the case firms seek the right strategic in order to exploit it. At post-

internationalization phase the firms choose their clients (in outsourcing activities) and from these relationships emerge new knowledge. Internationalizing firms often have to acquire knowledge proactively from foreign partners to create new capabilities that can contribute to their competitive advantage (Coviello & Cox, 2006). The skilled workers observe and learn about specific tasks in different firms and they transfer that knowledge to the firm for which they work. That knowledge could produce technical capabilities and product and technological capabilities (Kenny & Fahy 2011; Kyläheiko et al., 2011).

**Proposition: Outsourcing activity is positively associated to creation of new networks.**

**Proposition: Outsourcing activity is positively associated to acquisition of knowledge.**

## **6.5 Summary**

Collectively, the cross-case findings pointed out a number of general themes related to the evolution of social capital affecting firm internationalization proposed in Chapters 2 and 3. The themes that emerge in the internationalization phase overlap with, and include those in, the founding of the firm. First, the cross-case findings indicate that the founder's social capital at early stages plays a key role in discovering international opportunities and acquiring the needed resources which may develop in the later stage of internationalization.

Second, the cross-case findings show that, generally, initial internationalization can be shaped by social capital or prior knowledge that can be accessed and utilized, for instance, encountering new ties and/or the actions of existing and new ties that discover opportunities while acting on their own knowledge and new information. This supports the predicted relationship between prior knowledge, network ties and discovery of (initial international) opportunity and the role of prior research (Birley, 1985; Shane, 2000; Loane & Bell, 2006). Third, the findings show that in the context where the amount of social capital is high (Costa Rica) the deliberate or passive search for opportunities did not play an important role for entrepreneurial activities. While prior research indicates little role for deliberate search in entrepreneurial discovery (Shane, 2000), this study shows it in a context of high amounts of social capital. The entrepreneurial opportunities (local or international) could be elaborated



from a non-entrepreneurial activity (outsourcing). These patterns cut across all cases in some stages.

Fourth, the cross-case findings show that personal- and firm-level social capital tend to merge over time, after venture creation, as the development of one can lead to the other in a way that may not be seen in advance. This depends on the firm's transfer, and social capital changes in the firms. The patterns of interconnectedness since start-up and initial international opportunities, interactions between domestic and international social capital, all play a role in the development of social capital.

In brief this chapter highlights the differences within and between the two groups of firms: international start-ups and early internationals.



## **CHAPTER SEVEN: CONCLUSIONS**

This chapter synthesizes the qualitative findings of the study. The chapter begins with a summary and contributions of the research. The research findings of the two main research questions are then summarized and discussed as well as the empirical and theoretical contributions of the research. Then implications for managerial and policy maker are presented. This chapter ends with describing its limitations and future directions for research.

### **7.1 Introduction**

This dissertation has investigated the development of social capital dimensions and internationalizing SMEs, to describe the dynamics of social capital through the different stages of SMEs' internationalization (pre-start-up/venture creation, pre-internationalization and post-internationalization) and its influence on each of those stages in the context of Costa Rican knowledge-intensive sector. The results have been focusing on cognitive, structural and relational dimensions of social capital, which are present at firm level and individual level. The findings suggest that the dimensions of social capital are part of the evolution process of SMEs with the overlapping processes of its network context. Besides economic exchange have been relevant in social capital development, the findings also suggest a greater importance in building trust within personal or business networks of the entrepreneur and firm on the internationalization process (even before the creation of the firm). A part of the development of social capital dimensions is determined by a new source as a component of the strategy, which is internal, but sourced externally by serendipity at pre-internationalization stage and deliberately in post internationalization stage. Social capital development of SME is concomitant phenomenon.

### **7.2 Summary and contributions**

The study completes the summary of theory with empirical findings based on previous results and then contribution to INV and social capital theory.

#### **7.2.1 Summary of the study**

The social capital development and its influence on the internationalization process of knowledge-intensive SMEs, found both from reviewing theoretical literature and from the empirical findings, are presented in Figure 11 below. The following summarizes why and

how the identified propositions interact with one another, and explain the logics behind the boxes and arrows in the figure.

For SMEs, social capital development is divided into three stages: (1) Pre-start-up/venture creation or pre-founding stage, (2) Pre-internationalization and (3) Post-internationalization. Social capital is analysed in terms of its dimensions and its influences on a firm's identification of international opportunities and acquisition of resources that support the internationalization process. On the left of Figure 11, the nature and characteristics of pre-founding social capital by dimension, it describes social capital composition that influences identification of the first international opportunity and resources acquisition. This personal-level social capital is scantily discussed in literature. Prior knowledge is also identified as an important variable that influences the creation of an international start-up. During the pre-founding phase, the main founder existing local and/or international network ties are important for creating an international start-up, in accordance with initial product or service and prior knowledge. The effect of the relational and cognitive dimensions of the individuals' social capital is on the acquisition of resources and the quality of the accessed resources. Thus, all three dimension of the social capital at individual-level in the pre-founding stage are needed for an immediate internationalization and for the acquisition of resources to support this type of internationalization.

In the centre of Figure 11, there is a framework for the pre-internationalization stage; the process of identification of international opportunity is identified as well as the initial firm resources. It is difficult in the SME literature to distinguish individual and firm level of social capital, because of their juxtaposition and overlapping. Both Individual-level and firm-level social capital are discussed in the SME literature. Generally, individual-level social capital is related to personal ties of the founder and managerial team. In SMEs specifically, individual-level social capital is important. The results of this study are in line with the research; however, there is a need to add the firm-level analysis to the discussion, in order to specify the role between them in internationalization process. The sources of social capital and the process of transfer are presented. The sources helps to distinguish the outcomes of the social capital and the process of transfer convey the importance of a process that never seems to end. To examine more closely the influence on the internationalization process, the dimensions of social capital were analysed separately and prefaced the influence of each dimension in the process of internationalization and resources acquisition to deduce their

influence on the business development of SMEs. Two of the most important events in this stage are probably the role of local ties, particularly the business ones. The level of social capital in a specific geographical area has been discussed in the literature. Contextual settings of high level of social capital encourage and promote local social interactions which in turn may shape the business development through internationalization. The proposed concept of social capital captures aspects of the social contexts that create opportunities. The second event, is the arisen of outsourcing as a versatile activity. It is an activity that facilitates the creation and the internationalization of a venture firm. It may contribute to discover new opportunities in domestic and foreign markets.

On the right of Figure 11 the development of social capital by dimension and the influences of this asset on international development are specified in the model, including an important theme – outsourcing activities as a complement of social capital. At this stage this activity is carried out deliberately. This is an important gap in the current literature which does not include this crucial activity in the software business when explaining the internationalization process. Outsourcing is related to social capital. It extends the interaction between actors; facilitates the maintaining of those ties, transfers knowledge from one actor to other and helps to discover new business opportunities. These outsourcing activities had a close relationship with another important activity in the firm – networking activity. Networking capability consists in the creation and deletion of transformed ties within networks. This expands the internal competencies of SMEs. SMEs improve their limited competencies from outside the firm by acquiring the required skills and capabilities even for (e.g.) innovation and financing, which are considered the most important issues for the firms. Outsourcing and networking are also combined to support SME business development. This study shows how it enables resource acquisition and networking. The small business culture is relevant in Costa Rica due to the international business policy. SMEs are keen to establish their product/services in the markets, and are therefore more open to establishing new relationships to survive and develop. The left column therefore shows social capital and business changes that each firm has encountered, and dealt with.

The propositions ordered by sequential stages are described in order to make more comprehensible the proposed model.

**Propositions Pre-start-up/venture creation phase:**

Proposition 1: The structural dimension of personal-level of social capital at pre-founding stage is positively related to creation of an international start-up.

Proposition 2: The relational dimension of personal-level of social capital at pre-founding stage is positively associated to the quality of the resources acquired for an international start-up.

Proposition 3: The cognitive dimension of personal-level of social capital at pre-founding is positively associated with facilitating the share of the resources through ties of an international start-up.

Proposition 4: At pre-founding stage, in the absence of social capital, prior knowledge would positively influence the creation of an international start-up.

**Propositions Pre-internationalization phase:**

Proposition 5: The diversification of structural dimension of initial social capital, in terms of type of relationships, is positively related to the creation of an early international venture.

Proposition 6: Greater relational dimension of initial firm-level social capital is positively associated with the quality of the resources acquired for an early international venture.

Proposition 7: The cognitive dimension of initial firm-level of social capital is positively associated with facilitating the share of the organizational resources for an early international venture.

Proposition 8: After venture creation, domestic firm-level social capital will positively influence the creation of an early international venture.

**Propositions Post-internationalization phase:**

Proposition 9: Strong international ties with a high level of trust at the pre-founding stage, shared experiences and similar frame of mind are positively associated with the contribution of social capital to expansion in extant international markets, new international markets, and domestic markets.

Proposition 10: Outsourcing activity is positively associated to creation of new networks.

Proposition 11: Outsourcing activity is positively associated to acquisition of knowledge.

Proposition 12: Proper management of firm-level social capital is positively associated with capabilities to support business development.

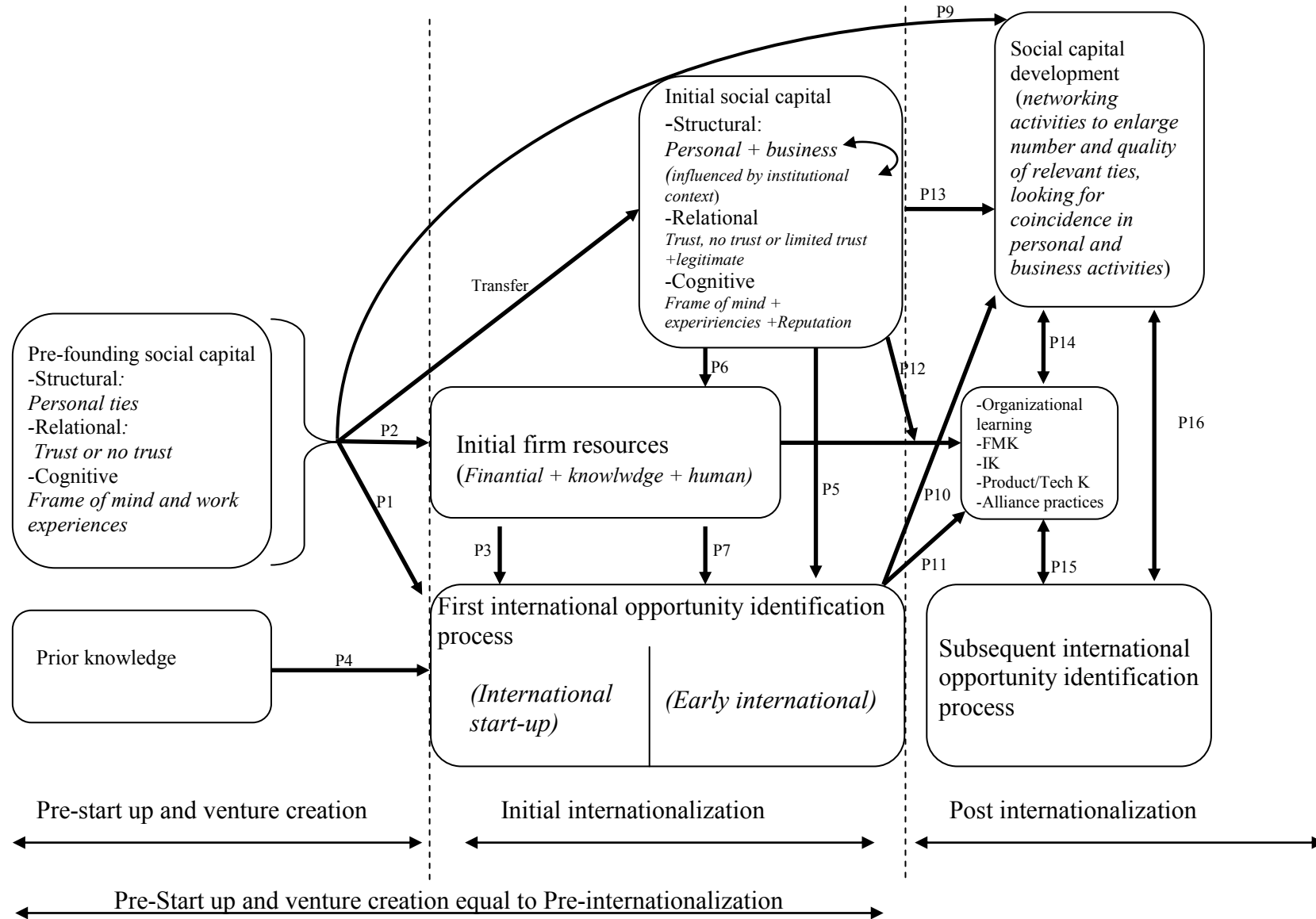
Proposition 13: Personal relationships in the structural dimension of firm-level social capital at post-internationalization stage are positively associated with business development.

Proposition 14: The relational dimension of social capital at post-internationalization stage is positively associated to the quality of the resources acquired for international business development.

Proposition 15: The cognitive dimension of firm-level of social capital at post-internationalization stage is positively associated to share resources for international development.

Proposition 16: The social capital is positively associated to support the international production capacity of the firm.

Figure 11 Model of social capital development and its influences on internationalization process of knowledge-intensive SMEs





## **7.2.2 Contributions of the study**

The contribution of the study is next elaborated upon from the perspectives of empirical and theoretical contribution.

### **7.2.2.1 Empirical contribution**

The empirical study, which applied qualitative case studies, achieves the purpose of generating important findings for the research topic. The qualitative approach provides understanding about the development of social capital dimensions improving the knowledge about the type, content and location of relationships; the processes involved in their evolution, change and develop during internationalization process of SMEs. The qualitative results, therefore, provide relevant answers to address the research questions.

The first question is regard to the genesis of social capital, the role of pre-founding/initial social capital dimension on initial internationalization. The first research question of this study, therefore, concerned the pre start-up/venture creation and pre-internationalization stages.

- RQ1: 1a. How does social capital dimensions influences the initial internationalization of Costa Rican knowledge-intensive SMEs, and  
1b. What is the role of pre-founding social capital dimensions for their initial internationalization?

Discrepancies exist in the literature as to whether business or personal, domestic or international and strong or weak ties are more fruitful still exists (Ibeh & Kasem, 2011, Prasthantham & Birkinshaw, 2015; Chetty & Söderqvist, 2013).

Larson and Starr's (1993) notion of combined personal-business ties through all stages and Hite and Hesterly's (2001) argument of a shift to balanced ties at later stages contradicts the results of Coviello (2006) and Chetty and Wilson's (2003) suggestion about that the initial ties might be more business than social. Empirical study of this research lends support to the former once the firms were created. During pre-founding stage all of the ties are personal ones. That's pretty obvious since the firm is not created yet. From the start-up phase the firms combined personal-business ties, taking into account that personal ties allow the firms creation. Later the firms balance their ties.

The findings support that domestic ties affect internationalization process. Prior studies had revealed opposite findings for this relationship (Prasthanam & Birkinshaw, 2015). At pre-founding stage international ties influenced the international venture creation and domestic ties once the ventures were created also influenced the internationalization process.

Through individual pre-funding social capital based on personal ties the discovery and evaluation of the opportunities may in fact be the reason to create a venture, and international strong ties, prior knowledge and outsourcing activities the reason to exploit the opportunity internationally. This study suggests that through a strong tie flow more and high quality resources. Weak ties are often useful for brokerage actions. Thus, the debate about type, strength and location of ties should be widened, as well as the relationship benefits, because there is evidence that all are important. However, in a dynamic view there is evidence that suggest the importance of the strength the weak (no matter the type or location) ties. Learning outcomes of social capital facilitate the change in a firm's strategy based on election of the tie in its networks

Current research has shown the importance of structural, relational and cognitive social capital allowing INV early internationalization (Coviello, 2006; Chetty & Söderqvist, 2013; Lindstrand et al., 2011). Previous research has mentioned the relevance of studying pre start-up/venture creation phases to improve the understanding of social capital development and international venture development (Coviello 2006; Prasthanam & Dhanaraj, 2010; Söderqvist 2011; Laurell et al., 2016).

The link between pre-founding social capital and the process of identification of the initial internationalization opportunity takes place through existing personal ties. Social capital is beneficial to international start-ups. An international new venture rich in social capital may internationalize faster and enter into more sophisticated markets. Its market selection may also be affected by international social capital. Once the business had been created the international opportunity recognition of INVs relies on new network ties (mainly formed through institutional and business interactions). These types of relationships at the pre-internationalization stage of the early international firms have a crucial role, whereas personal ties are less important. The importance of weak ties in providing new information is present in some of the case-study firms as well as the importance of strong ties that usually contain trust. It has to be considered that a weak tie in this context could develop a new strong tie into

a trustworthy one. That is particularly important for INV entrepreneurs in recognizing opportunities for foreign market selection and entry. Furthermore, the findings indicate that INVs are quick to develop their new weak ties into strong ties, and that they make efforts to maintain the strength of such ties. As mentioned, the pre-founding social capital is based on the founders of the firm. The international start-ups thus draw social capital from their founders, providing that the founders themselves possess it. This applies to international social capital. At the pre-internationalization stage, INVs may possess higher levels of social capital than at the pre-founding stage.

This research explore the genesis of the social capital dimensions from personal level view and trace the evolution of relationships of the founder team until post-internationalization stage. This social capital dimensions at personal level become part of the social capital dimensions at firm level after venture creation. The transfer process to the firm level is completed at early stage, at first sight it seems that firms act differently at different stages. The former is associated with the pre-founding and pre-internationalization stages. The latter is associated with subsequent internationalization. However, on more careful examination it is more accurate to say that firms react actively or passively depending on their objectives. These findings are obtained in association with the specific context of the internationalization of INVs. The results support Johannisson's (1988) and Coviello's (2006) conclusions that an entrepreneurial firm can operate reactively and proactively at the same time. As mentioned, this discretion is influenced by the objectives and context of the firms and the context refer to the large amount of social capital that exists in Costa Rica.

Social capital is recognized as strategically important to business development, and the development of social capital indicated the rapidly internationalized is deliberate. The qualitative findings confirm the deliberate development of social capital that is positively and significantly associated with the formation of international new ventures and creation of new venture. This evidence of "social capital orientation" of SMEs in existing internationalization studies is obtained mostly from qualitative case studies (Chetty & Agnal, 2007; Loane & Bell, 2006; Prashantham & Dhanaraj, 2010)

The effects of social capital dimensions on internationalization are mainly studied and discussed in terms of the resources made available through networks to compensate for SMEs' inherent resource constraints. The findings show that social capital benefits are

significantly associated with the availability of network resources. However, this instrumental view of social capital shows that availability of network resources may not be associated with rapid internationalization. The internationalization requires specific resources from networks, and hence necessitates intentional networking behaviour to make those specific resources available.

Knowledge-based resources are underlined to be essential for internationalization of firms (Johanson & Vahlne, 1977; Yli-Renko et al., 2002). All three dimensions of social capital were used to obtain external knowledges. Intentional efforts linked to external (domestic and foreign) resources are essential for driving and enabling rapid internationalization. The acquisition of other intangible resource (financial) seems to be less active as well as tangible resource (human).

The second research question concerned the development of social capital during post-international activities and its influence. The question is regard to the development of social capital dimensions.

RQ2: How is the development of social capital dimensions and how does it influence the subsequent foreign business development of Costa Rican knowledge-intensive SMEs?

There is scan knowledge about how firms' social capital develops, about the factors and processes enabling and constraining its development, and about possible related performance implications (Mauer & Ebers, 2006; Prashantham & Dhanaraj, 2010; Lindstrand et al., 2011). This research argues that knowledge-intensive firms' social capital will affect their acquisition of knowledge, financial resources and human resources during their internationalization. However, how this process occurs is unknown (Mauer & Ebers, 2006; Prashantham & Dhanaraj, 2010; Lindstrand et al., 2011). Also, the literature does not discuss how social capital and its influences evolve over time (Adler & Kwon, 2002; Burt, 2000).

The international new venture develops new social capital built on what it possesses. The sources of the firms since they were created come from the domestic market and the foreign market. The trust level at any point of time facilitates and constrains the future creation of social capital. The creation of social capital seems to require networking capabilities attached

to the objectives of the firms. The context should play an important role in the behaviour of case-study firms. There is a lot of (potential) social capital in Costa Rica; e.g., the FDI coming from the USA is the highest amount per capita in Latin America. In addition there is direct contact between US firms (located in USA) and Costa Rican firms (located in Costa Rica). This means there is a highway (not in a straight line) of (potential) international social capital between these two countries. Appropriate management of their relationships is a key issue to obtain a high quality of social capital. Balancing the dimensions of it may lead to its higher usefulness. Overall, this type of behaviour may enhance the positive relationship between initial and subsequent social capital.

Social capital mitigates the resource constraints faced by INVs. Those firms that possess social capital may equally gain access to network resources, available through and derived from network contacts. Moreover, information on international opportunities may be derived from the social relationships. Being embedded in networks offers the opportunity to obtain information and knowledge that it is difficult to obtain outside of the network. Outsourcing activities represent a different channel to obtain information or knowledge. In addition it represents the first step to establishing a business relationship. In other words this service evolves its complexity as social capital does. It is also associated with proactive networking in later stages of the INVs. The significant and positive association between the international growth of SMEs and deliberate networking, which reflects the extent of planning, evaluation, prioritization and adaptation of network relationships by case firms, is the most distinctive finding of this study. The firms' experiences provide evidence that the internationalization patterns of INVs are not as deterministic as proposed by the internationalization model, and that internationalization can be enacted by INVs in a way which matches their specific conditions. This implies that further efforts to explore and explain the key endogenous and exogenous factors driving and enabling SME internationalization are still needed in order to gain a holistic understanding of the phenomenon. Long-term relationships (business or personal, domestic or international) enlarge the firm's social capital in every stage of internationalization. Finally, social capital and the resources it renders may be a source of competitive advantage for an early international venture.

In this research, different perspectives on networks were used, as suggested by Slotte-Kock and Coviello (2010), in order to improve the analysis. Integrating various network perspectives provides a deep insight into social capital dynamics. Thus, a more holistic view

and understanding of the social capital development and its influence on the internationalization processes of INVs is one of the features of this study. The study's focus and the research questions as well as the results are discussed in the following lines. The research focus is placed on social capital and internationalizing SMEs to describe the development of social capital through different stages of SMEs' internationalization (pre-start-up/venture creation, pre-internationalization and post-internationalization) and how social capital influences each stage of their internationalization processes. The findings suggest that social capital helps firms in their internationalization. However, the positive effects of social capital on firms' internationalization start to reduce when the trust level of social capital becomes low. It was been shown that this reduction in trust levels draws out the business development. This finding represents an important contribution to the understanding of the role of social capital in defining firms' international growth.

#### **7.2.2.2 Theoretical contribution**

This study shows an insight into which opportunity discovery, evaluation and exploitation activities entrepreneurs' relationships are involved in. This study also shows a vector of characteristics of the relationships which contribute to these opportunities discovery, evaluation and exploitation activities, mainly in the sense of benefits gained through the relationships. By offering this vector of characteristics of the relationships in depth, during three phases of firm development (pre- founding, pre-internationalization and post-internationalisation), this study offers a unique approach to INV social capital research.

An important contribution of the thesis is regarded to derive from the type of case firms studied. It offered unique insights into pre-founding and pre-international and post-international stages. Not many studies on INVs have been carried out on firm development from prefunding stage.

Although social capital are widely acknowledged to be an important factor in the internationalization of SMEs, and to be in particular a core feature of the international new venture (Coviello, 2006), social capital research in the internationalization context is generally limited to one specifically stage of international process. It seems that there are not enough efforts to theorize social capital development as a central construct relating to internationalization process (Coviello, 2006) particularly in emerging/developing economies

(Prashantham & Dhanaraj, 2010). This research made efforts to characterize social capital development during internationalization process of SMEs in Costa Rica context.

It has also contributed towards a better understanding of the role firms' context. The term context is often used to explain what other variables cannot with regard to firms' performance. The findings emphasized the role of external sources of knowledge for firms to obtain international growth. Extant literature on outsourcing in knowledge intensive SMEs (Su, 2013) has examined the role of this activities in emerging countries as a (new) source of knowledge. This dissertation extends this literature and argues that firms' contexts in terms of social capital quantity do matter.

The main theoretical contribution of this thesis is the creation of a social capital development model for knowledge-intensive firms on emerging/developing countries that can be used to understand its influence and role during internationalization process. This model is based on three theoretical pillars: a) the insights gained from social capital theory and, b) the insights gained from the social capital development on knowledge-intensive sectors c) the specific insights relating to internationalization process of INV in emerging/developing.

The systematic literature review on internationalization and social capital has provided important insights into the operationalization of social capital development. This thesis has analysed three different dimension of social capital, according to Nahapiet and Goshal (1988) multidimensional view, which takes into account the structural, relational and cognitive dimensions of social capital. In order to measure structural social capital, this research has distinguished four different components: the unit of analysis (individual/firm), the type of social capital (domestic/international), its source (personal/business) and its strength (weak/strong). All three levels and its components are related to pre-founding and venture creation, pre-internationalization and post-international stages of INV. It offers a better understanding of INV and social capital at the pre-internationalization and pre-founding stages (Coviello, 2006) and the refinement to the development of a realistic, time-based view of international entrepreneurship (Rialp et al. 2005b; Rialp-Criado et al. 2010).

By studying relationships in depth, specifically the development of social capital (personal-level and firm-level) this research has explored the dynamics of relationships on the individual relationship level. This offers insights regarding the measures and dynamics of

personal and business tie. The post-internationalization stage benefits from networking and establishes the discussion of the effects of different levels of social capital on post-entry speed, not only the structural attributes. This study, therefore, offers a valuable view of importance or the level of trust associated with different ties and the role for business development.

Another contribution of this work is the evidence of the development of new activities that support the creation, internationalization and develop of venture firms based on unstructured international strategy. So far, the explanation of those firms' internationalization behaviour has not been yet adequately elaborated in the IE field.

### **7.3 Managerial and Policy-making implications**

Managers and public policy makers are interested to develop the understanding on how a business develops its social capital and use it for international expansion.

#### **7.3.1 Managerial implications**

The managers of SMEs should strive actively to build social capital. A firm needs to reformulate its social capital structure, both domestic and international, according to its needs. It should do this in order to avoid being constrained without reason or exploited without alternatives. There are larger trends and evolutions in the market that are not manageable for a single firm, but as part of a business network it has increased possibilities to overcome changes successfully. Even small SMEs may benefit from resource accumulation. This study emphasizes the benefits of social capital, while the potential drawbacks are specified through networking capability. SME managers ought to be careful when they rely on their personal-level social capital. This social capital provides certain benefits and the potential disadvantages seem less important than benefits. The SME managers should constantly monitor the quality of their social networks and counteract any adverse effects.

This research suggests that SME managers should engage in a minimum level of social activities in order to be able to react (on time) to opportunities that may arise. At the same time, the opportunities may arise from social networks. Nevertheless, they should carefully monitor the quality of their activities in a hyper-competitive sector. For firm managers, this study shows that firms are less likely to profit from social networks, whereas the negative



impact of social capital seems to be important but not crucial for the firms. While the lack of trust and trustworthiness increased suspicion between members of a network, and this may have potential negative effects, the same attributes show positive effects on the development of social networks. The findings suggest that, if firms want to pursue international expansion, they should invest in generating trust towards relevant social networks, and it seems to be possible to strengthen those relevant relationships. At the same time, they should remain cautious towards social networks that are not strong, in order to optimize their scant resources.

The empirical findings of this thesis confirm that the development of social capital favours and accelerates a firm's international growth. Alliances make possible the achievement of projects that exceed the capabilities of individual SMEs. Accordingly, business managers and policy makers should pay more attention to these advantages, to further strengthen the relationships with suppliers, distributors and customers in international markets.

### **7.3.2 Policy-making implications**

Policy makers have long recognized that entrepreneurs are embedded in a social context and have tried to facilitate the establishment of connections between them and various actors able to bring them resources. The creation of networks is a central plank of entrepreneurship policy, taking a variety of forms including university research parks, university-industry collaborative research programmes, and public-private partnerships (Phan et al., 2005). For example, in Taiwan, the Industrial Technology Research Institute has developed public-private partnerships which have enabled Taiwan to become a world leader in semiconductor manufacturing, digital displays and note-book computers (Amsden, 2006).

The study indicates the potential role of institutional actors, which have both a direct influence, through their support programmes, information services and knowledge sharing, and an indirect influence, supporting certain sectors and the circumstances with their policy. Access to these institutional actors and their services may represent one critical event. The inexistence or lack of articulation of supporting services for the SMEs may be an important factor that alters the activities of the firm. The role of the public sector as a facilitator of SMEs' networking activities should promote incentives for the establishment of inter-firm

networks among SMEs and other institutions in order to generate benefits. Also they may be a link between an entrepreneur and a new international opportunity.

Comprehensive policies are essential to support SME development. Internationalization policy implies the government's support of SMEs in their internationalization process, which needs to be developed considering the context, in which the particular features of an industry should be taken into consideration. Trade politics and economic policies impact firms and should be part of a comprehensive framework. The public policies must be carefully tailored and be responsive to match the specific conditions and needs of specific conglomerate. Beyond public managerial/economic policies, a labour policy should influence the software sector, SMEs and probably the country as a whole. In Costa Rica, for example, the enormous amount of FDI (particularly from US companies) has impacted the supply of available qualified professionals in the country. However, the rate of unemployment for unqualified workers has increased in recent years. Policies that transfer professionals from one side to another should have a positive impact on economic activities, particularly in high-tech SMEs sector.

Finally, this research has important implications for policy makers. SMEs play a dominant role in most economies, and facilitating their international involvement is widely recognized as an important public policy priority. Thereby, most governments have introduced traditional export promotion schemes that provide export advice and subsidies. Policy makers need to consider export promotion activities as much more than merely direct attempts to stimulate export activity.

## **7.4 Limitations and recommendations for future research**

### **7.4.1 Limitations of the study**

The research findings need to be examined in the context of the limitations of the study. Data was collected exclusively in Costa Rica, introducing a potential inclination regarding the effects on internationalization and thereby limiting generalization of the findings to other countries. Due to its relatively small population of only 4 million, Costa Rican firms may be more dependent on international trade than firms in countries with larger domestic markets. Furthermore, cultural and institutional differences may have important implications regarding SMEs' social capital development.

This thesis is limited to a longitudinal, in-depth case, which is reconstructed the development of social capital and critical events of a young SME during different phases of its development, including pre-founding stage. The research design that this work has managed allows identifying the developing of critical events based on the key individuals' different existing and/or new network ties. However, real time extensive longitudinal study to track critical events and tie development over the time is recommended.

Although this research examines three dimensions of social capital it does not capture the full range of potential relationships. Other types of networks exist, which include venture capitalists, ex-employers, and universities, among others. Most research studies have concentrated on several specific network actors and thereby neglected other potential network actors.

A further limitation of the research is that there was generally one informant per company rather than multiple interviews as is often recommended for case study research.

Finally, the data was collected after the actual events and the researcher relied on the retrospective recall of the interviewees. This recall may be less influenced by memory than by a reconstruction of the past to make it consistent with subsequent performance results, conventional storylines, and current beliefs.

#### **7.4.2 Recommendation for future research**

This research aims to expand the knowledge of social capital development and its influence on internationalization processes. The conceptual model developed is advanced to stimulate further research in this area. The model offered incorporates testable propositions for future research. Its constructs have been defined and its underlying rationale has been articulated. It offers insights into pre-founding social capital, social capital at pre-international activities and social capital at post-internationalization in the context of software firms in small developing economies.

Extension of the study to incorporate quantitative methodologies in different sectors and different geographical regions would be a step forward. Research linking social capital and business competitiveness in domestic and international markets would equally be a good

opportunity to study. The current research on the software sector and the characteristics of those firms nowadays presents a gap that have to be filling in taking into account outsourcing activity. This would help to understand the velocity of the changes of entrepreneurial characteristics in this sector, which in turn distances itself from the state of current research.

The phenomenon of outsourcing and INV is an unexplored research avenue in Latin America context. Future studies of its influence on venture creation, learning process and its link with social capital, are strongly suggested.

The role of internal social capital in learning process in Latin America context is another unexplored research avenue. The acquisition of different types of knowledge seems like a key process from knowledge-based firms. Analysing how those ventures incorporate that knowledge to the activities into the firm and its subsidiaries, may provide new insights of the role of internal social capital.

Finally, in the same way this research suggests social capital will support venture creation. As social capital is shaped by context, it is needed to be aware of the advantages and disadvantages of dimensions and understand their role in predicting the effectiveness creation of an internationalization of new venture.

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