

THE ECOSYSTEM STRATEGIES OF BORN GLOBALS: A case study of two Finnish game firms as participants of global business ecosystems

International Business

Master's thesis

Janina Åhlgren

2013

Research Goals and Methodology

From inception, Born Globals with scarce resources face substantial pressure to seek for business growth on global markets. Understanding how these companies are able to succeed as participants of global business ecosystems can help new Born Globals to take greater advantage of their external ecosystem environment. Therefore, the purpose of this study is to gain novel insights into the ecosystem strategies of Born Globals and to specify the tools that allow these firms to co-evolve with their constantly changing business ecosystem setting.

This thesis is based in a qualitative multiple-case study involving two Finnish Born Global firms that operate in game industry. The empirical material was analysed with help of the thematic network tool and the findings were compared with previous literature.

Findings

As the key findings of this study, business ecosystems are the fundamental enablers of the business of Born Globals but also govern the strategies of these firms to a large extent. Born Globals correspond to ecosystem niche players for which the emergence of digital ecosystems has opened up groundbreaking opportunities in recent years.

Internal capabilities as well as the personal networks of employees play a key role in the ecosystem strategy of Born Globals as they can significantly improve the firm's strategic position in the business ecosystem setting. Furthermore, the strategy of Born Globals features active seek of new opportunities, variation and high degrees of flexibility, which help these companies to manage risks that originate from the external environment. In order to co-evolve with their business ecosystems, Born Globals perform both reactive and proactive actions. In addition, they favor relatively simple strategic rules that allow operational efficiency under the rapidly evolving business conditions.

The ecosystem strategy of Born Globals was found to evolve towards a more structured approach along with the firm growth and maturity. Furthermore, the empirical evidence indicated that their strategy may turn to emphasize stricter focus as well as more deliberate risk-taking over time. This is because Born Globals become more capable to manage their external dependencies once their operations get more stabilized.

Keywords

Business Ecosystem, Born Global, Strategy, Co-evolution, Game Industry, Finland

Tutkimuksen tavoitteet ja tutkimusmenetelmä

Jo liiketoimintansa alkumetreillä niukkaresurssiset Born Global -yritykset kohtaavat huomattavan paineen etsiä kasvumahdollisuuksia maailmanlaajuisilta markkinoilta. Ymmärtämällä keinot joiden avulla yksittäiset Born Global -yritykset kykenevät menestymään globaaleissa liiketoiminnan ekosysteemeissä, voivat uudet Born Global -toimijat hyödyntää ulkoista ympäristöään entistä tehokkaammin. Tämän tutkimuksen tarkoituksena onkin siksi tarkastella Born Global -yritysten ekosysteemistrategiaa, ja määrittää keinot joiden avulla nämä toimijat pystyvät sopeutumaan ekosysteemiympäristönsä jatkuvaan muutostilaan.

Tutkimus perustuu laadulliseen tapaustutkimukseen keskittyen kahteen suomalaiseen Born Global -yritykseen, joista molemmat toimivat peliteollisuuden alalla. Empiirinen tutkimusaineisto analysoitiin temaattisen analyysityökalun avulla ja verrattiin lopuksi aiemmin esitettyyn tieteelliseen kirjallisuuteen.

Tutkimustulokset

Tutkimuksen päätuloksena havaittiin, että liiketoiminnan ekosysteemit ovat perimmäinen edellytys Born Global -yritysten toiminnalle mutta samalla ne myös ohjailevat kyseisten yritysten strategiaa huomattavasti. Born Global -yritykset ovat verrattavissa ekosysteemien alasegmenttien toimijoita, joille digitaalisten ekosysteemien kehittyminen on avannut uudenlaisia liiketoimintamahdollisuuksia viime vuosina.

Born Global -yrityksien sisäinen kyvykkyys sekä työntekijöiden henkilökohtainen verkosto havaittiin kyseisten toimijoiden ekosysteemistrategiassa keskeisiksi. Näiden elementtien avulla Born Global -yritys voi parantaa suhteellista asemaansa ekosysteemin toimijana huomattavasti. Lisäksi pyrkimys uusien mahdollisuuksien aktiiviseen tunnistamiseen; sekä toimintojen vaihtelevuuteen ja joustavuuteen nousivat esiin Born Global -yritysten keinoina hallita ulkoista riskiä. Born Global -yritysten vastaavat ekosysteeminsä jatkuvaan kehitykseen paitsi reaktiivisella myös ennakoivalla toiminnalla. Ne pyrkivät myös seuraamaan melko yksinkertaisia sääntöjä strategiansa toteutuksessa, sillä operatiivinen tehokkuus on kyseisille yrityksille tärkeää nopeasti muuttuvien liiketoimintaympäristön olosuhteiden takia.

Tutkimuksessa havaittiin ekosysteemistrategian muuttuvan jäsentyneemmäksi Born Global -yritysten kypsymisen ja kasvun myötä. Lisäksi kaventunut strateginen fokus ja tietoinen riskinotto voivat korostua niiden myöhemmässä strategiassa. Tämä johtuu siitä, että toimintojen vakautuminen luo Born Global -yrityksille paremmat edellytykset hallita riippuvuuttaan ekosysteeminsä muista toimijoista.

Avainsanat

Liiketoiminnan Ekosysteemi, Born Global, Strategia, Evoluutio, Peliteollisuus, Suomi

‘Strategy is the art of accomplishing more than has ever been achieved before
with fewer resources than one would like to have at one’s disposal’

(Rubenstein & Grundy 1999: 167)

Table of Contents

1. INTRODUCTION.....	1
1.1 Background	1
1.2 Historical factors contributing to the rise of game industry in Finland.....	2
1.3 Research Problem.....	4
1.4 Research Objectives and Questions	6
1.5 Structure of the report	7
2. LITERATURE REVIEW.....	8
2.1 Born Globals	8
2.1.1 Criteria and characteristics of Born Globals.....	9
2.1.2 Challenges affecting the strategy formulation of Born Globals	12
2.1.2.1 Challenges posed by the home market.....	12
2.1.2.2 The challenge of global market access.....	13
2.2 Business Ecosystems.....	15
2.2.1 The main theories of business ecosystems	16
2.2.2 The structure of business ecosystems.....	18
2.2.3 Strategy-making in a business ecosystem setting.....	21
2.2.3.1 The Core components of niche player strategies	22
2.2.3.2 Strategic co-evolution with the business ecosystem.....	25
2.2.4 Ecosystem implications on the strategy formulation of Born Globals	31
2.3 Preliminary Theoretical Framework	35
2.3.1 Justification for the theoretical framework: research gaps.....	36
2.3.2 The strategy of Born Globals in a business ecosystem setting.....	39
2.3.3 The elements of the Theoretical Framework.....	43
3. METHODOLOGY.....	46
3.1 Unit of analysis: a multiple-case study	46
3.2 Data collection.....	48
3.2.1 Interviews	48
3.2.2 Documents.....	50
3.3 Data analysis technique.....	50
3.4 Validity of the study.....	53
3.5 Limitations	56
4. EMPIRICAL FINDINGS.....	58
4.1 Game industry in Finland.....	58
4.2 Background and characteristics of the case firms	60
4.2.1 Housemarque Oy	60
4.2.2 Remedy Entertainment Oy	62
4.2.3 Characteristics of the case firms.....	63
4.3 The Thematic Network of the empirical research.....	65
4.4 Findings on Housemarque Oy.....	68
4.4.1 The strategy of Housemarque in a business ecosystem setting	68
4.4.2 The co-evolution strategy of Housemarque.....	74
4.5 Findings on Remedy Entertainment Oy.....	81
4.5.1 The strategy of Remedy in a business ecosystem setting.....	81

4.5.2	The co-evolution strategy of Remedy	86
5.	DISCUSSION AND ANALYSIS	94
5.1	Cross-case Analysis.....	94
5.1.1	The strategy of the case firms in a business ecosystem setting	94
5.1.2	The co-evolution strategy of the case firms.....	102
5.2	Discussion	109
5.3	Revised Theoretical Framework	114
6	CONCLUSION.....	117
6.1	Summary	117
6.2	Theoretical contributions.....	119
6.3	Managerial implications.....	122
6.4	Recommendations for further research	123
	REFERENCES	125
	APPENDIXES.....	137
	Appendix 1. The case interview details and the background information of the interviewees.....	137
	Appendix 2. The Outline of the Case Interviews	138
	Appendix 3. A Timeline of Housemarque Oy’s History.....	141
	Appendix 4. A Timeline of Remedy Entertainment Oy’s History	142
	Appendix 5. Born Global Characteristics Applied to Case Companies	143

List of Figures

Figure 1:	Value-added of electro-technical industry and Nokia as a proportion of GDP (%)	3
Figure 2:	Annual employment growth in the information sector and in the economy as a whole.....	3
Figure 3:	Research objectives.....	6
Figure 4:	The specific features of Born Globals identified by various researchers	11
Figure 5:	Challenges of Born Globals	14
Figure 6:	The structure of a business ecosystem	19
Figure 7:	The coupling of business ecosystem and digital ecosystem	20
Figure 8:	Strategy propositions and discussions for rapidly changing environments	30
Figure 9:	The implications of digital distribution for the business of game firms.....	32
Figure 10:	SWOT model of the relationship between a Born Global and a business ecosystem	35
Figure 11:	A summary of the expected responses to the original research questions.....	43
Figure 12:	Preliminary Theoretical Framework A.	44
Figure 13:	Preliminary Theoretical Framework B.	45
Figure 14:	The development of the Finnish game industry between 2004 and 2012	59
Figure 15:	Housemarque’s historical sales revenue development and employee growth	61
Figure 16:	Remedy’s historical sales revenue development and employee growth.....	63
Figure 17:	Thematic Network for the empirical data analysis.....	65
Figure 18:	A Summary of the cross case analysis.....	108
Figure 19:	A Summary of the expected and obtained responses to the original research questions..	111
Figure 20:	Revised Theoretical Framework A.	116
Figure 21:	Revised Theoretical Framework B.	116

1. INTRODUCTION

1.1 Background

Born Globals; companies that start their business in foreign markets at inception, have proliferated in Finland in recent years. These firms have been able to tap into opportunities that lie beyond their geographical reach, allowing them to pursue high revenues shortly after the establishment of the firm. Born Globals being a relatively contemporary field of research, the current understanding of this unique phenomenon is incomplete. Although the typical characteristics of Born Global firms are relatively well understood these days, there is only little knowledge of the circumstances under which these firms are able to succeed. Given the growing economic importance of Born Globals in small and open economies such as Finland, there is a substantial need to extend the yet insufficient knowledge of these companies.

The technological advancements taking place in the external business environment have had fundamental impacts on the strategies of most companies in the world (Laanti et al. 2007). For industries such as gaming, the development of digital infrastructure have revolutionized the operational environment of firms and opened up various new business opportunities. Specifically, the breakthrough of digital ecosystems now enables game companies to distribute their products directly to customers, which minimizes their time-to-market and allow quick access to potential profits. As the Finnish game companies fulfill many typical characteristics of Born Globals and their products have reached world-wide fame lately, the domestic game business provides a fruitful and highly topical aspect to contribute to the Born Global research.

Given the importance of technologies and digitalization in today's game business, it is interesting to study how game firms have been able to adapt to the gradual development of such systems over time. As the evolution of business ecosystems is continuous by

nature and combines markets and ecosystem participants with new as well as existing markets and participants, the firm must follow a strategy that secures the competitiveness under the constantly changing external conditions. Therefore, research that approaches the hot topic from longitudinal perspective provides a unique opportunity to gain deep, highly valuable insights into strategies of Born Globals. Furthermore, by deriving from the empirical findings of two pioneering case firms, this study seeks to contribute to the ultimate breakthrough of Finnish game industry as it has not yet become realized to the full extent.

1.2 Historical factors contributing to the rise of game industry in Finland

There are several convergent reasons that help explain why Finland became the trailblazer of mobile commerce and services by the end of 1990s. Initially, the target-oriented technology policy adopted by the Finnish government in the 1980s had resulted in a proper technological infrastructure, which was an ultimate precondition for the emergence of the local software industry. Furthermore, the businesses of Nokia and Sonera had begun to call for specialized know-how, thereby giving rise to several small software firms around these companies. Also, the growing demand on the Finnish market turned 'Finland's Wireless Valley' into a test bed for various multinational ICT manufacturers such as ICL, IBM, Siemens, Hewlett-Packard and Ericsson, which consolidated the local software industry further. (Steinbock 2002: 8, 59-60; see also Rouvinen & Ylä-Anttila 2003; Hirvonen 2004).

The historical development of the Finnish electro-technical sector is illustrated below: Figure 1 shows the rapid growth experienced in the 1990s as a proportion of GDP, and Figure 2 presents the corresponding impacts on the information sector employment.

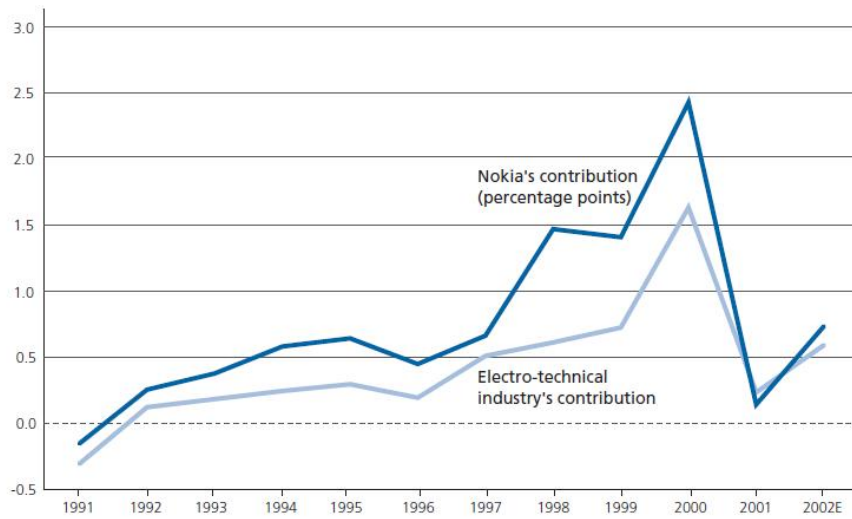


Figure 1: Value-added of electro-technical industry and Nokia as a proportion of GDP (%)
(Rouvinen & Ylä-Anttila 2003)

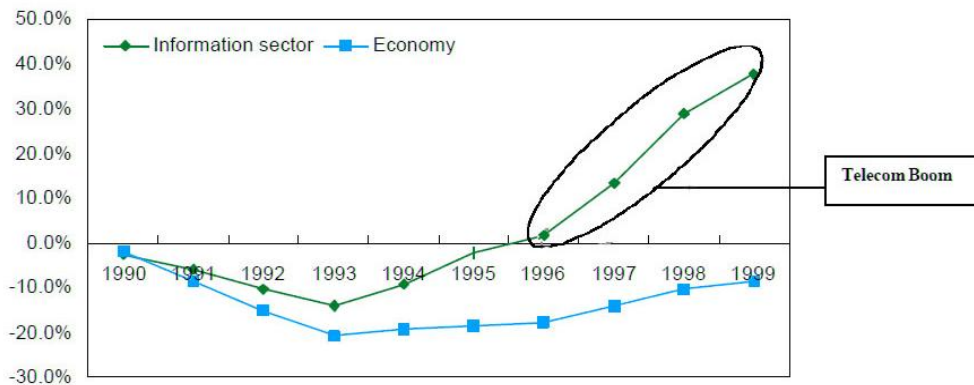


Figure 2: Annual employment growth in the information sector and in the economy as a whole
(Steinbock 2002, modified)

The rise of software business contributed to the gradual emergence of the Finnish game industry. Once a bunch of local computer game hobbyists grew up, it was probably a natural step for them to begin to employ themselves by engaging in the actual

development of games. Thus, as the devotees of *demo-scene*¹ gradually began to seek business opportunities as entrepreneurs, they were able to benefit from the knowhow accumulated along with software business development (see Saarikoski & Suominen 2009; Steinbock 2004: 73; Granqvist 2004).

In addition, Nokia boosted the local game business directly by funding the development of games: although the company's N-Gage device brought out in 2003 did not reach the target of revolutionizing mobile gaming, the risk investments spurred by N-Gage gave rise to a network of mobile game start-ups (Nelskylä 2012). In 2003, the nascent game business also gained two other significant stimuli: The National Technology Agency of Finland (Tekes) adopted mobile games industry in its Fenix technology program, and Neogames, the Centre of Game Business, Research and Development, was established to facilitate the domestic game development (Granqvist 2004).

A more detailed description of the research setting of this study is presented alongside the empirical part of the research in chapter 4. Next, a relevant research problem for the study is specified by deriving from the existing research gaps.

1.3 Research Problem

Based on the literature review, several research gaps in the existing literature dealing with the ecosystem strategy of Born Globals can be identified. These gaps are comprehensively analysed and discussed in section 2.3.1 (p. 36) wherein the author justifies the validity of the preliminary theoretical framework. The research gaps for this thesis are threefold as they stem from the fields of Born Global, business ecosystem as well as strategy research. In order to demonstrate the call for more profound examination of these themes, the key research gaps are summarized below:

¹ *Demo-scene*, a computer art subculture that connected the game hobbyists, emerged in Finland in the late 1980s. Demo-scene is acknowledged as the initial contributor to the development of the Finnish game industry (see Saarikoski & Suominen, 2009).

- Literature investigating the strategies of Born Global firms has mainly focused on the internationalization phase of these companies but do not cover the long-term perspective. Furthermore, the topic is typically approached from the perspective of the firm whereas the aspect of their operational environment tends to be overlooked.
- Strategy theories and studies that address the firm's co-evolution with its external business environment are strongly focused on large MNCs whereas the aspect of small firms is mainly neglected.
- Typically, business ecosystem theories seek to enhance the competitiveness of a particular ecosystem as a whole against the competing ecosystems. However, the viewpoint of a *single* ecosystem participant has gained only a minor consideration by the ecosystem theorists.
- As the related ecosystem strategies are created for firms that seek to become ecosystem leaders, they are not fully applicable to small ecosystem participants.
- If the aspect of ecosystem niche players is addressed in academic literature, the focus is primarily placed on how these firms *can survive* in an ecosystem setting but the factors resulting in *performance differences* are not specified.
- Finally, as ICT sector has grown rapidly in recent years and there are new business opportunities opening up continuously, deeper theoretical understanding on ICT is of great value.

Given the rapidly growing number of Born Globals in small economies and their ever higher economic importance to these countries, it is valuable to study the strategies that allow these firms to compete in the increasingly networked, ICT-driven business environments. Thus, the research problem of this study can be stated as follows:

How are Born Global firms with limited resources able to operate and succeed as participants of global business ecosystems?

1.4 Research Objectives and Questions

The objective of this study is to investigate whether the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players. When seeking to fill this objective, the distinction between a niche strategy *per se* and the strategy of ecosystem niche players should be clarified. While *niche strategy* is defined as one of the generic business strategies (see Porter 1980), *the ecosystem niche player strategy* refers specifically to the ecosystem-oriented strategies that are implemented by the small ecosystem participants who operate in the niche domains of ecosystems. Thus, the latter approach in particular is of the primary interest in this research as it is strongly ecosystem-centred. As another objective this study seeks to determine the strategic tools that help Born Globals to adapt to the evolution of their respective ecosystems. Figure 3 specifies the considerations that are associated with reaching these two objectives.

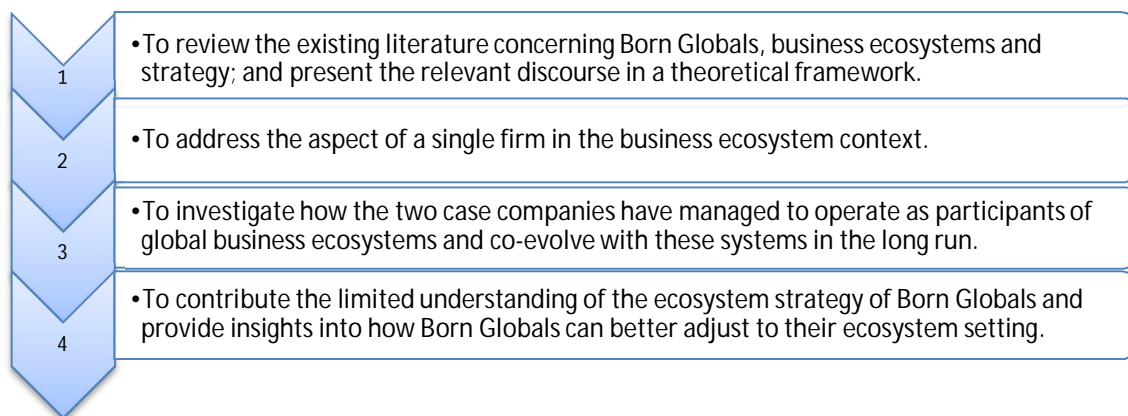


Figure 3: Research objectives

In order to tackle the research problem and gaps described in the previous section, two research questions are set up for this thesis:

Research question 1

Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?

Research Question 2

How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?

1.5 Structure of the report

In order to answer to the research questions and to the ultimate research objective, this study is divided into six chapters that follow a logical order.

First, the introductory chapter contains the basis and background of the study. Then, the second chapter provides a review of the existing literature on the fields of Born Global, business ecosystem as well as strategy research. In the end of the chapter, a preliminary theoretical framework is created on the basis of the relevant theories and research work. The third chapter elaborates and justifies the method that is used in the empirical part of this study. Importantly, the third chapter provides the theoretical foundation for the thematic network tool, which is constructed and utilized in the context of the empirical research findings (chapter four). After the presentation of the individual case findings, the fifth chapter contains the cross-case analysis. This is followed by a discussion that addresses the original research questions of the study; as well as the revision of the theoretical framework. Finally, the sixth chapter summarizes the research. In addition, the theoretical contributions as well as certain managerial implications are provided.

2. LITERATURE REVIEW

2.1 Born Globals

The phenomenon of Born Globals has fascinated researchers for over three decades: the emergence of firms that go global from inception has attracted attention as the approach deviates from the traditional model of internationalization. Even so, the literature on Born Global has remained mainly explorative by nature with no clear-cut theory for their unconventional strategy. On the other hand, the author was not able to find any theory presented in strategy literature truly matching with the specific characteristics of Born Globals.

In the studies focusing on business in international or global context, especially the relationship between a firm's strategy and structure has been comprehensively addressed. International (export-driven), Multidomestic, Transnational and Global are typically presented as strategy alternatives of multinational corporations (MNCs) (Bartlett & Ghoshal 2000). However, SMEs with substantially smaller resource base should not imitate the strategies of leading MNCs as they may become vulnerable if a direct conflict with larger firm occurs (see Etemad 2004). Specifically, as the characteristics and operational conditions of Born Globals differ remarkably from those of large corporations, the theories concerning the global strategy of MNCs are not applicable to Born Global firms.

With roots in the industrial organization theory (see e.g. Caves & Porter 1977; Porter 1979; Tallman 1991), the resource based view of the firm (RBV) has been a predominant research stream in the academic literature when international business strategies are sought to be explained (see Wernerfelt 1984; Barney 1991; Conner 1991). Fundamentally, RBV considers the firm-specific strategic resources as the ultimate determinant of business strategy and performance. Given the resource scarcity that typically characterizes and guides the business of Born Globals, the RBV theory and its

more recent derivatives are likely to provide a relevant and fertile basis for studying how Born Globals can match their limited resources to the dynamic business ecosystem environment in a sustainable way.

According to Hamel (1999), the new techno-economic paradigm is driven by business networks and a firm's strategy relative to E-commerce is a determinant of survival. The remark is valid for many Born Globals as their business models may have evolved radically along with the development of technology infrastructure and digitalization. As a sequence, Born Global firms have adopted unconventional, global strategies that guide their business in a rapidly changing environment where geographical boundaries are increasingly blurred or even unimportant. This new configuration challenges the traditional strategy thinking, making Born Globals a very fruitful theme to study.

In this section we will first specify the characteristics of Born Globals, followed by a discussion on how these specific features significantly impact their business strategy. As Born Global firms typically emerge from small economies, we will address the key challenges Born Globals need to overcome and also consider the strategy implications posed by their home country market.

2.1.1 Criteria and characteristics of Born Globals

There are many ways to define Born Global companies, also called International New Ventures (McDougal et al. 1994; Oviatt & McDougall 1994, 2003; Autio 2005; Zahra 2005; Coviello 2006; Coviello & Cox 2006; Sasi & Arenius 2008), Global Start-ups (Oviatt & McDougall 1995), Global Entrepreneurs (Isenberg 2008) and High Technology Start-ups (Jolly et al. 1992).

Typically, criteria such as global vision, time before starting to export as well as export versus global growth are used to distinguish Born Globals from conventional companies (Gabrielsson et al. 2008). Some of the researchers apply a numerical approach to define Born Globals - for example, according to Luostarinen and Gabrielsson (2006), Born

Globals are companies that have entered global markets, derive over 50% of income from non-domestic continents, and are on a global growth path – whereas others focus solely on descriptive features of these companies. Oviatt & McDougall (1994: 27), define the concept 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’

Sasi et al. (2009; also Sasi 2011) remark Born Globals do not follow the traditional Uppsala stage model proposing that companies go orderly through a set of incremental stages during their internationalization process (see e.g. Johanson & Vahlne 1977). In addition to rapid internationalization pace, researchers emphasize certain features to be specific to Born Globals (Figure 4). In this study, the features listed in Figure 4 below are adopted and their implications on the firm’s strategy are discussed in the context of game companies (section 4.4, p. 68 and section 4.5, p. 81).

Born Global Feature		Identified By
F1	The establishment of global vision from the very beginning	Casas & Dambrauskaite 2011; Falay et al. 2007; Jolly et al. 1992; Luostarinen & Gabrielsson 2004, 2006; Oviatt & McDougall 1995
F2	Entrepreneurial mindset and/or experience of managers	Casas & Dambrauskaite 2011; Falay et al. 2007; Laanti, et al. 2007; Luostarinen & Gabrielsson 2006; Oviatt & McDougall 1995; Sasi & Arenius 2008; Gabrielsson & Gabrielsson 2010
F3	Limited resources caused primarily by the small size of the company	Arenius et al. 2006; Casas & Dambrauskaite 2011; Falay et al. 2007; Luostarinen & Gabrielsson 2006; Oviatt & McDougall 1995; Sasi & Arenius 2008
F4	The importance of networks and/or personal relations of the managers for business operations	Falay et al. 2007; Jolly et al. 1992; Laanti et al. 2007; Luostarinen & Gabrielsson 2006; Oviatt & McDougall 1995; Sasi & Arenius 2008
F5	Operation in narrowly defined market niche	Casas & Dambrauskaite 2011; Falay et al. 2007; Dunning & Wymbs 2001; Luostarinen & Gabrielsson 2004, 2006; Rennie, 1993
F6	Use of unconventional product-, operation- and/or market strategies (Also, the product pricing ideology may differ from that of traditional companies)	Luostarinen & Gabrielsson, 2004, 2006; Oviatt & McDougall 1995 (Casas & Dambrauskaite 2011; Luostarinen & Gabrielsson 2006).
F7	Utilization of modern technologies to offer unique, high-value products or services on a global basis	Casas & Dambrauskaite 2011; Dunning & Wymbs 2001; Luostarinen & Gabrielsson, 2004, 2006; Oviatt & McDougall 1995; Rennie 1993

Figure 4: The specific features of Born Globals identified by various researchers

The typical organizational features of Born Globals are interrelated and contribute to the urge of these companies to begin rapid internationalization. In order to give an understanding of the fundamental factors steering the business strategy of Born Globals, certain critical challenges that drive their internationalization are next discussed.

2.1.2 Challenges affecting the strategy formulation of Born Globals

Limited resources were identified as one of the key characteristics of Born Globals in the previous section. However, remarkable variation in terms of the availability of external resources as well as other business conditions of Born Globals exists, as many of these variables are specific to the firm's home market. This section identifies the main challenges that shape the strategies of Born Globals in the context of small economies such as Finland. In addition, as Born Globals typically target global markets, the aspect of product distribution is elaborated.

2.1.2.1 Challenges posed by the home market

There are several reasons why start-ups originating in small economies are facing a particular pressure to start international operations before or along with domestic business. Within the time frame 1985-2002, the domestic period of 89 Finnish Born Globals averaged 2.1 years after which the business activities were started to globalize (Luostarinen and Gabrielsson 2006).

Evidently, given that Born Globals typically operate in a market niche (section 2.1.1, p. 9) the small size of home market makes it difficult to grow on a domestic scale alone. Thus, the need to reach the critical mass is likely to push these companies to target a global customer base at early stage. In addition to the push factor, Luostarinen and Gabrielsson (2004) note the substantial demand entailed by global markets may act as a pull factor for business expansion. Consequently, the liability of foreignness – the additional costs of doing business abroad that result in competitive disadvantage against local firms (Hymer 1976; Zaheer 1995) - is acknowledged as a typical challenge of Born Globals from small economies (see e.g. Arenius et al. 2006; Sasi & Arenius 2008). The author would like to remark that although the liability of foreignness is not *caused* by the home market as such, the market likely *contributes to the rise of* this liability as the conditions in small economies (e.g. the push factor) put the ultimate pressure on Born Globals to internationalize rapidly.

The scarcity of resources was identified as a major challenge of Born Globals in section 2.1.1 (p. 9). Luostarinen & Gabrielsson (2006) found insufficient revenue flows, lacking trust from the partner side as well as underestimated sales and marketing resources as typical challenges of Born Global firms. Specifically, there is a weak availability of money from venture capital firms; and even non-availability of money from banks for Born Globals in Finland (Ibid). In comparison with technology start-ups in Israel, Sasi et al. (2009: 129) observed the Finnish new ventures facing more difficulties with resource acquire from their business network. Falay et al. (2007) studied design-intensive Finnish Born Globals and found them suffering from both small market volume and limited financial resources in their home market. Consequently, companies need to seek alternative options to finance their operations, and these options lie more frequently on global markets.

2.1.2.2 The challenge of global market access

Jolly et al. (1992) identifies *market access* as a major challenge when a global strategy is sought to be executed. New ventures usually lack the infrastructure required for managing scattered operations from a distance (Isenberg 2008; Lin 2009). Because start-ups typically rely on a single product in the beginning, the development of distribution channel or -network tends to be costly (Jolly et al. 1992). Luostarinen and Gabrielsson (2006) note conventional single sales channels (both direct and indirect) are impractical for Born Globals: as these companies and their products are often unknown, the middlemen of indirect sales channels are reluctant to make sufficient marketing investments. On the other hand, the limited resources prevent Born Globals from setting up a direct sales channel on their own. This is why Born Globals seek to establish multiple sales channels (dual and hybrid) at the early stage of business or utilize them from the very beginning. The location of the lead customer often dictates the foreign markets a Born Global chooses to enter. (Luostarinen & Gabrielsson 2006) However, Isenberg (2008) remarks the management of such supply networks is complex for global start-ups. Figure 5 summarizes the challenges of Born Globals identified in this section.



Figure 5: Challenges of Born Globals

Contributed by the challenges listed above, the role of networks and business relations has been discovered significant to Born Globals: Sasi & Arenius (2008) note these firms may own only the core resources and utilize their business network as a source of complementary resources (see also Luostarinen & Gabrielsson 2006). Similarly, Gabrielsson and Kirpalani (2004) identify four channels Born Globals can utilize during their internationalization: (1) MNCs that act as systems integrators, (2) MNCs that distribute the products/services of the Born Global, (3) Networks and (4) the Internet. Scarce resources may drive Born Globals to form a relationship with MNCs as system integrators or distributors in order to leverage their distribution competencies. (Ibid)

In recent years the two last alternatives - networks and the Internet as channels for internationalization - have reduced Born Globals' reliance on MNCs (Arenius et al. 2006; Sasi & Arenius 2011). Especially digitalization has allowed various new business opportunities for many Born Globals and is thus playing an increasingly important role in their respective business ecosystems. Although digital environments cannot be utilized in every business, they have proved particularly important to Finnish game firms. To be able to operate and gain success in an ecosystem environment, understanding the contextual key elements and their underlying regularities is highly critical to these companies. Next, the main business ecosystem theories will be

introduced by placing the emphasis on the strategic considerations that the author hypothesizes are the most applicable to game firms.

2.2 Business Ecosystems

The breakthrough of technology has been revolutionary for Born Globals: Rennie (1993: 48) notes the development of ICT is one of the fundamental enablers of the Born Global phenomenon and a catalyst for the emergence and growth of these firms. Furthermore, technological advancements have diminished the economies of scale in global business, which has improved the relative competitiveness of Born Globals against vertically integrated companies (Rennie 1993: 48; Oviatt & McDougall 1995, Hagel III et al. 2008: 83). At the same time, the distribution models of many small firms have gone through a massive change as the Internet has enabled digital distribution. In other words, the infrastructure of *business ecosystems* has radically shaped the operational environment of small global companies such as game firms.

Especially ecological metaphors have been widely adopted by researchers for building business ecosystem theories or describing certain phenomena within these ecosystems. For example, both Moore's pioneering business ecosystem theories (1993, 1996) and the keystone advantage theory proposed by Iansiti & Levien (2004a) are built on the basis of biological terms (see also Dini 2007; Nachira, Dini & Nicolai 2007; Stanley & Briscoe 2010). However, Moore (1993, 85) notes that unlike in biological communities of co-evolving organisms, business communities are social systems involving a complex network of choices. Similarly, Iansiti & Levien (2004: 38) acknowledge the planning and innovating capability of business ecosystem members as a distinctive factor for ecological ecosystem setting. Most critical scholars have even argued the biological ecosystem approach is not appropriate for analyzing business ecosystems because it does not provide a theoretical model which deepens the understanding of

business networks (see Corallo, Passiante & Prencipe 2007: 20, 29; Corallo and Protopapa 2007: 61).

Generally, various terms have been introduced in academic literature to describe the phenomenon of business ecosystems. As connective threads, researchers seem to agree that business ecosystems do not have a single reference model, but they span various industries and are interactive entities wherein the members balance their co-operation and competition (see e.g. Dini 2007; Iansiti and Levien 2004a, 2004b; Moore 1996). In this section, the organizational strategy-making under constantly evolving ecosystem conditions will be discussed. In seek of appropriate theoretical insights that fit for game firms, the theories addressing ecosystem niche players are being paid particular attention.

2.2.1 The main theories of business ecosystems

The concept of business ecosystem was introduced by James F. Moore in 1993 and described as a cross-industrial system in which ‘*companies co-evolve capabilities around a new innovation*’ (Moore 1993: 76). A business ecosystem was further defined three years later:

‘An economic community supported by a foundation of interacting organizations and individuals – the organisms of the business world. -- Over time, they co-evolve their capabilities and roles, and tend to align themselves with the directions set by one or more central companies. Those companies holding leadership roles may change over time, but the function of ecosystem leader is valued by the community because it enables members to move towards shared visions to align their investments, and to find mutually supportive roles’ (Moore 1996: 26)

Iansiti & Levien (2004: 37) do not provide any unambiguous definition for the business ecosystem *per se* but approach the concept implicitly: biological terminology is used for describing business networks, which in turn are interconnected and form business ecosystems. However, the concepts of business network and business ecosystem are not equivalent (Ibid).

The emphasis of Moore's ecosystem theories is placed on strategic considerations on two levels: on a wider scope, Moore (1996: 56) addresses the ecosystem leaders and discusses business ecosystem as the primary unit of strategy-making. He argues that rather than managing oneself, the central game of strategic management is shifting towards leading a community of allies (1996: 57). On a narrower scope, Moore (1996: 83) identifies four evolutionary stages occurring during the business ecosystem development (*Pioneering, Expansion, Authority and Renewal*) and discusses the cooperative and competitive challenges each stage causes the ecosystem members. As a new strategic paradigm, the future success of an organization will depend on its ability to co-evolve with the network of other contributors (Ibid).

In addition to the role of *ecosystem leaders*, Moore (1996) recognizes *followers, outsiders* and *customers* on the basis of their involvement in the ecosystem development but does not discuss these supporting roles in detail. However, there is also some criticism presented against such theories that build on the idea of one or a few dominant ecosystem players: Nachira and Dini (2007) remark that while Moore's leader-centred approach matches the economic structure of the USA, the ecosystems in Europe tend to be more dynamic by nature. As the European market consists mainly of small and medium-sized firms, the division of labour between the ecosystem leaders and other participants is not unambiguous (Ibid).

Contrary to Moore (1996), Iansiti and Levien (2004a: 39) remark the strength and type of organizational interaction vary within the boundaries that form a relevant ecosystem for a single company. Consequently, the keystone theory provides more rigorous role specification between ecosystem participants and presents *Keystones, Dominators, Hub landlords* and *Niche Players* as the key actors of ecosystems (Iansiti and Levien 2004a: 68). The roles are neither static nor unambiguous: a firm may be a keystone in one domain and play a role of a niche player in others (Iansiti & Levien 2004b).

To benefit from the discourse between different ecosystem theories, it is essential for this study to understand which of the various terms may be paralleled - and most

importantly; applied to small global companies such as game firms. *Keystones* being the most significant active contributors of the ecosystem health and survival (Iansiti & Levien 2004a: 68; 2004b), the concept can be seen as a counterpart of Moore's (1996: 192) *ecosystem leaders*. With subtle reservation, also another analogy between the terminologies may be drawn: Moore's (1996) *followers* and *outsiders* consist of *dominators*, *landlords* and *niche players* identified by Iansiti and Levien (2004). Thus, although Moore (1996) does not consider ecosystem niche players in particular, his remarks addressed to followers and outsiders – despite relatively generic by nature - are likely applicable to niche players to some extent.

2.2.2 The structure of business ecosystems

Because of the case-specific nature of business ecosystems, the structure and components of proposed ecosystem frameworks tend to vary. Moore's ecosystem model (Figure 6) presents the participants and the central elements of a business ecosystem. However, Moore's emphasis being on the ecosystem development itself, the system architecture or role differentiations among the ecosystem members is not analysed in detail. In contrast, Iansiti and Levien (2004: 43) view an ecosystem as a formation of several business domains which may be shared with other ecosystems. On a fundamental level, *platforms* and *standards* serve as the connectors of the ecosystem as they define the boundaries and relationships among the ecosystem participants. Platform interfaces provide participants the access points to interaction whereas standards facilitate the interoperability between ecosystem participants and technologies (Ibid. 167, 162).

Due to the empirical case approach of this thesis work, the focus of the study is placed primarily on the two innermost circles presented in Moore's ecosystem framework. In other words, the ecosystem elements involved in a company's core business as well as the outlook of extended enterprise are of specific interest when studying the external factors that shape the business strategy of game firms. The outline supports the objective of this study and is arguable for two reasons. First, as small global firms are

restricted by scarce resources and typically operate in a market niche (section 2.1.1, p. 9) their primary scope of strategic management may not cover the entire ecosystem but is most probably centred round their core operations. Second, considering the nature of global products (such as games), the role of country-specific factors such as governmental agencies and labour unions is probably diminished in the strategy-making of these companies.

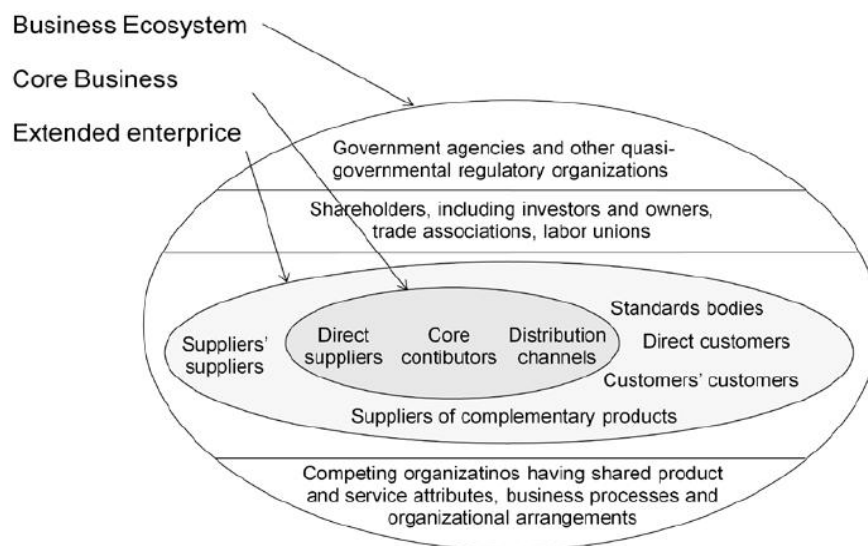


Figure 6: The structure of a business ecosystem (Moore 1996)

The concept of Digital Business Ecosystem

Touched upon in section 2.2.1 (p. 9), the technological perspective has gained a relatively lot of attention among ecosystem modellers (see e.g. Corallo, Passiante & Prencipe 2007; Dini & Nicolai 2003; Stanley & Briscoe 2010). On a very basic level, the digital business ecosystem can be defined as the e-business infrastructure enabling a business ecosystem in a digital environment (Corallo, Passiante & Prencipe 2007: 6; Brynjolfsson et al. 2007). The rapid advancement of modularity and open interfaces has

thus created an environment where a huge number of players are able to operate directly and leverage multiple platforms (Iansiti and Levien 2004a: 138).

Figure 7 illustrates Nachira, Dini & Nicolai's (2007) view on how business ecosystem and digital ecosystem are structurally coupled and together form a dynamic innovation ecosystem. The digital ecosystem shapes the structure of companies and their networks, whereas the business ecosystem influences the structure of the 'organisms' of the digital ecosystem (Nachira, Dini & Nicolai 2007). The illustration is helpful for understanding the different ecosystem components – and indeed relevant for the empirical part of this study as the digital ecosystem plays a crucial role in the operational environment of game companies. However, the focus of this thesis work is primarily placed on the business ecosystem layer as the author believes it provides the most useful frame for studying the ecosystem strategy of small global firms comprehensively.

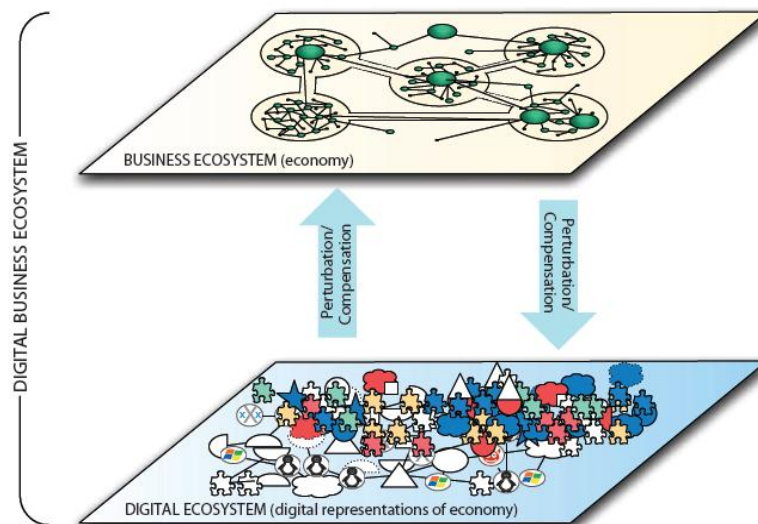


Figure 7: The coupling of business ecosystem and digital ecosystem (Nachira, Dini & Nicolai 2007)

As argued by Majumdar (2007: 185), the traditional 'bricks and mortar' business models do not fit the modern ICT-centred ecosystems. Having this said, the

implications that the rapidly developing ecosystem environment has for the strategy of the firm are discussed next.

2.2.3 Strategy-making in a business ecosystem setting

While the academic strategy literature has traditionally viewed competition at the industry level and later on shifted the focus on that to a firm level, Moore (1996: 3) argues the conventional paradigms and partitions fail to address the highly networked setting of today's business. Instead, the business ecosystem should be placed in the centre of a firm's strategy-making (Moore 1996: 56; Moore & Curry 1996). Also Iansiti & Levien (2004a: 10) acknowledge the limitations of former theories: the traditional strategy models that stress firm-specific capabilities fail to account for the dynamics of external interdependencies because they build the strategy on the firms' internal competencies.

According to Moore (1996: 61), the tension between a company's desire for autonomous decision-making and recognition of collective destiny among ecosystem participants emphasizes the essence of ecosystem-oriented business strategy. Instead of industry-bound thinking, the business model should be developed to fit a company's respective communities of coevolving participants (Moore 1996: 56). Consistently, Lam (2007) states managers must understand how the internal dynamics of social systems determine their responses to external stimuli before the intended business strategy can be achieved. Brynjolfsson et al. (2007: 198) note companies that utilize ecosystem approach as a basis for their business strategy have gained 'tremendous success'.

The identification of capabilities and relationships (Moore 1996: 67) as well as decisions about how and when to establish them (Moore 1996: 67; Adner 2006: 106) form a basis for ecosystem-centred business strategy. However, Moore (1996) does not elaborate these four elements in detail but notes that understanding both economic and social landscape; as well as learning to lead the co-evolution of the ecosystem are sources of firm's competitive advantage (Ibid). Two strategic implications will follow:

first, firms should seek wider opportunity environment (i.e. novel business possibilities characterized by untapped resources such as unsatisfied customer needs) and second, they must strive for leading the creation of ecosystem that is optimal for utilizing it (Moore 1996: 16).

Hagel III et al. (2008: 83) presents the idea of ecosystem shaping strategy and identify the view, the platform as well as the identification of shaping acts and assets as the three critical strategy components. According to Adner (2006: 101), the key to firm's success is an iterative strategy process that explicitly accounts for the inherent challenges emerging from the networked environment. In addition, decisions about how to trade off such ecosystem risks with the size of the market opportunity are the essence of business strategy (Ibid).

Iansiti and Levien (2004a: 145) propose a systematic approach to strategy creation in an ecosystem setting: according to the keystone theory, a firm must understand three foundations for competition as a starting point of strategy-making. The first foundation is *architecture* defining how the technologies, organizations and their products are bounded within the ecosystem. The second foundation, *integration*, describes how organizations collaborate and share technological components across these boundaries. Finally, the foundation of *market management* addresses how complex market dynamics influence the cross-boundary transactions done by the ecosystem participants. (Ibid)

In seek of theories that are probably most suitable for game companies, the strategies of ecosystem niche players are addressed next.

2.2.3.1 The Core Components of Niche Player Strategies

In the previous section the strategy-making of the business ecosystem participants was considered at relatively generic level. Now the attention will be shifted to the niche players of the ecosystem in particular. Specifically, the characteristics and the key

features of their strategies are discussed in the light of the existing business ecosystem theories.

Niche strategy was defined as one of the generic business strategies by Porter (1980) but has been studied relatively little from the perspective of environment-oriented theories (Noy 2010). This is why the ecosystem approach to niche strategy may provide a valuable contribution to the previous economic and marketing oriented studies. While keystones are the leaders of the ecosystems as a whole, niche players form a bulk of the system and seek to differentiate themselves through specialized capabilities in a narrow ecosystem domain (Iansiti and Levien 2004a: 77, 2004b). The two drivers of an effective niche player strategy - (1) value creation and (2) value sharing and risk management – identified by Iansiti and Levien (2004a) are discussed next.

Specialization in unique capabilities; leveraging other capabilities from keystones; and sustaining innovation are noted as the *value creation* components of a niche strategy (Iansiti and Levien 2004a: 133). Niche players leverage resources provided by the keystones and may utilize several overlapping ecosystems simultaneously. Specifically, they use existing solutions for everything outside their own niche business and seek continuous innovation by integrating technology available from the ecosystem. (Ibid. 2004a: 78, 128, 135; 2004b) As a sequence, niche players possess an ultimate advantage in the creation of novelty as their new products can function as an extension or additional capability of the existing ecosystem (Ibid. 2004a: 139, 140). Similarly, Majumdar (2007) identifies value creation as one of the strategy paradigms of firms that seek windows of opportunity in a business ecosystem setting.

The other group of niche strategy components deals with *value sharing and risk management* (Iansiti and Levien 2004a: 135). This requires a niche player to develop an understanding of its necessary *coupling strength* which indicates the switching costs between keystones (Ibid). Consistently, Hagel III et al. (2008: 84) note niche players must assess the relative strengths of ecosystem leaders and determine their own role within each committing opportunity. If the relationship between the niche player and its

partners is *tightly coupled* (i.e. the niche firm has to establish highly specific internal assets before it can benefit from the other organizations), the focus of the niche strategy should be placed on managing risk and dependencies (Iansiti and Levien 2004a: 135). Adner's (2006) similar notice of the inherent ecosystem risk as a key determinant for strategy was presented in the section 2.2.3 (p. 22). The main risk in implementing the strategy of exclusive commitment is that the supported platform fails to attract enough participants (Hagel III et al. 2008).

Contrary to the model of tightly coupled relationships, the risk of becoming dominated by the other ecosystem participants decreases if the niche player manages to diversify by establishing *loosely coupled* connections with several organizations (Iansiti and Levien, 2004a). In this case, the niche player strategy should embrace mobility and flexibility as interfaces in loosely coupled systems allow firms to respond much more easily to the changes in their technological environment. (Ibid. 2004a: 134-138) However, Hagel III et al. (2008) note the multiplatform strategy may incur costs if the firm must meet the standards of multiple platforms. On the other hand, Majumdar (2007: 190) addresses eBusiness firms and points out the companies must seek multiple sources of revenue.

Finally, the aspect of interdependency should be considered by niche players because mobility and collective negotiation power brings them influence over keystones (Iansiti and Levien 2004a: 138; 2004b). Thus, *niche leverage* is a significant element of niche strategy as firms may 'leave' the keystone if it does not enhance enough opportunities for value creation (Ibid. 2004a: 138; 2004b). This in turn would decrease the 'healthiness' of the ecosystem, which harms the operations of the keystone (Ibid. 2004a: 139).

In summary, sustainable niche strategies leverage the powerful platforms to compensate their limited resources and seek to manage the network dependencies: the key is to understand the nature of the particular platform and assess the likely evolution of the relationships (Iansiti and Levien 2004a: 155). Lewin et al. (1999: 538) note the profit

potential of new opportunities decrease as the competitor density in a niche increases. Constantly expanding platforms push innovation by driving niche players away from the original core where specialized expertise and quick response is required (Iansiti & Levien, 2004a: 155; see also Noy 2010). Misinterpretation of the complex ecosystem dynamics, supporting a weak keystone; or becoming overrun by a dominator or dependent on inappropriate platform are the main causes of niche strategy failure. (Iansiti & Levien 2004a: 11) Lastly, Noy (2010) states niche strategies are relatively short-range of nature and mostly affected by the environmental forces in the long term. The next section discusses how niche firms can retain their competitiveness in the continuously evolving ecosystem setting.

2.2.3.2 Strategic co-evolution with the business ecosystem

Thus far the strategy of the firm has been discussed in the context of a business ecosystem in its present state. In order to take into account the continuous evolution of the ecosystem environment, this section considers the strategy of the firm in the long run and addresses to the future aspect.

Co-evolution refers to a reciprocal adaptive process between one or more elements of an economic system (Moore 2006: 32) and is acknowledged as a precondition for the ecosystem's long-term sustainability (Moore 1996, 2006; Moore & Curry 1996; Iansiti & Levien 2004a, 2004b). The term is also used in the strategy literature addressing the interplay between the organizational environment and the firm's strategy. According to Lewin & Volberda (1999) co-evolution is '*a joint outcome of managerial intentionality, environment, and institutional effects*'. This section gives an overview of how the co-evolutionary aspect has been addressed by strategy theorists.

Research applying the long-term aspect to the linkage between firm's strategy and the external business environment has been mainly driven by the adaptation–selection discourse (see e.g. Lewin & Volberda 1999; Cantwell et al. 2010). The theories addressing strategic adaptation typically consider 'fit' or 'match' as an incremental,

reactive process driven by the environment (see e.g. Chandler 1962; Lawrence & Lorsch 1967; Nelson and Winter 1982; Tushman & Anderson 1986; Donaldson 1987; Taghian & Shaw 2010; Yamakawa et al. 2010; Cheng & Liang 2011). Often drawing from the resource-based view of the firm and the eclectic paradigm, firms' competitive advantage and survival is explained by unique resources and capabilities, regimes of routines or optimal resource allocation strategies (Lewin & Volberda 2003). Strategists acknowledge the growing interdependency between firms: for example, it has been stated the O advantage of OLI paradigm should be broadened to cover the inter-firm alliances and networks as the management firm's relational assets is a catalyst of sustainable competitiveness (Dunning 1995, 2000; Dunning & Wymbs 2001)

In contrast, the co-evolutionary organizational theorists propose that the managerial adaptation and environmental selection occur simultaneously and affect each other (see e.g. Lewin & Volberda 1999; 2003; Lewin 1999; Cantwell et al. 2009). Lewin & Volberda (1999) propose the *managed selection* as the most effective mechanism that drives the co-evolutionary patterns of firms and enables organizational renewal over time. The best elements of the past experiences should be retained along with deliberate creation of novelty: *'Rather than shaping the pattern that constitutes strategic renewal (hierarchical renewal) managers shape the context within which it emerges, speeding up co-evolutionary processes'* (Lewin & Volberda 2003). Importantly, organizations must carry out both exploitation and exploration strategies (Levinthal & March 1993; Lewin & Volberda 1999). Lewin et al. (1999) adds legacy as the third component affecting the firm's long-term survival.

Consequently, the focus of research has increasingly shifted to how exploitation and exploration should be balanced (Kyriakopoulos & Moorman 2004). The theory of *Dynamic Capabilities* (Teece et al.1997) proposes the firm's latent abilities allowing renewal and adaptation are the source of competitive advantage over time. The best strategic fit between firm and ecosystem as well as structure and strategy is gained specifically through the asset alignment capacity (Teece 2011). According to Eisenhardt & Martin (2000) dynamic capabilities are identifiable processes - such as strategic

decision-making and alliancing - that have commonalities across firms and thus resemble the traditional conception of routines (see e.g. Nelson & Winter 1982). On rapidly changing markets, these strategic routines should be purposefully simple to allow effective adaptation (Eisenhardt & Martin 2000). Similarly, O'Callaghan (2007) note dynamic capabilities allow SMEs to organize their existing competencies to better match the needs of emerging market niches. Taghian & Shaw (2010) found evidence the process of capability configuration is the main contributor to the firm's market fit, which in turn correlates positively with performance.

Although mainly disregarded in the ecosystem strategies of Moore (1996) and Iansiti & Levien (2004a), the importance of knowledge as the firm's strategic inimitable resource is highlighted in the strategy literature (see e.g. Barney 1991; Grant 1996; Kogut & Zander 1993, 2003; Madhok & Phene 2001). Knowledge creation process is also recognized as a key dynamic capability of the firm (Eisenhardt and Martin 2000). According to Madhok & Phene (2001), the ability to coordinate and leverage knowledge related-resources as well as the management of network-level knowledge-sharing processes are the key co-evolutionary processes that enhance firm competitiveness. *Absorptive capacity* – or *market sensing* (Cravens et al. 2009) - is acknowledged as a mean for a firm to utilize its external network relationships for knowledge creation (see Cohen and Levinthal 1990; Gupta & Govindarajan 2000; O'Callaghan 2007). As the environmental variation may change the way knowledge evolution impacts firm performance, the firm's knowledge evolution strategy should follow the changes occurring in the business environment (Cheng & Liang 2011). Lewin et al. (1999) propose high absorptive capacity increases the firm's likelihood to utilize exploration (Ibid).

In line with the theory of dynamic capabilities, Eisenhardt & Galunic (2000) state co-evolution embraces the routines that allow firms to formulate new synergistic resource combinations. Lewin et al. (1999) note high organizational bureaucracy lowers the firm's ability to recognize new opportunities. Consistently, many researchers propose strategies entailing relatively simple and straightforward rules for opportunity

identification and capture in constantly evolving dynamic environments (see e.g. Rubenstein & Grundy 1999; Eisenhardt & Sull 2001; Adner & Levinthal 2004; Adner 2006; Hagel III et al. 2008; Davis et al. 2009; Bingham & Eisenhardt 2011; Sull & Eisenhardt 2012). For example, Eisenhardt & Sull (2001) argue young companies typically have too few rules, preventing the effective implementation of innovative ideas. Instead, the identification of a few key strategic processes and unique simple rules provides more structure and guides them through the chaos (ibid). Also Adner and Levinthal (2004) remark firms' seek of adaptation through vague or unstructured exploration activities hinder them from distinguishing the real option from the generic notions of path-dependency.

In addition to planned strategies, Rubenstein & Grundy (1999: 9) present two more groupings for business strategies that are more informal by nature. Generally, *umbrella strategies* consider certain key aspects of the firm's environment, the present situation as well as the organizational capacity as a basis for strategy-making. Umbrella strategies are usually written and occur in global context; and they set the direction and main policies for the firm that strives for a particular result. In turn, *intuitive strategies* are often unwritten as they build on the idea of the firm's ultimate goal as well as the feel of how that goal is achieved. Usually there is little systematic analysis of the firm's environment, the present situation or organizational capacity carried out. (Ibid) According to Rubenstein & Grundy's (1999) theory, an entrepreneurial organization that seeks for high growth benefits from a suitable mix of intuitive strategies (to allow flexible decision-making when the needed data is not available), umbrella strategies (to allow policies and directions) and planned strategies (to allow analysis and coordination). Specifically, '*knowing which rules or moulds to break and reshape is the essence of the art of strategy*' and this is why the planning process of the firm should achieve a balance between the continuity and change. (Rubenstein & Grundy 1999: 10, 158)

Eisenhardt & Brown (1998) note the organizational change typically occurs as a response to single events such as shifts in technology, which is often an ineffective way

to manage transitions in rapidly moving markets. Tactical adjustments made by the managers may collectively lead to unintended changes to the strategy (Adner 2006). Therefore, Eisenhardt & Brown (1998) propose *time pacing* that is a semi-structured strategy allowing a predictable rhythm for change: a firm can gain competitive advantage by setting the right rhythms and synchronizing those rhythms both with the business environment and the firm's internal capabilities (Eisenhardt and Brown 1998). Consistently with the logic of dynamic capabilities and simple rule strategies, time pacing integrates exploitation and exploration by building on 'clear, choreographed processes' that are the key for managing the critical transitions effectively (Ibid). Process, schedule and the learning mechanism at the core of entrepreneurial strategy are also recognized by Rubenstein & Grundy (1999: 12). The organizational agility will be gained through the ability to anticipate change and perform proactively. (Eisenhardt and Brown 1998)

Contrary to the idea of time pacing, Voelpel et al. (2006) argue the pursuit of fit by predicting the environmental evolvment is not sufficient to survive in the long term. Achieving the organizational objects may necessitate challenging the industry mind-set as well as the firm's internal mind-set (Rubenstein & Grundy 1999: 21). While maintaining flexibility when changes in the business environment occur, a firm must also co-evolve unprompted by creating purposeful misfit (Voelpel et al. 2006). Specifically, by becoming misfit to prevailing ways of thinking and conducting business, the firm can bring about an innovative strategy that enhances its success in arising business environments (Ibid). Consequently, five managerial implications are identified: (1) Balancing the risks of misfit experimentation by aligning the innovation with customer needs and organizational capabilities, (2) Co-shaping new value with business ecosystem members, (3) Managing the paradox of fit and misfit simultaneously, (4) Implementing a redefined concept of 'strategic fitness' and accepting the disagreement that misfit generated, and (5) Measuring the performance through systemic scorecards (Voelpel et al. 2006).

Figure 8 summarizes and compares selected strategy propositions discussed above and in the previous sections of this study.

	Strategic Logic	Source of advantage in the long term	Firm's response to change	Performance Goal	Risks of the Strategy
Iansiti & Levien (2004a): Ecosystem Niche Player Strategy	Keystone leverage while managing interdependency	Value creation, value sharing & risk management	Both reactive and proactive	Differentiation through specialized capabilities	Difficulty of interpreting ecosystem dynamics, threat of over-dependency
Eisenhardt & Brown (1998): Time Pacing	Scheduling change at predictable time intervals	Ability to manage transition and rhythm	Proactive	Enhanced competitiveness	Not the answer for every business
Eisenhardt & Sull (2001): Simple Rules	Pursuit of fleeting opportunities whilst avoiding the chaos	Key processes and simple rules allow to identify the best opportunities	Proactive	Growth	High tentativeness in catching promising opportunities
Voelpel et al. (2006): Purposeful Organizational Misfit	Organizational misfit as a generator of innovative strategies	New and innovative customer value, ability to leapfrog competitors	Proactive	Long-term fit	The paradox of simultaneous fit and misfit: an uncontrolled misfit can result a failure
Adner (2006): Innovation Strategy	Successful innovation enabled by monitoring the ecosystem co-participants	Systematic approach to analyzing risks completes the due diligence process	Reactive: strategy modified on the basis of risk assessment	Growth	Not discussed

Figure 8: Strategy propositions and discussions for rapidly changing environments (selected authors)

In this literature review, two interesting research fields have been introduced in order to examine the existing theoretical foundation for the underlying linkages between them. First, the typical characteristics and challenges of Born Globals were discussed, followed by a review of business ecosystem theories with emphasis on their strategic implications for a single ecosystem participant. In seek of synthesizing the previous research work conducted on these fields, the classic idea of SWOT framework will be

applied next. By this way, the author attempts to clarify the role the business ecosystems have come to play in the business of game firms in recent years.

2.2.4 Ecosystem implications on the strategy formulation of Born Globals

When modelling the relationship between a small global firm and its ecosystem, the classical SWOT framework may prove useful: in addition to the firm's internal strengths and weaknesses, the tool considers opportunities and threats that are to emerge from the external business environment. The external factors of the SWOT matrix are outside of the control of the organization (Weihrich 1982, cit. Ghazinoory et al. 2011). In this light, the firms' external ecosystem may have significant implications on the strategy of small global firms.

Ecosystem as an Opportunity

The RBV of the firm helps to understand why the ecosystems environment may appear highly attractive to game companies. Instead of striving for strategic 'fit' (for the traditional strategy theories and discourse; see section 2.2.3.2, p. 25), firms may rather 'stretch' their resources because adding them can prove costly (Maula 1999, 347). Today, the emergence of business ecosystems has provided new opportunities for firms to acquire resources, thereby making the ecosystem environment especially appealing to small global operators. When reasoning how business ecosystems allow game companies to overcome the challenges relating to their scarce resources, niche operations and global market access (section 2.1.2, p. 12), the network theory of internationalization proves insightful.

As touched upon in section 2.1.2.2 (p. 15), the need to understand networks in the context of Born Globals is widely recognized by researchers (see Oviatt & McDougal 1995, 2003; Yli-Renko & Autio 1998; Coviello 2004; Autio 2005; Coviello & Cox 2006; Isenberg 2008 and Sasi and Arenius 2008). As found by Sasi & Arenius (2008),

the Finnish Born Globals may have access to resources that support their early internationalization, but global network exposure may be a necessary to reach subsequent international growth. The network effect brings about collective utility and thus benefits the ecosystem members of all sizes (Iansiti and Levien 2004b; Nachira et al. 2007: 4). The aspect of social capital is often highlighted by network theorists: for example, Dunning (2000) states social capital is directly related to firms' relational assets, which refer to capabilities to access, sustain and upgrade economically beneficial relationships. Specifically, firm's access to such resources is becoming more important than the actual ownership (Barney 1991; Dunning 2000; Coviello & Cox 2006; Cantwell et al. 2010).

The digital distribution enabled by business ecosystems has been a crucial catalyst for the competitiveness of game firms: today, their products can be distributed to foreign countries with minimal additional cost per unit once the game has been developed (see Arenius et al. 2006; Koiso-Kanttila 2004). At the same time, the number of intermediaries in the digital goods business has been profoundly reduced as the companies are able to distribute their products directly (Koiso-Kanttila 2004). The reconstructed model of game distribution demonstrates the evolvement of game firms' business ecosystem and is presented in Figure 9.

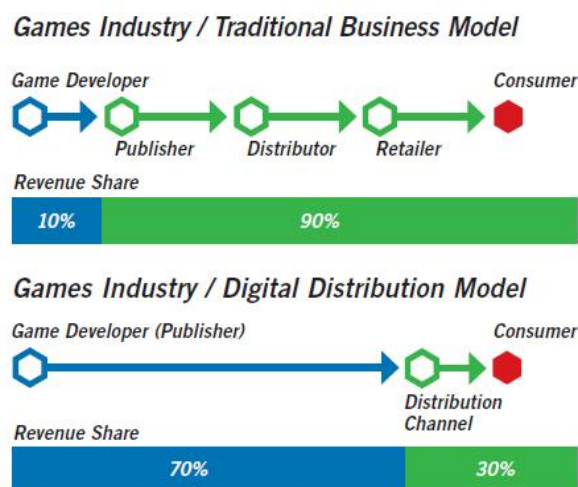


Figure 9: The implications of digital distribution for the business of game firms (Neogames 2011)

Along with direct distribution, the entire value chain of game industry – formerly ‘very unfair financially to those who develop games’ (Neogames 2011) – has been transformed, which is reflected in the business models of game firms. Such reorganization and generation of new value chains is termed as ‘value chaining’ by Moore (1996) and can lead to dramatic performance improvements in ecosystems (Ibid 70). In sum, the model of direct distribution provides a solution to many of the resource constraints the Born Global firms have formerly struggled with. It has allowed remarkably shorter time to market (see e.g. Koiso-Kanttila 2004; Wunsch-Vincent 2005) which enables quicker access to revenue (Gabrielsson & Kirpalani 2004); relieving game companies more resources for fast-cycle product development.

In addition to the response to resource scarcity of Born Globals, ecosystem also helps these firms to overcome the challenge of market access. The Internet has allowed global reach (Dunning & Wymbs 2001; Moore 2006), thereby letting the firms to find the critical mass for their niche products more easily. Similarly, Arenius et al. (2006) note Born Globals can use Internet for increasing the brand awareness among consumers, which facilitates market pull. Finally, the Internet can decrease the effects of liability of foreignness and resource scarcity because it decreases the costs directly associated with distance as well as costs resulting from the host country environment (Arenius et al. 2006; Sasi and Arenius 2008).

Ecosystem as a Threat

The constraining role of business ecosystems in the operations of its members or prospective participants has been paid only little attention by researchers. Dunning (2000) note the relational assets may be also negative of value and take the form of liability. Similarly, Adner (2006) remarks while easily overestimating the potential for value creation, ecosystem participants may underestimate the challenges resulting from the interconnected nature of liabilities. Before a sustainable ecosystem strategy can be established by small global firms, the challenges and threats posed by the ecosystem environment should be acknowledged.

Zahra (2005) notes the liability of newness limits Born Globals' access to existing networks. As found in section 2.1.1 (p. 9), Born Globals seek niche markets in order to gain competitive advantage against the firms with greater resource base. However, Iansiti and Levien (2004a: 119) remark both landlords and dominators may prevent niche creation in ecosystems, thereby hindering Born Globals from penetrating into ecosystem niche domains. In addition, the niche market may become attractive to larger firms and new entrants (Noy, 2010), which toughens the competition. Also, Iansiti & Levien (2004a 119) note the intense competition between dominators is likely to spur them to create and expand into new ecosystem niches themselves. Dunning and Wymbs (2001) remark the Internet allowing low barriers to entry may cause problems for start-ups to create sustainable, non-imitable assets.

The resource dependence theory argues that while the organizational survival is determined by company's ability to acquire critical resources from the business environment, a firm may become defenceless against the behaviour of its external resource sources (Pfeffer & Salancik 1978). Gabrielsson & Gabrielsson (2010) found the relationships with channel partners have remained important to Born Globals, regardless their relatively high utilization rate of Internet-based sales channels. Also, Yli-Renko & Autio (1997) remark network embeddedness is a significant factor in the evolution of small firms and note the network may constrain firms' growth. In contrast, Sasi & Arenius (2008) state Born Globals can engage in resource exchange and still avoid being controlled.

Especially the smaller firms with little market power may need to take the conditions of ecosystem as given and adjust their strategies accordingly: Iansiti and Levien (2004a: 134) remark due to the high reliance on external resources, ecosystem niche strategies trade off risk with productivity. Similarly, Adner (2006) notes that along with timing and resource allocation; the most important strategic implication posed by the interconnectedness is a call for systematic approach to risk assessment. Delays, compromises and disappointments should be expected as various operations are outside the control of a single ecosystem participant. If the market does not emerge rapidly

enough, the investment made by a company does not get support and may end with a failure (Adner 2006)

While the high dependency of network partners was identified typical of Born Globals (section 2.1, p. 8), the ‘collective destiny’ (Moore 1996) or ‘common fate’ (Iansiti & Levien 2004a, 2004b) shared by members reflects the interdependence between ecosystem participants. Sasi & Arenius’ (2008) remark Born Globals can achieve significant international growth only if they manage to transfer their dyadic business relationships into multilateral network relationships. However, Telesca & Koshutansky (2007) argue the trusted and affordable technological environment may be still lacking in ecosystems, which hinders small firms from pursuing new opportunities and growth (Ibid).

The SWOT model illustrating the relationship between a Born Global firm and its respective business ecosystem is presented in Figure 10.

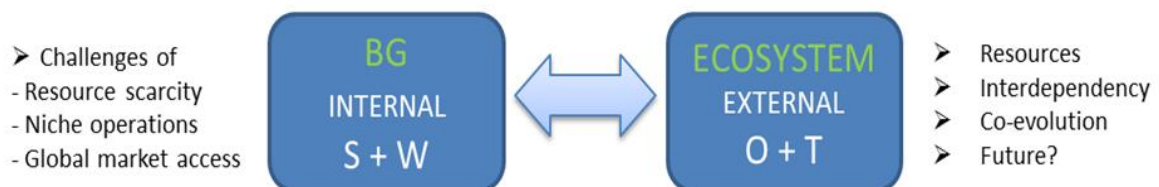


Figure 10: SWOT model of the relationship between a Born Global and a business ecosystem

2.3 Preliminary Theoretical Framework

Based on the literature review and the research question of this study, the gaps and limitations of existing theories and research work are identified and discussed next, followed by the introduction of the preliminary theoretical framework.

2.3.1 Justification for the theoretical framework: research gaps

The specific interest of this study being the relationship between the strategy of Born Globals and their respective ecosystems, the author would like to make certain critical remarks on the previous theories and research findings. The following identification of research gaps justifies the construct of the theoretical framework as well as provides a detailed explanation for its novelty.

Despite business ecosystems having been under relatively diverse research for almost two decades, one key aspect has been little addressed in the related academic theories: Although ‘the companies in a business ecosystem tend to have differing images and understandings of the ecosystem, even in a highly aligned situation’ (Moore 2006: 58), the ecosystem aspect of a *single* ecosystem participant has gained a minor consideration by the theorists. The author was not able to find any ecosystem discourse promoting the standpoint of each ecosystem participant in fact having *an own ecosystem within the larger ecosystem setting*. In contrast, the theme has been touched upon by researchers of other academic fields: for example Pfeffer & Salancik (1978: 63) and Redwood & Ford (2012) acknowledge the variation in organizations’ environmental perceptions. Also Yli-Renko & Autio (1997) note the corporate network identity is formed by a firm’s activity dependencies and resource linkages. Thus, the author argues the idea of firm-specific ecosystems is a topic area that deserves a greater research emphasis.

Moreover, the comprehensive understanding of *small* ecosystem participants is still mainly lacking as many of the existing theories are addressed to firms seeking to become the *leaders* of the entire ecosystem (see e.g. Moore 1996; Hagel III et al. 2008). Although Moore (1996) states ecosystem leaders should promote diversity and establish a critical mass, the aspect of how the strategies of other ecosystem members or prospective participants shape the strategy of the ecosystem leader is not considered. Given that ecosystem theories emphasize the interdependency between the ecosystem members, and niche players are essential to the survival of keystones (Iansiti and Levien

2004a); ignoring the bidirectional impact in strategy formulation is a limitation of Moore's theory and restricts its applicability to this study.

However, Moore (1996: 55) remarks business ecosystems can be also confined to a narrow purpose. In this respect, the theory of Iansiti and Levien (2004a, 2004b) supplement Moore's ecosystem framework in a worthwhile manner as it addresses the different roles of ecosystem participants and acknowledges their dissimilar strategies. Still, although providing worthwhile considerations of the fundamental regularities that may guide the strategies of niche players, the theory of Iansiti and Levien (2004a) remains relatively generic. The focus is primarily placed on how niche players with relation to other ecosystem participants *can survive*, but the theory does not consider competition *between* niche players or specify the *factors* resulting differences in their *performance*. In contrast, Majumdar (2007) remarks *value realization* as one of the key paradigms of strategy-making in an ecosystem setting. Furthermore, as the negotiation power of niche players over a keystone is mainly collective by nature (section 2.2.3.1, p. 22) the related gains are unlikely to become realized in the operations of a single firm. Thus, the author argues this aspect of niche strategy remains deficiently addressed; and niche players should not count on their negotiation power against keystones.

Besides the above gaps that stem from the business ecosystem theories, a significant limitation can be identified in the existing strategy literature. Specifically, the strategy theories and studies that address co-evolution are mainly focused on large MNCs (see e.g. Kogut & Zander 1992, 1993, 2003; Dunning 1995; Lewin & Volberda 1999; 2003; Madhok & Phene 2001; Cantwell et al. 2010) whereas the aspect of a small firm is typically overlooked. As an exception, Coviello (2006) studied the network dynamics of Born Globals but did not focus on the strategic implications of their network evolution in particular. Furthermore, Cravens et al. (2009) note that despite great interest for developing understanding of fast changing markets, the research focusing on strategies for these markets is relatively narrow. As the current research fails to cover the aspect of small firms sufficiently, one must be selective and apply the existing theories to Born Globals with a caution.

Several gaps with regard to Born Global literature can be identified too. The existing research work of the strategies of Born Globals typically addresses the general attributes of their strategy (see Jolly et al. 1992; Luostarinen & Gabrielsson 2006) or is centred round the internationalization phase of these firms (see Rennie 1993; Gabrielsson & Kirpalani 2004; Arenius et al. 2006; Sasi & Arenius 2008; Sasi et al. 2009; Sasi 2010; Casas & Dambrauskaite 2011). In those studies, the internationalization is usually studied from the perspective of a Born Global. Instead, the operational environment of the firms is little addressed, which is a significant limitation as compared to the coverage of the strategy literature. Moreover, the long-term aspect of Born Globals' strategies has been little studied yet. Given the rapidly growing game industry segment in Finland, there is a call for greater understanding of the ecosystem setting of game firms. The methodological challenges relating to longitudinal research - i.e. potential difficulties to conduct and compare the results - are likely to limit the availability of these studies. For example, Lewin et al. (1999) notes the main barrier for such case studies on firm adaptation is the lacking access to organization-specific time series data.

Finally, ICT being a rapidly growing business sector, there is an urgent need to gain more understanding on the firms operating in that field. Specifically, because digital infrastructure has opened up many new opportunities to ICT firms in recent years, it is important to investigate how the upheavals in their value chain have impacted the operations and strategy of these firms.

As a response to the limitations of the existing literature identified above, the preliminary theoretical framework is constructed in section 2.3.3 (p. 43). In order to present the scientific foundation for the research questions of this study, the related discourse from the fields of Born Global and strategy research are brought together next.

2.3.2 The strategy of Born Globals in a business ecosystem setting

As illustrated with help of the SWOT framework (Figure 10), business ecosystems have significantly shaped the business environment of game firms. While low revenue shares, slow information flows and dependency on distribution channels formerly complicated the business of game companies, the ecosystem infrastructure has opened up new ways for these firms to operate. At the same time, the literature indicates the ecosystem environment may pose some new strategic considerations for the participating companies. These considerations mainly concern the ability of a small firm to access and penetrate into the ecosystem; as well as the consequential interdependency between the ecosystem participants.

Generally, the building blocks for the firm's ecosystem strategy creation identified by Iansiti and Levien (2004) seem to accompany Moore's theory and can be summarized as follows: (1) understanding the structure of and relationships in the ecosystem, (2) defining the firm's integration capabilities as well as (3) its ability to manage the external market dynamics. Specialization in unique capabilities, leverage of external resources and sustaining innovation are the value creation components of ecosystem niche player strategy (Iansiti and Levien 2004a: 133). Although Moore (1996) neglects the aspect of niche players' possible mobility between the ecosystem leaders, the viewpoints of firm-specific high value capabilities as well as the importance of co-evolution at the hearth of niche player strategy connect the theories of Moore (1996) and Iansiti & Levien (2004). These findings seem to be in line with the typical characteristics of Born Globals: as these firms are acknowledged being typically highly reliant on their business networks; and as the strategy of Born Global firms feature differentiation as well as overcoming certain constraints (section 2.1, p. 8), the literature lends support to the fundamental applicability of ecosystem niche player strategy to Born Global firms. This is the ultimate starting point when approaching the main research question '*Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?*' in the light of the existing research work.

Several researchers have argued the absence of path-dependency is the key factor enhancing the competitiveness of Born Global firms. George et al. (2004) and Autio et al. (2010) found non-routine processes are specifically important for the capability development of Born Globals. The way Born Globals acquire resources and social capital changes over time and they tend to utilize active resource exploration strategies (Coviello & Cox 2006). Consistently, Yamakawa et al. (2011) found both high-growth industry firms and those with a focus on differentiation strategy will benefit more from alliance exploration, which has a positive impact on their external fit and performance. In contrast, Lewin et al. (1999) propose the firms with high niche density dependence have lower likelihood of implementing exploration. Redwood & Ford (2012) investigated a small UK Born Global and discovered their innovation strategy was characterized by randomness: the company combined ideas from a number of sources, mixed old and new concepts, and these processes of combination typically affected each other. In turn, Coviello (2006) observed the evolution of Born Globals' networks has both path-dependent and intentionally managed characteristics. Generally, these research findings about Born Globals appear to lend more support to strategy theories suggesting proactive strategies as a mean to enhance growth and competitiveness in an ecosystem setting.

Sasi (2010) and Sasi & Arenius (2011) found evidence Born Globals may concentrate on multiple strategies simultaneously in their start up-stage. Also the strategy literature provides some support for diversity as a mean to cope with the rapidly changing ecosystem conditions: Eisenhardt and Martin (2000) note effective dynamic capabilities in high velocity markets are experiential and entail multiple alternatives. Given the fundamental uncertainty of Born Globals' business environment (see Autio et al 2010), Aldrich et al. (1984) make a valid point by stating the strategies dealing with uncertainty should embrace variations and encourage the influx of new ideas (see also Cantwell et al. 2009). Similarly, Iansiti & Levien (2004a) note niche players should seek to utilize multiple platform strategy to manage the risks posed by their network dependency.

As it comes to Born Globals' potential need for market adaptation, researchers are not fully unanimous. According to Jolly et al. (1992), global start-ups cannot make market adaptations especially with regard to their products but choose segments which are relatively homogenous on a global scale. Consistently, Taghian & Shaw (2010) note the fit dynamics for global market segments tend to be similar, which reduces the need to reconfigure the internal capabilities of global firms. In contrast, Luostarinen and Gabrielsson (2006) found the products of Born Globals must be modular and allow market customization. However, the author would like to point out that as the study of Luostarinen & Gabrielsson (2006) did not distinguish the different maturity levels of Born Globals, their finding may be more generic of nature - and thus might not apply to these companies at their *start-up phase* but later on. Nevertheless, more empirical evidence is needed as certain ambiguity occurs with regard to this aspect of Born Globals' strategy.

The reviewed theories provide an academic foundation also for the second main objective of this study to examine '*How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?*' To succeed in the long term, the ecosystem participants must align their business with a winning direction by adapting themselves to the ecosystem leader (Moore 1996: 191, 193-194). As the key challenge, followers must co-evolve rapidly enough to avoid being cloned, whereas outsiders need to develop durable value adding capabilities in order to stabilize their ecosystem membership (Moore 1996: 194). In line with the earlier research findings about ecosystem participants presented in section 2.2.1 (p. 16), this may indicate the effectiveness of strategy is dependent on the strength and maturity of the firm's ecosystem position, and the emphasis of the strategy should evolve in accordance with the firm's maturity level.

Generally, firms are more likely to intensify their adaptation through exploration strategy when the environmental disorder increases (Lewin et al. 1999). However, Kogut & Zander (1992) remark a highly competitive environment may retard the ability of relatively new firms to invest in new learning (see also Autio et al. 2010). In addition,

too rapid pacing of experience can overwhelm managers, which prevents them from transferring the experience into sensible learning (Eisenhardt & Martin 2000). As the knowledge and routine-based strategy theories typically rely on the assumption of firms' prior experience and established learning processes, one should be cautious about their full applicability to Born Global firms. Rather, the limited resource base of Born Globals; as well as learning from heterogeneous experiences (George et al. 2004; Autio et al. 2010); may incline towards the theories proposing relatively straightforward but flexible disciplines as a basis for the firm strategy (e.g. the simple rules strategy (Eisenhardt & Sull 2001) and innovation strategy (Adner 2006)).

Figure 11 is built on the literature review that was presented in this chapter and it summarizes the expected responses to the original research questions. The objective of this study is to contribute to the research of Born Globals' strategies with a novel proposition. With the fundamental aim at open and objective research, this study welcomes the empirical evidence that may either support or deviate from the current theoretical viewpoints presented in this literature review. The findings and the discussion generated by this comparison provide novel insights with regard to the ecosystem-oriented strategy of Born Globals.

Research Question	Expected
<p><i>Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?</i></p>	<p>The strategies of Born Globals feature differentiation through unique capabilities and high orientation towards co-evolution with business environment; and can be thus paralleled by the strategy of ecosystem niche players.</p> <ul style="list-style-type: none"> - BGs utilize mainly explorative strategies for acquiring resources from their respective ecosystem. - Newly-established BGs support variation and multiple strategies as a mean to adapt to their respective ecosystems. - Need for market-based adaptations?
<p><i>How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?</i></p>	<ul style="list-style-type: none"> - BGs seek to co-evolve with their respective ecosystems by reshaping their strategies proactively. - BGs utilize relatively simple strategic rules and processes as a mean to cope with changes and uncertainty.

Figure 11: A summary of the expected responses to the original research questions

2.3.3 The elements of the Theoretical Framework

The preliminary theoretical framework consist of two interrelated parts as the particular objective of this study is to narrow the research gaps

- (1) By extending the present understanding of the ecosystem strategy of Born Globals (framework A) and
- (2) Cover also the long-term aspect of the strategy of these companies (framework B).

The elements of these preliminary frameworks are now introduced.

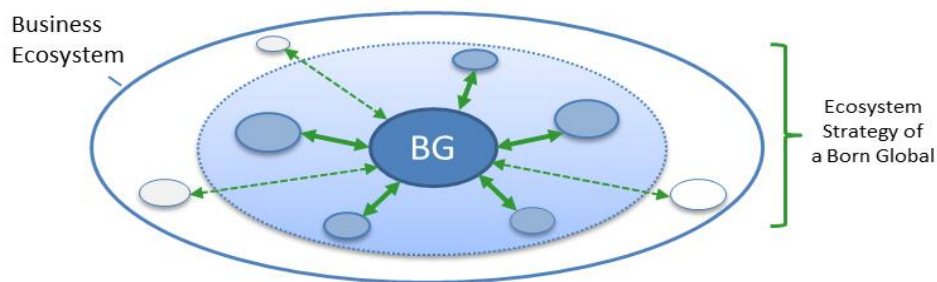


Figure 12: Preliminary Theoretical Framework A.
Born Global strategy in an ecosystem setting (present moment)

The framework A illustrates the strategy of a Born Global in an ecosystem setting and encompasses the aspects that concern this particular strategy overall (i.e. the main research question of this study). Given that the company interacts with different members of its ecosystem, the one and same strategy guides its operations with various ecosystem participants. This is why it is important to note that the *set of arrows* in the framework A represent *one coherent strategy* of a Born Global: the strategy is *directed to the entire ecosystem* and *implemented in various contexts* by the firm. As the main objective, this research seeks to investigate whether this strategy corresponds to the strategy of ecosystem niche players.

Another important remark is the two-way form of the strategy arrows that indicates the need for reciprocal strategic adaptation: as noted in the literature review, the relationships between ecosystem participants may involve high level of interdependency, thereby posing strategic considerations for the companies on constant basis. Specifically, the capability leverage as a core component of a niche strategy may make the firm highly exposed to the internal dynamics of the ecosystem. By building on the literature reviewed in this chapter, small global firms are expected to adapt to environmental uncertainty and risk through the strategic seek of variation.

Finally, as the organizational ecosystem roles were found dissimilar in the literature review, some of the business ties are strategically more significant to a Born Global and

require greater consideration (thick arrows). On the other hand, some ties play less crucial role or may have only indirect impact on the strategy of a Born Global (dash line arrows). As the framework illustrates the firm-specific perception of an ecosystem environment, the potential interconnectedness of the Born Global firm's ecosystem members is not represented in the figure. For the same reason, the objects of framework may be out of proportion.

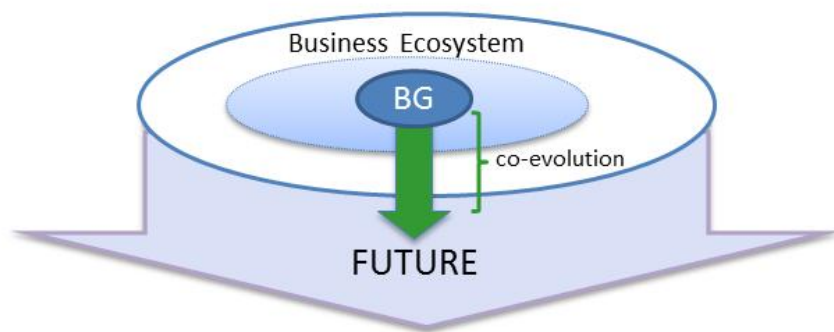


Figure 13: Preliminary Theoretical Framework B.
The co-evolution strategy of a Born Global (long-term perspective)

The framework B in turn illustrates the co-evolution perspective of the strategy of a Born Global and thus addresses the second main objective of this study. In order to ensure competitiveness in the long term, a Born Global must align itself to the future direction of the ecosystem and co-evolve with the ecosystem fellow participants. A Born Global is expected to apply a proactive approach to co-evolution and utilize relatively simple strategic rules and processes as a mean to cope with changes and uncertainty.

3. METHODOLOGY

The methodology part of this thesis outlines and justifies the research design of the study. The research design follows the structure proposed by Yin (2009: 27): first, the research objective and questions were identified, followed by the selection of the meaningful units of analysis for the study. Then, the logic behind the data analysis as well as the criteria for interpreting the findings was determined. Consequently, the validity, reliability and limitations of the study will be discussed later in this section.

3.1 Unit of analysis: a multiple-case study

This thesis is conducted as a holistic multiple-case study. By definition, case study is an empirical inquiry that aims to understand and capture the dynamics present within a single setting (Eisenhardt 1989) when the boundaries between phenomenon and context are not unambiguous (Yin 2009: 18). Generally, the method is preferred when the objective of the research deals with explanatory *how* or descriptive *why* questions (Ibid: 2; 2012: 5). Case studies are particularly suitable for examining new subjects and in situations where the existing theories prove limited (Eisenhardt 1989; Yin 2009). Developing a theory inductively by using rich empirical data is likely to result in a theory that is ‘accurate, interesting and testable’ (Eisenhardt & Graebner 2007). The method typically utilizes several data sources such as archives, interviews and observations (Eisenhardt 1989), which is the unique strength of case studies over other research methods (Yin 2009).

As case studies can transfer complex business phenomena into accessible ‘down-to-earth format’, they may be especially useful for firm managers (Eriksson & Kovalainen, 2008: 116). The existence of organizational success stories (e.g. Cisco, Microsoft and IBM) may be one reason for why many researchers favour case examples when seeking to explain ecosystem-centred strategies (see e.g. Moore 1996; Gossain & Kandiah 1998; Iansiti & Levien 2004a, 2004b; Mayer & Kenney 2004; Hagel III et al. 2008). However, given the complexity of contemporary business networks, normative research

instructions for related case studies are ‘extremely difficult and even questionable’ to set out (Törnroos & Halinen 2005).

Traditionally, concerns over the rigorousness of the case study method as well as their limited contribution to scientific generalizations have been expressed (Yin 2009: 15). Moreover, strong reliance on empirical evidence may result in an overly complex or a narrow and idiosyncratic theory (Eisenhardt 1989). However, Yin (2009: 15) responds to the criticism by pointing out the aim of case studies is to provide analytic generalizations to theoretic propositions instead of producing statistically generalizable findings. In addition, well-grounded research design including detailed justification of theory building, interviews minimizing informant bias as well as rich presentation of research findings in tables and appendixes brings about a high-quality theory (Eisenhardt & Graebner 2007). Finally, Eisenhardt (1989) states the process may actually yield a less-biased theory as the juxtaposition of conflicting realities tends to ‘unfreeze’ the investigator’s thinking.

A multiple-case study occurs whenever more than one case is examined (Bryman 2004: 55) and is a preferred method over single-case designs as the replication logic can provide greater confidence in research findings (Yin 2009: 60; 2012: 7). Both case companies of this study, Housemarque Oy and Remedy Entertainment Oy, are experienced Finnish game studios and were considered particularly suitable units of analysis because of their eventful corporate histories. Dyer & Wilkins (1991) argue the multiple-case method may lead to focusing on the ways the cases can be contrasted at the expense of gaining the specific contextual insight from the study. Still, such a concern is much associated with the goal of qualitative research to provide understanding of a certain phenomenon or process in its particular context (Bryman 2004: 55, 281).

The multiple-case method serves the purpose of this study for four reasons. The first reason is the explanatory type of the research problem ‘How are Born Global firms with limited resources able to operate and succeed as participants of global business

ecosystems?’ (see Yin 2009). Second, the method allows the study of a phenomenon that is ‘difficult to separate from its context, but necessary to study within it to understand the dynamics involved’ (Halinen & Törnroos 2005). Thus, the close relationship between the strategy and the dynamics of business ecosystem makes the case study approach particularly suitable for this research. The third reason relates to the abundance of information allowed by the method: since the topic of this study is rather unique and several research gaps were obtained (section 2.3.1, p. 36), the opportunity to gather in-depth data is likely to support the objective of this study to provide novel theoretical contribution (see Eisenhardt 1989; Eisenhardt & Graebner 2007). Finally, investigating two companies instead of one provides analytic benefits and allows more favorable conditions to yield a valid theory of Born Global strategy.

3.2 Data collection

As noted by Yin (2009: 118), a case study research should embrace a variety of data collection techniques. The research data of this study was collected by conducting interviews in the case companies as well as by utilizing documentary information available. These sources of evidence are introduced and discussed next.

3.2.1 Interviews

The empirical data was primarily gathered through semi-structured interviews between December 2012 and January 2013. Semi-structured interviews are suitable for studying both ‘what’ and ‘how’ questions, the value lying in the fairly conversational tone of the interview which is still systematic and comprehensive by nature (Eriksson & Kovalainen 2008: 82).

The approach was selected due to three specific reasons. First, as the experiences, thoughts, concepts and attitudes of the interviewees may significantly contribute to the understanding of the case companies’ ecosystem strategies (and thus the objective of this study); interviewing proves a particularly useful data gathering method in this study

(see e.g. Hirsjärvi & Hurme 2009: 41; Rowley 2012: 262). Second, semi-structured interview type is considered as a worthwhile procedure because the research topic is relatively little examined and several gaps in the literature exist (section 2.3.1, p. 36): as noted by Eriksson & Kovalainen (2008: 82), too strictly pre-planned questions might prevent important aspects and themes from being raised by the interviewees. Finally, as the research is conducted as a multiple case-study, the broad outline of the interviews allowed by the semi-structured formula helps to ensure cross-case comparability (see e.g. Bryman 2004).

Employees with long-standing career path in the case companies were defined as the primary targets for the interview because the author believed they were most capable to reflect the firm's ecosystem and strategy from the evolutionary viewpoint. As another criterion, the author wanted the interviewees to be in a hospitable position to elaborate the firm's strategy as the topic may be somewhat sensitive by nature. Consequently, the empirical research data was gathered by conducting in-depth interviews with the CEOs of both case companies – Matias Myllyrinne from Remedy Entertainment Oy and Ilari Kuittinen from Housemarque Oy. Through these means, an attempt was placed on ensuring high levels of expertise (for the background information of the interviewees and for the interview details; see Appendix 1, p. 137). One of the interviews was conducted in English and the other one in Finnish. Although the respondent of the interview in English was a non-native English speaker, language barrier did not hinder the data collection as the language fluency of the interviewee proved to be excellent.

The outline for the interviews was built on the literature review findings: with the help of predefined themes, the author aimed to ensure that all the main aspects with regard to the strategy process as well as the ecosystem setting of case companies were covered. In addition to introductory questions, the main themes common to the interviews covered the firm's critical resources and capabilities; network and environment; strategy; opportunity identification; and future outlook (for the interview outline, see Appendix 2, p. 138). The interview questions followed the nine question types proposed by Kvale (1996) and were adjusted to the case context in order to receive the most meaningful

results. Prior to interviewing, the main interview questions were also discussed with the thesis supervisor. The interviewees were approached via email and the interview questions were distributed to them in advance to allow the interviewees some time for preparation.

3.2.2 Documents

In addition to the interviews, documents were utilized as a secondary material in the research. Because documents typically have a broad coverage (e.g. long span of time) and can provide exact information on many events and settings (Yin 2009: 102), the evidence gathered from the interviews with the case company representatives were complemented by relevant documentation. This was important for two reasons. First, although the case interviews were designed comprehensive and in-depth, the small number of interviewees created a call for augmenting sources of evidence. In addition, given the purpose of studying the case companies' organizational evolution and strategy over a long period of time, the capability of documents to corroborate and specify the firm's past events in detail were found valuable. The material was gathered both from the internal and external documentations of the case companies. Specifically, the secondary material included annual reports, newspaper articles and complementary information that were found from the websites of the case companies.

3.3 Data analysis technique

The analysis of research data typically begins during the data collection process (Eriksson & Kovalainen 2008: 128). As groundwork for the actual analysis part, the author carefully transcribed all the material that was recorded over the case interviews. Also the notes written down during the interview sessions were added to the transcription documents as a supplement to the recordings. By this way, a rich and easily-accessible base of empirical material was tried to be established for the analysis. Due to the semi-structured type of interviews, some differences with regard to the

handling procedure of the interview questions and themes occurred during the empirical data collection. However, the transcriptions allowed the author to organize the material into a more easily comparable order. The groundwork was done right after each interview in order to ensure that the details of the sessions were still fresh in the memory. In addition, immediate processing of the empirical data allowed the author to pick up ideas as well as to contemplate some important aspects that emerged in the interviews, which created a good starting point for the actual data analysis part of this study.

Constructing either a thematic or chronological case record is advisable especially when the empirical material of the study consists of unedited data that originates from multiple sources (Eriksson & Kovalainen 2008: 128; see also Yin 2009: 156). In order to allow coherent analysis of the case companies, the author used the thematic networks technique as a basis of the analysis process. A thematic network is a tool that employs established, well-known analytic methods and presents the main themes emerging from textual data as a web-like illustration (Attride-Stirling 2001). The technique being 'robust and highly sensitive' as well as 'practical and effective' (Ibid), it was considered very suitable for increasing the level of systemization across the case company analyses of this study. In addition, as a thematic network seeks to facilitate the structuring and depiction of the themes that are salient in a text (Attride-Stirling 2001), the author believes it may give certain edge over classic word tables or other tools available to qualitative researchers (see e.g. Yin 2009: 156-157).

Basically, a thematic network extracts themes on three levels: lowest-order *Basic themes*, which are clustered around *Organizing themes*, which in turn represent a super-ordinate *Global theme*. In other words, the global theme of the thematic network summarizes the principal message of the data as a whole. (Attride-Stirling 2001: 388-389) The author would like to emphasize that the idea of the technique is to construct the thematic network tool *on the basis of* the empirical research material, not before collecting it. That being said, the thematic network of this study presents the salient themes that emerged from the case interviews in particular. This is why the illustration

of the thematic network itself is very informative from the viewpoint of the empirical part. Because the tool can be also seen as one of the research contributions, the thematic network specific to this study was meaningful to present as the foundation for the empirical findings in chapter 4.

As noted by Attride-Stirling (2001), the thematic network is a tool for performing the analysis in a systematic and tested way, not the analysis itself. The actual analysis most often begins with focusing on each individual case separately and is termed within-case analysis (Eriksson & Kovalainen 2008: 130). This is followed by cross-case analysis in which the similarities and differences across the cases are searched for and contrasted to theory (Ibid, see also Yin 2009: 156). When exploring the empirical material of this study, the author interpreted the original transcribed data with the aid of the thematic network that is described in detail in section 4.3 (p. 65). Thus, as proposed by Attride-Stirling (2001), the text was read and processed through global themes, organizing themes and basic themes rather than in a linear manner. Both case companies were first analyzed separately, followed by a cross-case comparison. Finally, the findings gained from the research data exploration were contrasted to the original research questions of this study. As explained by Tuomi & Sarajärvi (2009: 96-97), the theories should have an assisting rather than a guiding role in empirical analysis: thus, the material can be freely interpreted by the researcher and the literature employed only when *presenting* the results. During the analysis, the author attempted to confront the empirical data with existing theories and research work.

According to Eskola and Suoranta (2005: 180), a study embracing plenty of citations allows the reader to make his or her own interpretations and conclusions of the topic being examined. This is why the author favored relevant citations as a mean to illustrate the real life setting of the cases and thereby contribute to the quality of the empirical study (see Eriksson & Halinen 2008: 131). However, a detailed analysis was also attempted to provide alongside every citation. The citations of the interview conducted in English are direct in the text. As for the interview conducted in Finnish, the author

translated the citations and aimed to establish the highest possible authenticity and accuracy.

3.4 Validity of the study

As Eriksson & Kovalainen (2008: 291) point out, no universal criteria is possible to set for evaluating the goodness or badness of qualitative research work. In this study, the quality tests highlighted by Yin (2009) and Eriksson & Kovalainen (2008) are followed as they are acknowledged as relevant and commonly used procedures in qualitative case study research (see Yin 2009: 40; Eriksson & Kovalainen 2009: 296).

As noted earlier, the authenticity of case study approach has been questioned, the lack of rigor being one of the greatest concerns associated with the method (see section 3.1, p. 46). As a response to such doubts, the author has strived for trustworthiness and validity by establishing *construct validity*, *internal validity* and *external validity* in the research design (see Yin 2009: 40). In addition to these validity aspects, Yin (2009: 40) proposes *reliability* as the fourth criteria for judging the case study quality. However, Eriksson & Kovalainen (2008: 290, 292) argue while reliability is a classic criterion of quantitative research, it may not fit qualitative research projects: rather, trying to assess qualitative work with such criteria ‘often leads to poor quality research’. Deriving from this statement, the author decided to exclude Yin’s reliability test from the quality assessment measures applied to this research work. Instead, the focus is placed on quality tests and aspects that the author believes are more meaningful from the viewpoint of this study.

According to Yin (2009: 40-41), the test for construct validity is about ‘*identifying correct operational measures for the concepts being studied*’ and involves the use of multiple sources of evidence as well as establishment of the evidence chain. Thus, the concept bears a resemblance to *triangulation*, which refers to the utilization of multiple perspectives as a mean to refine the research findings and increase validity in the

research (see Eriksson & Kovalainen 2008: 292). As the evidence of the study is gathered from several empirical sources and comprises e.g. interview material and different types of written documents; and as these sources are also used to cross-check information; this study features the triangulation of data. Importantly, because both of the interviewees had deep, longstanding experience in managing the business operations of the case firms, the author sincerely believes they have the best possible knowledge and historical understanding of the matters that contribute to the objective of this research. Furthermore, the individual within-case analyses were followed by the cross-case comparison in which the findings about the case companies were contrasted, which helped the author address various relevant aspects and perspectives. During the analysis the author attempted to foster genuine openness to any empirical evidence that either supported or deviated from the propositions presented in the existing academic literature.

In addition to construct validity, the means to establish internal and external validity are followed in this study. Internal validity deals with seek of establishing a causal relationship between the phenomena of interest and is thus linked to the analysis of research data (Yin 2009: 40-41). In the previous section, the technique used for analysing the empirical data and combining the findings with relevant theories were carefully explained. The purpose of case analysis being to derive the salient concepts, patterns and structures from the empirical material, the thematic network proved a very useful tool for conducting an in-depth analysis of the case data.

The external validity of the study, in turn, is about '*knowing whether the study findings are generalizable*' (Yin 2009: 41). As this study was conducted as a multiple case study, the starting point for gaining more generalizable results is likely better than that in single case studies. However, it should be acknowledged that the sample size of two companies is still very small, which limits the generalizability of the findings (for the limitations of the study, see the next section). Consciousness of such restrictions as well as the critical evaluation of their implications increases the external validity of this research. Finally, one should bear in mind that the purpose of case research is not to

produce statistically generalizable results but provide analytic generalizations (see section 3.1, p. 46).

Member check is another commonly acknowledged contributor to the validity of qualitative research (see Eriksson & Kovalainen 2008: 292). In order to guarantee that the deductions built on the empirical evidence are in line with the original viewpoint of the interviewees, the respondents were asked to preview the interpretations made by the author. By this way, the accuracy of research findings was tried to ensure while minimizing the risk of any misapprehension with regard to the research data.

‘At its best, the case study report is able to take the reader into the real life setting of the case but also to the mysteries of the theoretical issues in question’ (Eriksson & Halinen 2008: 131). Throughout this study, the author has tried to consider the both aspects rigorously: in addition to describing the research setting of the empirical part (see section 1.2, p. 2 and 4.1, p. 58), the time lines created for both case companies illustrate their historical development and thereby demonstrate the real-life case setting further. These firm-specific timelines of Housemarque and Remedy are presented in Appendix and 4 (p. 141-142) respectively. Also, the synthesis presented at the end of the literature review (section 2.3, p. 35) forms a basis for the theoretical framework as well as the interview questions, which helped to bring the current academic debate to the case company context. In seek of high-quality analysis of the empirical material the qualitative data was then systematized with the help of a thematic network (Figure 17, p. 65). During the analysis, the tool allowed the author to contrast the empirical findings to existing theories in an organized and meaningful way.

In this section, the author has attempted to show how quality can be seen in this study. Finally, it is important to note that the author has strived to follow high ethical principles throughout the research process in its entirety.

3.5 Limitations

This study is limited in certain ways that should be considered when assessing the generalizability of the research findings and the overall merits of this work.

First, the focus of the study is narrow as it is delimited to case companies that operate in the game business in Finland. In addition, only two companies were included in the empirical analysis of the research. This result mainly from the fact that there are a few companies that fit in the scope of the research objective: as most of the Finnish game firms are relatively young, they lack the history during which the evolution of business strategy typically occurs. On the other hand, the narrow focus allowed a rigorous and throughout analysis of the selected business area and allowed the conduction of profound interviews.

The second limitation concerns the case interviews conducted during the research. Due to the time constraints of the case company representatives, two in-depth interviews were managed to arrange. The long-standing CEOs of both companies were interviewed as they most likely possess solid experience and expertise in the business area under research. Although the interviewed persons were probably in the most hospitable position to elaborate the strategies of the case companies, one should be aware of the interviewees' potential unwillingness to fully disclose all information on the topics discussed. In order this research to meet high ethical standards, *the data collection boundaries* – i.e. how hard the interviewer can push the interviewees for data (see Gray 2004: 235) were respected and continuously assessed by the author during the interview session.

On a general note, the data collected through interviews is very often somewhat subjective by nature, and should thus not be considered as an ultimate truth of the matter. Conducting interviews with the employees working in different positions at the case companies might have provided more diverse viewpoints and experiences on the topic under research.

As a third limitation, the evolutionary aspect of the firm strategy is neither a distinct nor straightforward theme to study. During the empirical data collection, the interviewees were asked to tell about events that date back to as far as the mid-1990s in the company's history. Because of the long span of time covered, it is naturally challenging to recall and recreate all the relevant matters and their chronological sequences in the interview. This is why the author sought to utilize a number of secondary sources as a supplement to the case interviews.

Finally, the author would like to point out that the business circumstances and the operational environment of Born Global firms - even within the same country and industry - may differ a great deal. This is why it is not possible to create any universally applicable conclusions or frameworks for the ecosystem strategy of game firms. Rather, the purpose of this study is to contribute to the knowledge and understanding of the topic area that is relatively unexplored but plays an increasingly significant role in the Finnish economy.

4. EMPIRICAL FINDINGS

4.1 Game industry in Finland

In this section, the research setting of the empirical part of this study is introduced.

Since the early 2000s, the Finnish games industry has boomed and games have become the most prominent cultural industry exports of the country ('Suomen Pelitoimialan Strategia...' 2010). Currently, game business is the fastest growing sector in the Finnish entertainment industry: the Compound Annual Growth Rate (CAGR) of over 22% between 2004 and 2011 is significantly higher than CAGR of the global game market and can be considered as hyper-growth (Nelskylä 2012; Neogames 2011). Thus, the Finnish games industry has added weight also on a global scale: it has even been stated that the 'next Nokia' may reside in Finnish game companies (Boxberg 2012; Nelskylä 2012). Figure 14 illustrates the rapid growth experienced by the industry over the past few years.

The development of games may require relatively little resources, thereby allowing the game firms to overcome one conventional business constraint of Finnish companies: given that fixed capital may not be Finland's primary competitive asset on global markets, the local game business still has great growth prospects. Rovio Entertainment's *Angry Birds* is a real-life example of how a small-scale game can evolve into globally acknowledged brand and bring the game firm a remarkable return on investment: the company is one of the top 25 developers that accounted for 50% of app revenue in the US in November 2012 (Canalys 2012). Also Supercell's *Hay Day* has risen to the top ten downloads list in AppStore (Nelskylä 2012). In 2011, the turnover of 89 game companies operating on the domestic market totalled €165 million (Figure 14). Also the employment effect of the game industry is becoming increasingly significant: while the industry employed roughly 400 Finns in 2002, the number exceeded 1500 in 2012 and is predicted to be 6600 persons by 2016. (Boxberg 2012)

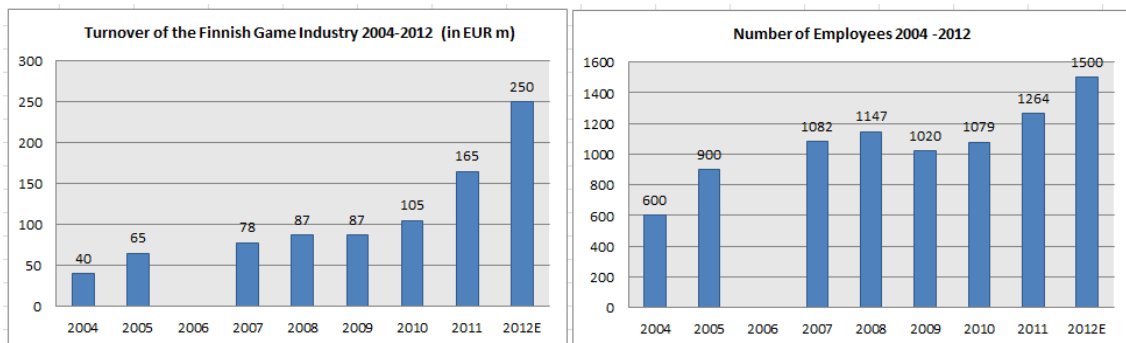


Figure 14: The development of the Finnish game industry between 2004 and 2012 (Source: Neogames 2011)

However, despite of the media hype, the history as a pioneer of mobile technology and strong gaming culture in Finland, only a few game firms have yet managed to achieve financial success. There may be several underlying reasons for the matter: importantly, Finnish game companies face difficulties to gain funding for their business as the number of investments has remained modest with relation to the industry growth ('Suomen pelitoimialan strategia...' 2010). In addition, the societal subsidization of game business has proved low compared to other culture sector industries (Ibid). Also, normal venture capital investment strategies may not be well-applicable to game development due to high level of risks involved (Neogames 2011). Furthermore, it is not only financial but also human resources that may hinder the business operations in a small home country market: the Koopee Hiltunen notes the weak availability of skilled employees is a critical bottleneck of Finnish game companies (Boxberg 2012). Overall, the Finnish game industry is still fairly young (17 years in existence) and the local game firms with 16 employees on average are relatively small by international standards (Neogames 2011)

At present there are 14 companies - including Remedy Entertainment and Housemarque - that reach the revenue of over €1 million whereas almost 50 percent of game firms have turnover less than €100 000 (Boxberg 2012). This is mainly explained by the large number of start-ups established in the past few years (Neogames 2011). Housemarque has been a pathfinder of the business and this is why it is very interesting

to compare the company with Remedy Entertainment, which also has an eventful history but has chosen a completely different business strategy.

Detailed descriptions of these two case firms are presented next.

4.2 Background and characteristics of the case firms

4.2.1 Housemarque Oy

Founded 1995, Housemarque is one of the most experienced game developers focusing on downloadable games on console platforms. The company was established when two of the first game development studios in Finland, Bloodhouse and Terramarque, allied their strengths and visions. Apart from Terramarque, CEO and co-founder Ilari Kuittinen did not have prior experience in game development but got into the business through his personal contacts rather than knowledge or technical skills (Kuittinen 2.1.2013, an interview). As a mission, Housemarque seeks to create ‘novel game concepts and engaging gaming experiences’ across different game genres (Housemarque 2012a).

From the very beginning, the need of finding customers overseas was evident as the firm’s home market ‘was practically non-existent’ (Ibid). Housemarque’s direct customers comprise mainly large international game publishers who take care of marketing and selling the games to end-customers world-wide. Over the corporate history, Housemarque has released various PC and console games in collaboration with several publishers - exclusive deals with Sony Computer Entertainment on *Super Stardust HD* (2007) and *Dead Nation* (2010) among the most notable of them. The products of Housemarque are original game titles that are developed by using either the original content or licensed game IP’s.

Today, Housemarque seeks higher revenue and margin growth by focusing on digitally distributed games and technologies on multiple platforms such as PlayStation Network

(PSN), Xbox Live Arcade (XBLA), PC and iOS (Housemarque 2012b). The company’s first multiplatform release *Outland* came out in April 2011, followed by the self-funded add-on titled *Dead Nation: Road of Devastation* (2011) for PlayStation 3 and the self-published mobile game *Furmins HD* (2012) for iOS. In 2012, the company also released a downloadable *Super Stardust Delta* for PlayStation Vita as well as *Angry Birds Trilogy*, which is a multiplatform retail game co-developed with another Finnish game studio Rovio Entertainment. (Housemarque 2012a)

The historical development of Housemarque’s employee rate and sales revenue growth are presented in Figure 15. In the past years, considerable variation in terms of the firm’s revenue has occurred as their revenue generation is project-based by nature. Thus, the actual turnover is highly affected by Housemarque’s ability to convince the publishers to invest in their concept ideas; as well as the success of the final product. The figure shows how the firm has been adjusting the number of employees accordingly. Presently there are more than 40 people working in the company, out of which three are foreign talents (Kuittinen 2.1.2013, an interview).

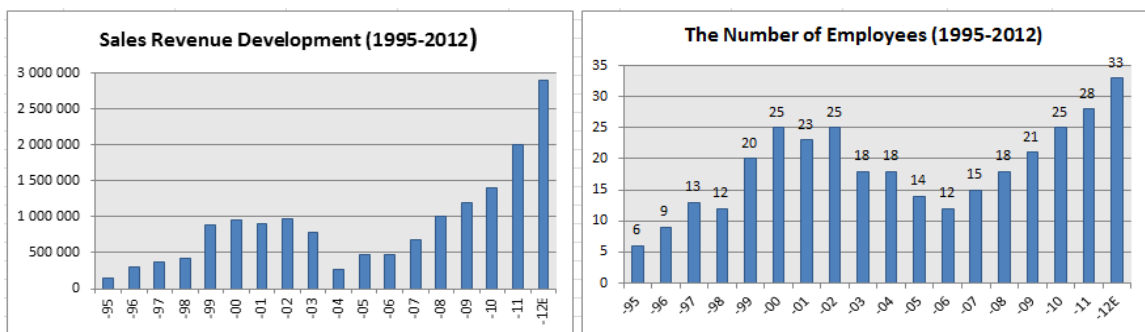


Figure 15: Housemarque’s historical sales revenue development and employee growth

4.2.2 Remedy Entertainment Oy

Remedy Entertainment Oy, a privately held Finnish game company, is based in Espoo, Finland. The company was founded in 1995 and from inception had a mission to produce leading action games (Gamersbook 2010). Today, Remedy has grown to be a developer of action games, game franchises and 3D game technology, striving for the next blockbuster on future generation game consoles. To realize this vision, the company seeks to combine the right team of people and innovative ideas with quality content and cutting-edge technology (Gamersbook 2010).

Despite of relatively long-standing history, Remedy has released only five games: *Death Rally* (PC 1996; iOS 2011; Android 2012), *Max Payne* (PC, PS2 2001), *Max Payne 2: The Fall of Max Payne* (PC, PS2, Xbox 2003), *Alan Wake* (PC, Xbox 2010) and *Alan Wake's American Nightmare* (Xbox Live 2012). In 1997 Remedy also created a popular benchmark application 3Dmark (originally known as Final Reality), but established another firm Futuremark to handle it as the company wanted to retain the focus on game development (Dome.fi 2010). Typically, high degree of cooperation is involved in the development process: in addition to subcontractors, Remedy's external partners around the world have participated in the firm's projects. In 2005, the company made a ground-breaking deal on *Alan Wake* with Microsoft Corporation. Exceptionally, Remedy has been able to retain the intellectual property rights of its games when making the publishing contracts. (Kovalainen 2009, 2012)

The company targeted the global markets '*from day one*' because they did not consider the domestic market '*any viable*' (Myllyrinne 19.12.2012, an interview). Basically, Remedy's direct customers are publishers who carry out the manufacturing, packaging, distribution and marketing of the games, and most importantly fund the game development. However, the actual game players are the final end customers of Remedy.

Figure 16 presents the historical development of Remedy's sales revenue and number of employees. As shown in the figure, the production-based business has caused remarkable fluctuation in terms of the firm's revenue generation. In 2002, Remedy sold

the IP right of their Max Payne hit to Take-Two Interactive Software, which improved their financial standing significantly. With regard to the personnel, the growth has been moderate but relatively steady: in December 2012, there were around 80 employees working full time for Remedy (Myllyrinne 19.12.2012, an interview)

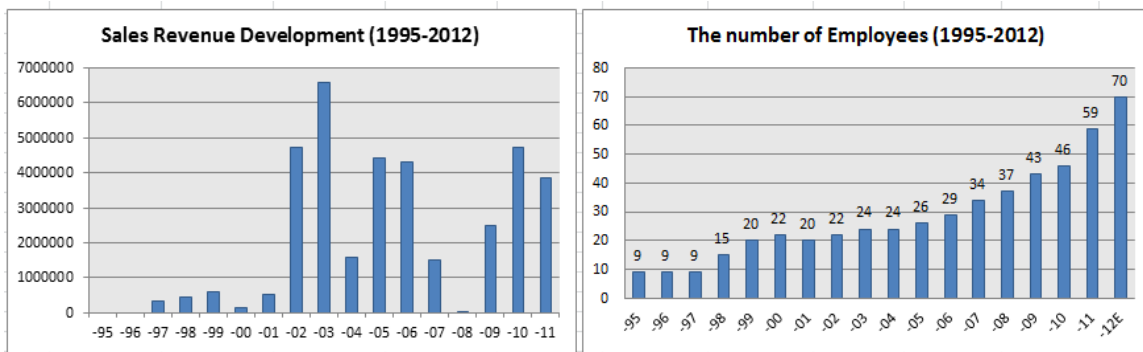


Figure 16: Remedy's historical sales revenue development and employee growth

4.2.3 Characteristics of the case firms

From the very start it was evident for Housemarque and Remedy that they are to operate on global markets. Consequently, both firms signed their first production deals with an overseas partner a year after their establishment. Thus, the first typical feature of Born Globals (*F1: the establishment of global vision from the very beginning*) is fulfilled by the case companies (see section 2.1.1, p. 9). Also the secondary material of this study backs up the finding: for example, the game companies in Finland are relatively young as the majority of them are found in the 2000s ('Suomen pelitoimialan strategia...' 2010) but on the other hand their biggest target markets are North America and Western Europe (Neogames 2011). Furthermore, the export rate of nearly 90 percent of production reflects the global nature of Finnish game business (Neogames 2011).

The entrepreneurial mind-set of the case company founders can be detected in various undertakings Housemarque and Remedy have initiated over their corporate histories (for

the empirical case findings; see sections 4.4, p. 68 and 4.5, p. 81). In addition, it has been found that many of the founders of Finnish game firms possess entrepreneurial spirit or strong previous experience in the game industry (see Saarikoski & Suominen 2009; Neogames 2011). Thus, also the second Born Global feature (F2: *Entrepreneurial mindset and/or experience of managers*) can be seen fulfilled by the case companies.

Housemarque and Remedy operate in a niche market as console games and mobile games can be considered as niche domains within game business. On a larger scale, the case companies represent niche players in the business of digital goods. Furthermore, game business may also be viewed as a niche area of the entertainment industry. Finally, both companies have sought to differentiate their products deliberately: for example, Remedy was noted to ‘*try to do less but do something that nobody else is doing*’ (Myllyrinne 19.12.2012, an interview). Hence, the typical Born Global feature concerning *niche market operations* (F5) is met by the case companies. Consistently with the empirical evidence, the earlier research work has found the utilization of new growth opportunities being typical in game industry (see Cohendet & Simon 2007; ‘Suomen pelitoimialan strategia...’ 2010). These findings indicate that game companies may actively seek new niches in their business.

Finally, the strategies of the case companies have remained mainly unchangeable with regard to their operations and markets. From the very start both firms have targeted the global markets but are still running their operations solely in Finland these days. Instead, certain alterations can be observed in the product strategies of these companies. Housemarque has moved from PC games through various different undertakings to develop primarily downloadable console games. However, a more radical change has been carried out by Remedy: over the years, the firm has shifted its strategy from developing PC games solely to pursuing market leadership in two different categories of games. Thus, as the internationalization process of the case companies differed from the traditional stage model (see e.g. Johanson & Vahlne 1977), the sixth typical Born Global feature concerning unconventional product-, operation- and/or market strategies (F6) is fulfilled by the firms.

4.3 The Thematic Network of the empirical research

As carefully explained in section 3.3 (p. 50), the author utilizes thematic network technique in the analysis of the empirical research data. The thematic network of this study was constructed on the basis of the case interviews and will be employed in order to allow coherent processing of the case findings. The illustration of the network presented below lays a helpful foundation for analytical purposes. The process of constructing the thematic network of this study is described next.

By following the steps proposed by Attride-Stirling (2001), the author first established a coding framework in order to reduce the empirical research data that was initially transcribed. The coding framework allowed the author to organize the text into meaningful segments. As the second step, common and salient themes were abstracted from the coded text segments, refined and arranged into coherent groups. As the last step, these groups were then used as a support for the identification of basic, organizing and global themes that finally constructed the thematic network of this study. Since the outline of the case interviews was built around five main themes (see section 3.2.1, p. 48 and Appendix 2, p. 138), this helped the author to categorize the data and identify the relevant themes during the building process of the thematic network.

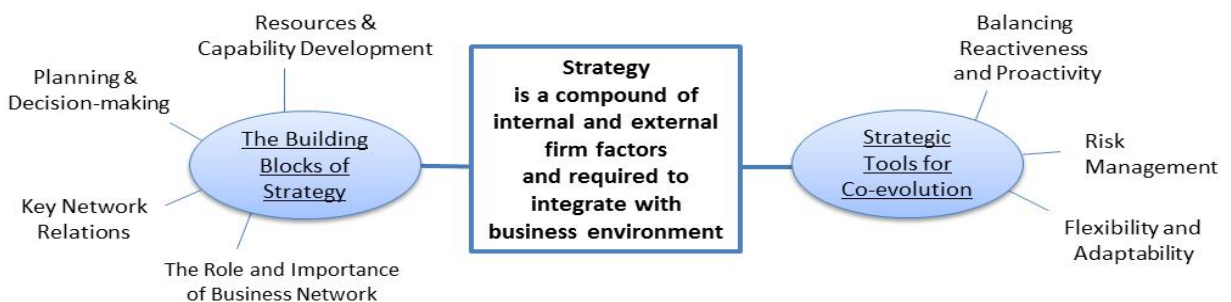


Figure 17: Thematic Network for the empirical data analysis

The thematic network constructed for the analytic purposes of this study is illustrated in figure 17. The very fundamental claim of the empirical research data can be summarized as '*Strategy is a compound of internal and external firm factors and required to integrate with business environment*', which is the global theme of the thematic network and lies at the hearth of it. The global theme comprises two organizing themes that represent different aspects of a firm strategy.

The first organizing theme, *The Building Blocks of Strategy*, encompasses elements from the firm's internal and external environment. Altogether these elements form the basis and general circumstances under which the firm is needed to build and execute its strategy. Internal components (represented primarily by the basic themes *Resources & Capability Development* and *Planning & Decision-making*) relate most closely to the firm's everyday operations and can be managed and organized relatively independently by the company. In contrast, the firm may have less control over *Key Network Relations* and *The role and Importance of Business Network* as they typically involve and are influenced by two or multiple parties. However, they still play an unquestionably important role in the strategy of the firm. These variables - for example the firm's relations with the business ecosystem fellow participants - may be partially manageable (through interaction) or to be taken as given.

Because the first organizing theme described above (*The Building Blocks of Strategy*) entails elements that shape and determine the firm's strategy, it provides a tool for investigating the main research question of this study dealing with the firm's ecosystem strategy in general. Specifically, the theme may allow the examination of what kind of strategy is it possible for a firm to implement overall and how are the internal and external considerations reconciled with each other in the firm's strategy.

The second organizing theme is termed as *Strategic tools for co-evolution*. It represents the self-manageable components that are established in the firm strategy with primary object of helping the company to deal with the conditions of its external business

environment. Thus, the organizing theme can be associated with the co-evolutionary aspect of the firm strategy, thereby helping to address the empirical evidence concerning the second main research question of this study. As the salient basic themes *Balancing reactivity and proactivity*; *Risk management*; as well as *Flexibility and adaptability* are identified.

Finally, worth noting is that the seven basic themes the author has identified may be interconnected and thus present different aspects of a single matter: for example, the basic theme 'Resources and Capability Development' may be one way for a firm to enhance 'Flexibility and Adaptiveness', which in turn may be used as a tool for 'Risk management'. Hence, the thematic network illustrated above is not unambiguous but provides more structure for investigating the case interview material.

Next, the empirical case findings are presented and later on analyzed with help of the thematic network tool.

4.4 Findings on Housemarque Oy

4.4.1 The strategy of Housemarque in a business ecosystem setting

In this section, the characteristics of Housemarque's ecosystem strategy are discussed in order to consider the first research question '*Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?*' in the light of empirical research findings. The related material was explored with help of the organizing theme '*The Building Blocks of Strategy*' of the thematic network (for the data analysis technique of this study; see section 3.3, p. 50)

Resources and capability development

The skilled employees are the key for Housemarque as the competitiveness of the firm builds on their ability to create and execute game concepts '*at the level not every company is able to reach*' (Kuittinen 2.1.2013, an interview). In addition, the firm's capability to sell their concept ideas to publishers or investors was noted important because Housemarque needs to get external funding for their projects.

Furthermore, the firm's in-house technology consisting of game engines and other tools necessary in the game development is highly important to Housemarque's operations: according to Mr. Kuittinen, the firm has made 'remarkable' investments in R&D and technology compared to their size. As the last strategic resource, concept know-how – the capability to create ever better game concepts and ideas – has begun to play an increasingly significant role in the business of Housemarque and is seen as the firm's source of competitive advantage. As noted by Mr. Kuittinen:

'That [here: in-house technologies and concept capabilities] gives us a cutting edge. -- It [here: the business of Housemarque] rides quite a lot on the personnel.'

For the present, the revenue of Housemarque is contributed mainly by the game productions that are carried out through partners whereas the revenue share originating

from their self-published games remains relatively low. Generally, the most critical considerations that have steered the business of Housemarque over the years have dealt with the firm's financial and employee resources. These aspects came up in several contexts during the case interview and will be discussed in detail later in this section.

At present Housemarque was said to have no systematic processes or practices established in the purpose of developing their internal capabilities. The employees are rather encouraged to follow their interests and engage in projects they have passion for.

'[Basically], the key persons are project-based. However, the concept designers have played an important role [in Housemarque's productions] in recent years as we have attempted to spice our games by unique concept art'

However, continuous learning was considered highly important for the greater operational efficiency the firm is constantly striving for. As noted by Mr. Kuittinen, the firm started to build their in-house technology '*from zero*' but is today '*investing a lot in the tools and technology side*'.

'The process [of developing the technologies] is continuous and we have learned a lot during it'.

'We seek to create our own domain, a so called blue ocean -- that cannot be reached by every company. We aim to develop our competencies to meet such a level and then we just hope there will be demand for that.'

Planning and decision-making

Reflecting the project-based nature of operations, Housemarque's planning system does not rely on a regular, set planning schedule but is guided by the firm's new and existing projects, emerging opportunities as well as changes in their business environment. The upper level strategic decisions are made by the two founders on the basis of their market understanding as well as the firm's capacity and capabilities. The operative planning in turn is carried out by project teams. Generally, '*any kind of key performance indicators are not being followed*' and no formal process for the related documentation or evaluation purposes has been established (Kuittinen 2.1.2013, an interview). However,

continuous monitoring of cash flow proves important in Housemarque's decision-making as it was noted to help the founders determine the firm's operational focus areas in the short term. Still, Housemarque's ability to plan ahead has been very restricted until recently because the project-based operations do not allow steady budgeting:

'Very often we face a situation where the project will be finished by summer and no one knows how the cash flow will develop thereafter'.

Hence, a great call for flexibility exists:

'We seek to fix the [technology] base [of our productions] and improve it continuously. The reactivity [in our operations] stems from the markets and channels. -- We just have to adapt to them.'

Because external finance plays a minor role in Housemarque's funds, their decision-making is strongly guided by the estimated revenue flows the different alternatives are expected to bring. Consequently, the firm's concept decisions tend to be made as a response to the existing market opportunities.

Finally, the steady growth of production capacity and personnel in the past few years is raising the need of reorganizing certain firm-level activities of Housemarque. Mr. Kuittinen acknowledges the call for greater structure in terms of production and work supervision: Presently, the firm does not really have a HR function as there is no person dedicated to developing Housemarque's human resources or related affairs. In addition, the firm's aim to make an increasing share of future products as self-publications creates a call for new skills:

'If we get to make more products as self-publications in future... That sphere of operations is full of new needs and skills we need to gain. For example, we do not have any marketing people [at the moment] as the product marketing to date has been taken care of by publishers. Things like this will certainly become increasingly topical in the near future. A lot depends on how we will get to publish our products and how we will begin to develop the brand-thinking [of Housemarque]'

Key network relations

There are from 20 to 30 companies worldwide that represent the potential customers of Housemarque and thus *'enable the firm's overall existence'* (Kuittinen 2.1.2013, an interview). The relatively high budget required for console game projects centres Housemarque's business around well-established publishers with good financial standing. A small pool of direct customers has allowed Housemarque to build a firm reputation across the network, which was said to be the main reason for gaining enough deals to sustain profitability over the years.

'Generally speaking, the things [here: products] we do on the console side... There is not that many potential partners after all. The established publishers may have money [to invest in productions] but the case with smaller operators is more like 'the poor are leading the poor'. I mean it is not worth joining the forces if we cannot get funding.'

The relationship between Housemarque and game publishers has evolved radically since the firm's establishment. Mr. Kuittinen describes:

'When we started [our business] in 1995, the only way to get the product to the end customers was to negotiate a deal with a publisher who was the [only possible] distribution channel [for us] and ask them money for game development. The publisher acted as a gatekeeper for the whole market.'

Today, the dominant role of publishers has reduced to cover mainly the retail distribution of games which is considered as a *'very welcome trend'* by Mr. Kuittinen. As a mean to build and sustain publisher relations, Housemarque was said to attend industry events and may make company visits in order to promote their new concept ideas. Thus far, Housemarque's two self-publications released in 2011 and 2012 have not impacted the firm's publisher relations:

'That [self-publishing] has been just a small part of our operations yet. And we are talking about very different types of products that do not necessarily compete in the same category. But we have cherished the idea of getting to make the big hit that would finally bring us the greatest gains. Such an opportunity has not turned up us yet.'

By contrast, the number and type of investor relations has evolved substantially in Housemarque's network over time, which is also reflected in the firm's relationships with the publishers as described above. Specifically, the funding of Housemarque's projects no longer relies on a publisher solely as the firm can utilize alternative monetary sources:

'Formerly, the publisher acted also as a kind of 'risk fund' that made the decision about which game concepts will be included in the portfolio. Now the model is much more scattered: there is venture capital [available as well as] some more specific investments that may be directed to a particular game production.'

'However, our funding is mostly based on cash flow; we have not received too many investments. -- We always need to find the next thing [to bring the business forward]'

As the content for Housemarque's productions is created mainly in-house, the firm conducts only small-scale subcontracting with few vendors.

'The network of subcontractors is not that big because there have not been that much need for us [to resort to subcontracting]. -- [Thus far] we have created the content of productions mostly by ourselves'.

However, Housemarque was noted to be constantly striving for the greater utilization of subcontractors in certain parts of their productions.

The role and importance of business network

Fundamentally, the business network was noted as a precondition for the operations of Housemarque:

'The business network provides us livelihood. However, the business field [here: network] is rather small in our case.'

'It would not have been possible to establish this kind of firm 30 years ago, right? The growth of the [game] market and the [business] environment as a whole are the fundamental enablers of our existence. However, we are in a reactive role whereas the other players create the market facilities'.

Housemarque was able to tap into the opportunities provided by digital markets very early: the firm was among the first developers for Sony's PlayStation Network and their first digitally distributed product became available on the service in 2007 (for the timeline of Housemarque's history, see Appendix 3, p. 141). Mr. Kuittinen describes:

'We [here: Housemarque] were living through very hard times some 8 years ago, there were big changes going on [in game business] and the new generation of game consoles was coming up. At that time, these new opportunities [enabled by digital ecosystems today] did not really exist yet. It was really difficult to find the thing that would bring our business forward. Then the digital downloadable games came in and it felt immediately very natural to engage with.'

Ever since - from the year 2007 onwards - the firm has been exploiting the digital infrastructure established for the market of downloadable console games by external parties.

In contrast, the network utilities provided by the vibrant Finnish game industry seem to have remained modest for Housemarque even in the very beginning of the firm's history. In 2003, the firm got to work on projects relating to Nokia's N-Gage device and the Nokia Game 2003 competition; however the related contracts were made with a Dutch marketing communications agency Euro RSGC (later Havas Worldwide).

'The initial hint [about the opportunity] came from Nokia... It was a very important project for us in that year. But otherwise Nokia has not had any bigger role for our business'.

Generally, the gains of the domestic network seem to remain at the level of single projects that have eventually had only a relatively small impact on the revenue of Housemarque.

The recent deal with Rovio Entertainment in 2012 was mentioned as *'perhaps the greatest benefit'* contributed by the domestic business network:

‘It was a very different type of game to what we usually make so I do not think the project had too much impact on our reputation. It is a kind of seal of acceptance when one can say we have co-operated with large companies. But the collaboration with Rovio did not bring us new deals. Our thing is coming through the other [kinds of] continuums and deals’

Similarly, the game rewards granted within the industry as well as Mr. Kuittinen’s personal activity in the operations of Suomen Pelinkehittäjät Ry (an association for the Finnish game developers) were reckoned to raise ‘goodwill’ among the possible future partners but not associated with the potential customers or ‘the actual business profit’.

The threat of new entrants in Housemarque’s business environment was described low as the specialized capabilities necessary in game development set high barriers for market entrance:

‘The competition [surging in the mobile game market] has not impacted us. Quite the contrary, almost monthly we receive announcements that some of the console game developers will shift their focus on a new business area. Not everybody can find their place in the ecosystem in which we are primarily involved’.

‘Thinking about the historical development of the Finnish game industry... New firms have arisen when there has been new opportunities opening up. For example, when Sulake [Corporation] initiated Habbo Hotel², online gaming had just opened because the [digital] infrastructure came into use and people began to use PCs for entertainment purposes. The second wave has been these different kinds of mobile games and such. – But I mean the new competition springs up in the areas where the required level of competencies is lower or substantially different [than in console game business].’

4.4.2 The co-evolution strategy of Housemarque

While the conditions under which Housemarque is to implement their strategy were discussed in the previous section, next the focus will be shifted to explore Housemarque’s historical co-evolution with its business environment. Thus, the

² Habbo Hotel is a networking site for youngsters launched in 2000 by a Finnish social entertainment company Sulake Corporation

research findings associated with the organizing theme ‘*Strategic tools for co-evolution*’ are mainly addressed (for the thematic network constructed for this study; see section 4.3, p. 65). A detailed timeline illustrating Housemarque’s corporate history vis-à-vis the events of their ecosystem development is presented in Appendix 3 (p. 141).

Balancing Reactiveness and Proactivity

While the predominant market trends and channels were said to require mainly reactive responses from Housemarque (see the previous section), the firm has been able to anticipate the evolution of their business ecosystem in relatively early phase over history. Mr. Kuittinen describes the experiments and trials Housemarque has initiated in their past:

‘We have been able to see and perceive new opportunities [throughout the history] but maybe at a bit too early stage. Even in the very beginning of the business we were considering [the opportunity of] an online game project and made a related prototype between 1996 and 1997. However, it was a way too early as the proper infrastructure [here: a broadband network] was missing. A game played by modem just did not work out. A couple of years later we foresaw the emergence of mobile market and established a spin-off company SpringToys Ltd in 2000. Again, we were many years too early; there was the hype but the [mobile] market did not spring up yet.’

At that time – around 8 years before the application marketplaces begun to break through – the firm’s operations were guided by ‘*the idea about mobile handsets as the most rapidly penetrating media device*’ (Kuittinen 2.1.2013, an interview). In the beginning of 21st century, mobile operators were explained to play the key role in mobile game distribution: for a developer lacking the sufficient resources to establish the deal separately with each operator, the only way to get their product to the market was to use aggregators as intermediaries. However, such a system was not able to give rise to a thriving mobile ecosystem, leading to the eventual discontinuation of the business of SpringToys.

Despite the past setbacks experienced in the nascent online and mobile game markets, Housemarque became an early mover also in the market of digital console games: while

the company identified the business potential of Xbox Live Arcade³ in 2005, two related projects were initiated in the following year.

‘Once we saw those [downloadable console] games in the late 2005, we were already negotiating for two deals in the following year. We had the belief that digital downloading [of console games] will grow into a big market’.

Consequently, when Sony launched its digital marketplace PlayStation Network in 2006, Housemarque’s Super Stardust HD was one of the first games Sony was able to publish simultaneously in all of their regional game markets. However, limited resources have made prioritization necessary for a small firm: when the release of digital distribution platforms (such as Steam in 2003) opened up new opportunities for PC games a couple of years before the birth of digital console game market, Housemarque could not respond.

‘We were maybe 13 or 14 [employees] so we did not have time to undertake that many projects. We could not really react to the rise of those PC channels.’

Instead, the market of downloadable console games has remained on the primary focus of Housemarque until today. Still, the firm’s latest production, a console game Angry Birds Trilogy, shows the firm has not fully ditched the traditional retail channels but rather complies the strategy of their partners:

‘We have been involved in both [retail and digital channels] in a way. The digital distribution has had a great importance [in the business of Housemarque] as almost all of our games have been distributed digitally in the past few years. However, the physical distribution of products is not a fully excluded option in future as we have gradually grown large enough for that to pay off.’

The main challenges faced by the company over the years are very much associated with the project-based production of games: fundamentally, making the right decisions and establishing a chain-like flow of deals are the key considerations for Housemarque.

³ Xbox Live Arcade (XBLA) is a marketplace for downloadable console games launched by Microsoft Corporation in December 2004.

Especially in the early phase of business when the company focused all the resources on developing one game at a time, the most critical challenge concerned the convenient timing of projects as the continuity of funding was to be secured. Later on when the financial standing of the firm has become more stabilised, the strategic challenge has shifted to finding the suitable productions for the number of employees available at the time. Specifically, ability to initiate new concept ideas when some of the key persons are still tied up with their on-going projects was mentioned to hinder the continuity of the firm's processes. In contrast, any significant challenges posed by the potential labour shortage in the industry (section 4.1, p. 58) were not obtained as the company has been able to acquire talent whenever the need has arisen.

Risk management

Over the history, Housemarque has typically carried out one or two game development projects at a time, the firm's capacity being heavily dependent on the existing number of employees. Along with the recent growth, the firm's target has shifted to having 2-3 productions on-going, each in the different stage of development. The past troubles faced by the firm - originating from focusing on project initiations that later on proved difficult to find customers for - were mentioned as a reason for why diversification is perceived important by Housemarque. In the past, the low gross margin complicated especially the planning and scheduling of the firm's operations:

'I am not sure if one can call it a strategy, but we have been persistent conformists. And we have wanted to try new things out --. In the past five years we have finally broken the habit of maintaining a sort of 'survivor-mode'. However, we have always gotten to follow our interests [product-wise], which has brought our business forward and built our experience '.

'Everything starts from the competence and I see that as strength [of Housemarque].'

In consequence, when permitted by resources, Housemarque begun to seek for risk reduction and established more than one production line.

Furthermore, the business model of Housemarque has evolved to embrace greater variation in terms of product platforms and financing. As noted in the section 4.4.1 (p. 68), the publisher is no longer the only source of project funds as Housemarque has begun to utilize new types of investors that have entered their business ecosystem in the recent years. The new model was said to enable more continuous cash flow, allowing Housemarque to better adjust their operations to rapidly changing market conditions that the firm cannot really affect. Furthermore, cash flow originating from multiple sources was noted as a mean to reduce the risk of Housemarque's business. In addition to financial aspect, the firm has diversified its product range by adopting new platforms such as iOS, enabling the firm to build linkages with both console and mobile game ecosystems.

Finally, two additional means to manage external risks were taken up by Mr. Kuittinen. First, Housemarque seeks to monitor the prevailing industry trends and endeavours to respond to them. For example, the firm has begun to offer downloadable extra content to their games: while the product revenue was traditionally generated as a one-time event during the initial product purchase, Housemarque has identified the business models of mobile games to be shifting towards more continual revenue generation.

'The key question for Housemarque is whether we are able to apply these kinds of models [in our products]. Namely, the bet is that such models [used in mobile game business] will become increasingly general on the console game side so that is the direction we need to develop our business into.'

Thus, in addition to the aim at variation in terms of revenue generation and product platforms, Housemarque's risk strategy features reactions to industry evolution. As the last mean to manage external risks, Housemarque was said to seek for sustaining its business network bonds by *'warming up the potential customers'*. However, due to running contracts that may tie Housemarque down for long periods onwards, maintaining the customer relations was noted challenging.

Flexibility and adaptiveness

In terms of human resources, Housemarque seems to support flexibility to a great extent:

‘Our way has been to recruit people that are equipped with skills we are presently looking for, but then in fact it goes the other way round: the employees themselves find positions that match their desires and enthusiasm the best. We have tried to give space for things they have been interested in.’

Thus, although no systematic or conscious capability development initiatives were said to have been undertaken (section 4.4.1, p. 68), the employees are spurred to follow their interests unprompted and may even change their roles completely. Earlier in their history Housemarque has invested substantially in employee training: as a response to a small pool of talented labour, the firm established a pioneering game programming program in 2000. Today, call for flexibility is reflected in the firm’s project management as *‘It is product-dependent who [of the employees] stands out with his or her contribution and begins to take charge’* (Kuittinen 2.1.2013, an interview). Given that the main challenges faced by the firm were noted to concern project scheduling earlier in this section, a small firm needs to embrace a low level of hierarchy and adjustable roles in their project management practices.

In the case of Housemarque, the urge of enhancing the technical know-how arose ‘a couple of years’ after the establishment of the firm, resulting in a decision to differentiate R&D activities from the other operations. Mr. Kuittinen describes:

‘The project-based products we made in the beginning did not feature the components that we could have utilized in our forthcoming productions. This is why we decided to begin developing the technology by ourselves and so improve the standard quality of our products. – Over the years, a significant share of revenue has been invested in tools and game engines, and later on in the development of new concepts too’.

‘Decision-making must be inevitably flexible. At certain point [of business] you always face a situation when you need to decide which direction to take. We had that a year ago. We were just thinking what things we are capable and willing to do [in future]. --

And if it comes to a halt at some point, then [we] just [think] ‘okey, this path has been walked through now.’

In addition to the ability to produce games of high technical quality more efficiently, in-house technologies were said to allow the firm to place a greater emphasis on the actual content of games.

‘The core [of Housemarque’s business] is to make certain types of products and learn by doing --. Distribution channels are not the most critical thing to us but rather what kinds of products we make and how they are being produced. That is what we have been devoting to. Systematically and for a long time’

‘Currently, we are striving more and more for the capability to initiate new [game] concepts. We have managed to create new games and IPRs pretty well [lately] and have gotten certain confidence with that respect.’

Thus, the in-house technology and game concept capabilities have increased the strategic importance in Housemarque’s operations over the years. Earlier in this section the in-house technology was found to bring value to Housemarque’s operations as it allow the firm to develop their products on different platforms, which in turn is a way to manage business risks. In addition, the importance of concept capabilities was also reflected in the firm’s project team construct because concept designers were noted to play an increasingly important role in productions. Finally, the technology proves also to be the primary tool of Housemarque for adapting to the conditions that emerge from their external business environment. In sum, the function of technological tools and capabilities is two-fold in the co-evolution strategy of Housemarque and thus undoubtedly crucial for the firm.

4.5 Findings on Remedy Entertainment Oy

4.5.1 The strategy of Remedy in a business ecosystem setting

Resources and capability development

Competent personnel lie at the heart of Remedy's operations. As explained by Mr. Myllyrinne (19.12.2012, an interview):

'Obviously competent staff [is the key resource of Remedy's]. So you're supposed to get the best people. And as it happens, the best people like to work with the best people, regardless their discipline. Finding those kinds of different talents is the most important thing.'

In addition to professional skills, the healthy organizational culture fostered by the employees was noted as a key for Remedy as the firm pursues *'creative and sometimes even a little anarchistic'* traits in their business (Myllyrinne 19.12.2012, an interview). Presently, Remedy's financial standing is relatively stable: about half of the firm's revenue is coming from operations that they carry out through partners, and about half originates from the sales of their self-published products. However, financial resources were noted as a prerequisite for Remedy's ability to take risks, and thereby considered highly important in the firm's business today.

Although the company has no established processes or practices for developing their human capital, the firm culture was said to embrace building talent as well as making mistakes because learning from them is considered highly important. In practice, the employees are encouraged to enhance their capabilities autonomously by paying for the initiatives (such as books, games or training) they find worthwhile. Thus, the firm does invest in human resources to some extent, however their system for capability development is mainly self-directed by the employees.

'I would love to say we have a process for learning; that we have institutionalized it, but no. I think it comes from the people themselves.'

Planning & decision-making

The explicit and focused approach steering the business of Remedy was highlighted by Mr. Myllyrinne. Retaining the focus forms the core of their current strategy:

‘Retaining focus is a key [for Remedy] because you only have a limited amount of people and money. For our strategy in general, we try to remove distractions and opportunities, and sometimes that can be very hard because it’s very difficult to say no for tempting opportunities. We have certainly had our share of defining what’s core or key right now. -- If you try to do too many things, the quality of your work will automatically suffer. It is a short-term profitability versus long-term brand value recognition and the happiness of people situation’.

In consequence, Remedy was said to concentrate on a few unique things while avoiding to do anything beyond, as well as to strive for a performance superior to their competitors.

Along with the growing scale of Remedy’s operations, the production lead times have become extended, nowadays requiring the firm to commit around 18 months in advance. This has set certain constraints to Remedy’s planning processes in recent years: as a response, the firm has decreased the time between their planning cycles and follows now a biannual system. Presently, the firm’s principal strategy meeting takes place in the spring, followed by a review session held 6 months after in order to assess whether the strategy under implementation is still valid. According to Mr. Myllyrinne, such system serves Remedy’s business well as it *‘makes sure that we take corrective action as soon as possible, but still gives enough time for things for succeeding’.*

In addition, supportive tools such as decision-trees are being adopted in the firm’s strategic decision-making in order to allow the consideration of different scenarios and thereby rationalize the process. However, Remedy’s history was said to entail also pure *‘quality of life choices’* too, resulting in the rejection of some deals in their past. The comment of Mr. Myllyrinne demonstrates how the importance of retaining the firm’s internal culture is reflected in decision-making:

‘There have been one or two partners that I just declined to work with; even if we had a good deal on the table but if the quality of life starts to drop... -- So how happy people are is really important. If their freedom is taken away too much, you start bleeding talent. On the other hand, you can’t let them do whatever they want. You need to find a compromise between commercial and artistic.’

The larger scale of productions has made Remedy redefine the employee roles in the past ten years. While a single manager previously answered for various key aspects (such as schedule and quality) of a project, such liabilities are now being distributed within the firm whenever possible. Consequently, Remedy has established a dedicated person or a team to be responsible for different parts of the process, as well as adopted more structured project management practices within each team. However, the level of organization and hierarchy is still adjusted to the scale of the given process. The teams operate under their own budget and targets while the top management seeks to build consensus around upper-level themes that steer the business of Remedy:

‘Our plan [in managerial terms] is to have a leisure type focus in what we do. -- It is important to give the teams a target, and let them define by themselves how to reach that’.

Specifically, the self-direction of teams is encouraged in order to allow for new ideas and innovation, which was said to promote the creativity the firm’s operations are ultimately built on.

Key network relations

At present, the business of Remedy relies largely on the firm’s external relations. Mr. Myllyrinne describes the relation between Remedy and the platform holders:

‘The content is what sells [the devices] so that is why even Apple has come around to us supporting games --. For Microsoft in 2010, we gave a game that was not available on a Sony or Nintendo platform, so they got a lot of people to buy their console because they had something unique. And that for them is very valuable.’

Remedy seeks to outsource a substantial share of their operations and thereby remain as lean as possible. In large productions there may be even 10-20 vendors utilized, the structure of Remedy's internal project teams reflecting the significance of external parties in the firm's operations: the teams may involve a dedicated outsourcing manager, and the production producers in the last resort are to make sure that all the different parts fall into place with Remedy's internal production timely. The extensive business network is also considered as a supportive tool for capability development: the firm was said to strive for increasing the number of employees that face external parties (such as competitors or channels partners) in order to allow them to discover different trends.

Being a middle-sized player on the market, the firm's competitive position between small and well-established operators is considered hospitable by Mr. Myllyrinne:

'We're kind of in the switch part where we have enough money, enough people, enough know-how, enough networks to do what we need to do; like the big companies. But on the other hand, we're not too small and [thus] not too constrained'.

The firm's ability to compete against larger console game developers with greater resources was said to build on value proposition through the unique and personal products; avoidance of head-to-head competition; as well as capability for quick reactions.

'We need to be very clever... Working hard is not going to solve the issue, right? -- I think we need to have a smarter strategy [than our competitors do].'

Remedy considers the role of personal relations highly important in their business:

'We do spend a lot time and money in building our networks. I think they have always been the key, now we just have better networks. -- Having access to that [the network] is kind of the thing that makes us successful. I mean that we can call people and we will get a response. And that we have various access points to the large companies as well'.

Personal relations were also noted to generate Remedy access to new areas once the employees shift their roles internally or change the company they work at. Maintaining the contacts was said to be especially critical in the United States where switching the position *‘is just a cultural thing’* among employees. Furthermore, the genuineness of the relations was emphasized:

‘We don’t just collect business cards and gift baskets, but when we really have friends who like us and who work with us – we have a really good reputation in the industry and that’s the key thing for us’.

The role and importance of business network

At root, the development of digital infrastructure has provided Remedy a new way to access capital through global markets, which in turn has substantially increased the firm’s risk taking capacity. Previously, the business of Remedy was mainly regulated by the channel intermediaries who coordinated the retail distribution of console games world-wide. Mr. Myllyrinne explains:

‘[There are] only six companies [that] can sell games to Walmart. And everybody knows who those six guys are, which is kind of boring. -- But we have an ecosystem where you can now launch something and you can feasibly hit it in over 100 countries world-wide within a day. And you can be on sale and get paid from these different countries. You’re just waiting for the check to arrive. I think that’s wonderful.’

On the other hand, there are still certain external patterns the firm needs to follow: for example, the publishers typically strive for establishing new intellectual properties in the beginning of the game console lifecycle, requiring Remedy to adapt. However, the firm was noted to be *‘much more enabled by these changes [in our business ecosystem] than restricted’* for the moment (Myllyrinne 19.12.2012, an interview).

In the past, Remedy has received *‘really helpful’* funding for their R&D operations from Tekes and thereby benefitted from the Finnish ICT cluster in financial terms. In addition, the invocation of the domestic game developer network can be noticed in the restructure of Remedy’s Board: today, the Board of Directors involve members from renowned Finnish game firms (Petri Järvillehto, the executive vice president of games at

Rovio Entertainment and Ilkka Paananen, the CEO of Supercell are members of the Board), which was noted to bring more variety in the firm's portfolio of skills. In consequence, Remedy is able to gain perspective from different network domains such as mobile game market.

Remedy does not consider the threat of new market entrants to have any remarkable impact on the firm's business as they aim at driving their products by a brand:

'There's so much competition that the level does not matter'.

'I think a quickly evolving market is great market for those who are aggressive and quick, and for those who can be very agile in their thinking.'

In addition, the firm believes the prospects for the console game market may become ever propitious as the market has become stagnant or even started to decline:

'What we're seeing is that there are less and less large bets being made [once companies exit the market]. -- We supply the talent that provides that content [for console games], and the supply has declined rapidly. And [on the other hand] the demand from the consumer side remains more or less the same. So it's a very good market.'

On the other hand, new entrants in the domestic mobile game market – i.e. the rapid growth of the Finnish mobile game industry – have hindered Remedy from finding skilled labor force: the competition for talent was perceived *'very tough'* on the Finnish market, making the firm recruit more and more employees abroad.

4.5.2 The co-evolution strategy of Remedy

Similarly to the logic of the previous section, the co-evolution strategy of Remedy is now explored in seek of empirical evidence for the second main research question of this study (*How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?*). A detailed timeline illustrating the historical

events of the firm vis-à-vis their ecosystem development is presented in Appendix 4 (p. 142).

Balancing reactivity and proactivity

Remedy's corporate history was said to be composed of roughly four different stages. Mr. Myllyrinne describes the role of demo-scene (see section 1.2, p. 4) in the very beginning of the firm's business:

'Because of the demo-scene in Finland, they [the founders of Remedy] were already known for the technical skills and they got in touch with various parties. People were interested; can you make a game?'

Consequently, finding a partner for low-budget productions did not pose any remarkable challenges for a small start-up:

'It's much easier to find a person with 100 thousand dollars than a person with let's say 30 million Euros'.

At that time, Remedy had six 'very small, kind of amateur ventures' in production, three of which signed with publishers who required milestone-based performance from the firm. Fundamentally, the ability to establish business relations with 'predictable' partners was noted as a key thing for Remedy in the first stage of their business.

After Remedy's debut game *Death Rally* in 1996, the firm had a desire to enter into larger productions. In consequence, the second stage in the firm's history was said to entail the building of infrastructure and processes necessary for the larger-scale operations. Furthermore, organizational practices such as building cash-flow forecasts were adopted for the first time. In 1997, Remedy's second product, a 3D benchmark program *Final Reality* (later *3DMark*), was released and later became an industry standard. However, in the following year Remedy made a strategic decision to remain as a pure game developer and established a spin-off company *Futuremark Ltd* to handle *Final Reality*.

In the third stage of corporate history, Remedy made a critical decision about reselling the IP rights for their Max Payne hit in 2002. In consequence, the financial standing of Remedy improved significantly. However, the firm was also to deal with various administrative hurdles relating to currency risk, taxation and royalty issues. Mr. Myllyrinne explains how the firm with no related experience managed to overcome such unanticipated challenges:

'At least some of them you could have avoided if you knew what was coming. -- I spent two years on six legal cases, and then you start to learn how to adapt to that. -- So you try to outsource it, to keep it away from your talent and management, because it starts to be a distraction.'

In the fourth historical stage beginning in the early 21st century, the declining PC market as well as the Remedy's need for creating something new after the success of Max Payne made the firm search for new opportunities:

'We saw the PC market had declined. -- It was 1.5 billion dollars in North-America in 2001, and it fell to 800 million dollars in 2003. That was a problem. The internet had come; people were able to pirate and share games, so that destroyed our PC market. Then we thought we will become a console developer because consoles don't have any piracy, right?'

As a small company, Remedy's desire was said to be to reduce the risk involved in the new kind of business. Still, the firm did not want to become a multi-platform developer yet as their intention was to avoid too rapid business growth. As a result, Remedy took a risk of becoming a strategic partner for one company and signed an exclusive contract with Microsoft Corporations in December 2005, which mainly defined the direction of their future business.

'We wanted to remove a lot of the technology risk, we were a small company. We did not know what [here: which platform] was going to be successful, we just made a hypothesis that Microsoft will win'.

Thus, Remedy chose to apply a single-platform strategy in order to ensure moderate growth, thereby leaving a chance to expand into new platforms later on if necessary.

However, resource constraints prevented Remedy from responding to the emergence of digital ecosystems until in the early 2010:

‘We were certainly looking at that space for a long time. But we just did not have the ability to do it: I mean we were all tied up, all our resources and brain power was tied up to shipping Alan Wake, a project that had gone on for too long and taken a lot of money. So we needed to close it [first] and also meet the quality target [set by Microsoft].’

However, once the team was released from the Alan Wake project, it was very clear for the company to tap into the new opportunities enabled by digital infrastructure. Since 2011, the company has released a remake of Death Rally for iOS and Android, self-published a game on XBLA under the brand label of Microsoft as well as brought Alan Wake available on Steam.

For the present, Remedy is seeking to co-evolve with their ecosystem environment in a more timely fashion:

‘The change has not ended; it [the ecosystem] will continue to change dramatically into new platforms and new business models... I think next time round we’d like to be there earlier, and for that to happen we need to have more slack and resources. That means enough bandwidth internally [here: employees] and a budget that is unallocated.’

In consequence, more proactive traits have been adopted in the firm’s strategy in the past two years:

‘There’s a slide from profitability and financial stability to growth [in our strategy]. I mean we have always wanted to do awesome products and win the market, but we’re realizing that we need to be more aggressive –’.

Still, Remedy’s ability to take risks was described limited, making the firm as a non-platform holder unable to invest big sums in their self-publishing initiatives in the near future.

Generally, the co-evolution strategy of Remedy contains both reactive and proactive elements. On one hand, willingness to question the prevailing industry practices has led the firm to make *'some technological innovations'* lately. In addition, the uniqueness of Remedy's products is fostered by seek of elements that have not been introduced in games before. Remedy was also said to have undertaken single small-scale trials in their past: for example, the firm made a demo without a real business potential in order to see how a certain type of server technology works. Hence, the enthusiasm for learning proved as Remedy's motive for proactive initiatives especially in the early stages of their business.

On the other hand, call for profitability prevents a small firm from anticipating the future of devices or digital markets: *'We need to see a viable market or business before we can put money on it'* (Myllyrinne 19.12.2012, an interview). Thus, while Remedy's proactive initiatives are mainly driven by the employees and associated with the processes and products; it is not reasonable for the firm to aim at leading the customer opinions or market trends. Mr. Myllyrinne encapsulated Remedy's approach to co-evolution with the firm's rapidly changing environment:

'The ability to listen the signals of change as well as the ability to react to the right ones is the key. It's not about doing things well, it's about learning to do new things well, which is becoming more and more important'.

'There's a lot pressure to grow but I want to do it in a sustainable way, where we're not doing too many things at once'.

Risk management

Generally, Remedy's ability to run risk has been limited over their corporate history and guided the operations of a small company. For the first fifteen years Remedy followed a strategy of focusing all the resources on one production at time:

'Till the early 2010 we had a policy or a strategy of following a hit-driven business. About 5% of the games in the console and PC space brought over 50% of the revenue, so we wanted to be in that top 5 percent'.

The exclusive publishing deal made about Alan Wake in 2005 had provided the firm benefits such as better funding and Microsoft's marketing machine for the product, however it limited the sales potential as the game could not be played on other platforms but Xbox 360 console.

In 2010 when Remedy was able to react to the opportunities generated by the digital markets, the firm made a shift in strategy in order to gain more independence in their operations. In consequence, a remarkable change with regard to the firm's attitude towards risk-taking can be observed as the company began to pursue opportunities more dynamically and placed a greater emphasis on risk-taking. Basically, in their remodeled strategy, about a half of the revenue is generated as per the traditional model (i.e. from larger projects that are founded by external parties) and the rest comes from the digital distribution through an impartial vendor such as application marketplace. By this way, Remedy aims at reducing the riskiness of business while building the capability of going directly to the consumers. Mr. Myllyrinne explains:

'The ability to take risk and look for fund in different ways [became important to Remedy]. You never know when you're going to strike gold – it may be very quickly or it may take a long time. And the ability to take risk implies that you have money. So you need access to capital.'

'The way we approached it was that we saw a lot of growth from the digital side: higher risk, higher return, smaller bets... So they are kind of our stock in the portfolio. And then the larger project that goes on for the longer period of time is kind of our bond: it has a smaller return over longer period of time as a percentage but is huge in volume. And thus has the potential of high pay-off.'

'If you don't invest into the future and take more risk now, then 24 to 36 months after you're going to be very reactive. And you'll either be marginalized or then you'll die.'

Thus, as a primary mean to manage risk, the company began to support variation in their revenue generation.

‘Our hypothesis is that in two to three years these things [conventional productions and mobile games] will either converge or one will win, and we’ll be in a good position anyway.’

‘I’d like to see us to be more independent by having larger revenue share coming from our own channels and publishing operations [in future]. I think we have much more control if we have that, and that’s usually a good thing. I’d like to establish a portfolio of 3-5 of franchises. If we have three different things, maybe different platforms, maybe different kinds of things; I think that brings more stability and makes more growth.’

Finally, Remedy’s strategy was said to take into account different scenarios associated with the evolvement of consumer behavior or market trends. The firm has also established contingency plans for the calculated risks they take. Still, rather than providing for any extreme scenario, Remedy was said to invest in employees and their working environment because the firm’s internal confidence in future was noted critical for their ability to *‘lean forward’*.

Flexibility and adaptability

The establishment of operations on multiple platforms has allowed Remedy to better adjust its resource base according to the changing conditions, thereby enabling greater operational flexibility. Specifically, while the large-scale productions on the console side require long-term commitment from the firm, Remedy was noted as *‘perfectly agile’* and capable of quick moves on Steam and other digital platforms. The company considers these two sides of their business mutually supportive in the development of their internal capabilities: Remedy was said to utilize the experiences and learning they gain from the larger productions in the R&D work conducted for smaller-scale projects. In turn, the business models and publishing capabilities learned alongside digital platform operations are helpful in the firm’s other productions.

‘We try to build brands and something that can be transferred from one media to another. We don’t really build a game [but] we try to establish a franchise.’

As another way to keep pace with the constantly moving markets, Remedy was said to push their decision-making to the lowest level possible. Specifically, by making the

teams highly autonomous the firm strives for more efficient scaling and readiness for fast reactions.

Finally, when asked about factors that enhance the competitiveness of Remedy in the constantly moving environment, three aspects were encapsulated by Mr. Myllyrinne:

'The biggest thing goes back to being able to learn. And adaptability. -- The second thing is the retention of talent and staff [on the whole] in a market that's overheating or in hyper-competition for talent. The last thing is the ability to execute in a much more complex organization and much more complex market, where we have very different products'.

5. DISCUSSION AND ANALYSIS

5.1 Cross-case Analysis

In the following section the findings of the two interviews are mutually contrasted and discussed in the context of the existing literature.

5.1.1 The strategy of the case firms in a business ecosystem setting

Resources and capability development

Both case companies consider the competence of their personnel as the most critical resource of the firm. Skilled employees were perceived as the main source of ideas and creativity, on which the competitiveness of both firms is ultimately based. While Remedy emphasized the ‘good’ and ‘healthy’ internal culture that inspires their employees and helps the company retain talent, Housemarque stressed the skills on a more down-to-earth level by noting technical capacity, concept know-how as well as the capabilities to sell ideas as the key for the firm. The small pool of skilled labour in the home country market proved a challenge for Remedy, which supports the finding of Boxberg (2012). Instead, Housemarque was not found to have suffered from such a hurdle.

Financial resources were noted as the second key resource of the case companies. The production-based nature of business has resulted in highly volatile revenue flows, which has caused challenges especially to Housemarque. Consistently with the earlier research findings (Luostarinen & Gabrielsson 2006; Falay et al. 2007; Sasi et al. 2009; ‘Suomen pelitoimialan strategia...’ 2010), Housemarque confronted the weak availability of money in its home market in the early phases of business. In contrast, Remedy was able to benefit from the financial R&D support granted by Tekes and basically was not found to have faced any significant challenges with this respect. Instead, their main challenges rather concerned currency fluctuation, taxation and royalty issues, which

supports the earlier research findings relating to the liability of foreignness Born Globals from small economies may suffer from (see Arenius et al. 2006; Sasi & Arenius 2008). To summarize, the empirical evidence indicates the case companies have been constrained by resource scarcity.

Despite skills being a very critical organizational resource of both firms, neither one of them had a systematic process for competence enhancement. Instead, encouraging the employees to learn by doing seemed to be the main way to contribute the development of internal capabilities. Thus, the role of learning appeared highly important to both firms and was driven mainly by the interests of their employees. In addition, Remedy noted the contact points of their employees with other actors in the business network to support their capability building, which is a novel standpoint as regards to the existing business ecosystem strategies of Moore (1996) and Iansiti & Levien (2004a). The finding supports the literature highlighting the role of dynamic capabilities as well as absorptive capacity in the firm's co-evolution strategy (see e.g. Cohen & Levinthal 1990; Teece et al. 1997, Gupta & Govindarajan 2000; Eisenhardt & Martin 2000; O'Callaghan 2007; Cravens et al. 2009; Teece 2011).

Planning and decision-making

Generally, the case companies have very different approaches to planning and decision-making. The operations of Remedy are currently steered by a focused strategy with a clearly defined scope. Concentration on '*few unique things*' as a basis of Remedy's opportunity identification lends support to the strategy of simple rules proposed by Eisenhardt & Sull (2001). Thus, a small firm with limited resources needs to seek competitive advantage through a strategy that builds on a few selected and clearly defined focus areas. On the other hand, the resource constraints prevent a small firm from pursuing competitive advantage by tapping into new opportunities if those opportunities lie too far from the firm's strategic focus.

In addition, Remedy has '*increased their internal clock speed*' through a biannual planning cycle with the primary object of ensuring the validity of their current strategy.

Thus, along with business growth that has increased the rigidity of operations; a small firm has begun to seek for more agility by revising the direction of their strategy on a regular basis. In this sense, the strategy of Remedy bears resemblance to the idea of time pacing (Eisenhardt & Brown, 1998) but is just implemented at a fairly moderate pace. Still, the author would like to note that the finding does not fully support the time pacing theory as Remedy's system is not established in the specific purpose of ensuring *a regular change* but verifying *the validity of their current strategy*.

Housemarque, in turn, was found to have only a limited ability to plan ahead, making the firm follow a rather unstructured and unscheduled system. In consequence, their planning is mainly driven by new and on-going projects. Thus, a small firm with limited power on the market has to adjust its operations according to unsettled revenue flows by reacting to the opportunities it identifies. Consequently, investments in the internal technology and concept know-how become increasingly significant because the firm cannot plan too proactively. Interestingly, the role of the founders proved crucial as their current understanding of the market as well as the ability to 'sense' new trends functioned as a key determinant of Housemarque's strategic direction. The finding provides a novel contribution to the ecosystem strategy of a small, entrepreneurial firm.

For the moment, the way Housemarque is running their business can be mostly associated with intuitive strategies identified by Rubenstein & Grundy (1999). However, it seems the firm is gradually reaching the point where certain strategic decisions are necessary to make: while Housemarque's way to manage business operations heretofore can be characterized as relatively informal by nature, there is an increasing need to determine the internal management practices as well as the future direction of the firm's operations further. The contrast between the planning and decision-making systems of the case firms may be partially explained by the scale of their operations: specifically, also Housemarque has confronted a call for greater organization along with their recent business growth. This can be considered to lend further support to strategies comprising simple rules because such strategies were noted to provide more structure for a firm's business by Eisenhardt & Sull (2001). In addition,

the empirical evidence indicates that the way the case companies organize and manage their business operations will probably become increasingly alike in future.

Finally, the ability to follow the firm's ultimate desire proved a connective factor between the case companies and was found to guide the strategic decisions of them both. Despite Remedy's seek for rationalism in decision-making, the strategic choices are conditional on preserving their internal culture: the firm has declined some deals in the past because they did not consider the partnering sides worthwhile. Also Housemarque was noted having been able to 'do their thing' throughout the history, which was consider highly important by the firm. Thus, despite limited resources, a small firm is reluctant to compromise their strategic intent but strives to fulfil their vision.

Key network Relations

The primary business network of Housemarque can be characterized as small but significant. Their network encompasses primarily publishers and investors, which form the key relations of the firm. Since the firm is still publishing the majority of their game concepts through a partner, the operations of Housemarque are vulnerable to their actions. However, new types of investors attracted by the game industry in recent years have reduced the dependence of Housemarque on the well-established publishers solely. In other words, the alternative monetary sources that have become available in the business ecosystem have increased the autonomy of a small firm that formerly had to mainly heed the demand of the publishers. Still, given the small pool of direct customers, the reputation building appeared critical to Housemarque especially at the earlier stages of their business. Later on the reputation of the firm has turned an edge over competitors and new market entrants with less extensive track records.

In contrast, the business of Remedy relies on external relations to a great extent as the firm seeks to outsource as many parts of their productions as possible. Generally, their business network can be characterized as diverse and extensive, thereby differing remarkably from that of Housemarque. Being a middle-sized player on the market

benefits Remedy because it allows the firm to balance the operational autonomy and organizational agility. In addition, the personal relations of the employees were found to play highly important role in the firm's business because they contribute the efficiency of operations and allow Remedy to extend their network reach. Housemarque, in turn, considered personal networks helpful in their talent acquire. Thus, the empirical evidence shows that investments in building and retaining the personal relations of the employees may be especially critical to a small firm. Specifically, personal relations may help a small firm to promote their operations and network position beyond the formal inter-organizational relations. The aspect is novel to the existing ecosystem literature: yet only Moore (1996: 269) has touched upon the idea of one's personal ecosystem but considered the concept from the viewpoint of the individual's learning rather than as a source of actual business benefit.

Generally, despite of operating in the same industry and in the same country, the business networks of the case companies turned out to be very differing. While the essence of publishers and investors for Housemarque came up in several contexts during the interview with Mr. Kuittinen, these network actors were not highlighted in particular by Mr. Myllyrinne. Rather, the products of Remedy were considered to drive value for the device markets (i.e. the business of the ecosystem keystones), therefore improving their position against platform holders such as Microsoft. Thus, the interdependency between the content and the devices may benefit a small firm because the firm can utilize the exclusivity of deals as a way to increase its negotiation power in the ecosystem, as seen in the case of Remedy's Alan Wake deal. Generally, the business network of Remedy seemed to comprise more diverse group of actors, each being important to the firm but from the different operational aspects.

Finally, it seems the strategic decision of whether to deliberately start extending the firm's network with respect to subcontractor relations has not been necessary to Housemarque until recently. Along with the recent growth and more sophisticated capabilities, it is gradually becoming timely for the firm to consider which activities are reasonable to outsource to allow leaner processes. Consistently with the findings

discussed earlier, this provides further support to the idea of the case companies becoming more alike operation-wise in future.

The role and importance of business network

Business network was found to be a precondition for the growth and survival of both Housemarque and Remedy: from the very beginning both firms have been essentially reliant on external funding coming from the foreign publishers, and thereby have utilized their business ecosystem as a principal way for acquiring finance.

In addition, the case companies have exploited external resources to overcome the challenge of global market access: initially, the products of the firms were distributed solely through multinational publishers, which is in line with the previous research findings concerning the sales channels of Born Globals (see Jolly et al. 1992; Luostarinen & Gabrielsson 2006; Isenberg 2008). Later on, the infrastructure provided by digital ecosystems has allowed Housemarque and Remedy an option to distribute their products without the conventional channel intermediaries, which has increased their operational autonomy and allowed greater variation in terms of product range. Thus, unlike noted by Jolly et al. (1992), finding a partner is no longer a prerequisite for the competitiveness and existence of the case firms, as their products can be distributed without a publisher. Such a diversification has improved especially the network position of Remedy as about a half of the firm's revenue flow is today generated outside the publisher-driven productions. Also Housemarque was noted to be constantly striving for a similar kind of goal. These findings back up the logic according which a niche player should seek to establish loosely coupled connections with the firm's ecosystem co-participants (see Iansiti and Levien 2004a: 134-138).

Thus, as one of the key findings of the empirical study, the case companies have begun to exploit the infrastructure of digital ecosystems in order to overcome the resource constraints they used to suffer from. This lends support to the typical feature of Born Globals concerning *the utilization of modern technologies* (F7). Consistently, Burger-Helmchen & Cohendet (2011: 318) note game companies need 'technological virtuosity

to meet the constraints of the economics of mass entertainment'. The finding support also the Born Global literature proposing that the digital distribution has been a crucial catalyst for the competitiveness of these firms (see Koiso-Kanttila 2004; Arenius et al. 2006). Finally, the findings are in line with the theory of Moore (2006: 46) who notes the modularity and open interfaces enabled by Web 2.0 provide public or near-public resources the ecosystem members can exploit.

However, the ecosystem was also found to set constraints to the case firms. Specifically, the lacking infrastructure and the overall 'immaturity' of the ecosystem limited the growth of Housemarque remarkably twice in their past. Also Remedy was noted to be required to follow certain technological life cycles in their current business. Thus, the dual role the ecosystem plays in the business of a small, global firm should be acknowledged: the ecosystem may provide a solution for many challenges the firm cannot overcome on its own but at the same time the ecosystem may dictate the operations of the firm to a large extent. The finding is very central to the research problem of this study because it has had major implications on the strategies of the case companies. In addition, it provides further empirical validation for the research work conducted on the network challenges and constraints of small firms (see section 2.2.4, p. 31)

However, the empirical evidence also deviates from the prevailing understanding with certain respect. According to Neogames (2011), as a consequence of digital distribution the strategic focus of game firms has shifted from accessing the marketplace to dealing with fierce competition. However, neither one of the case companies was found to address their competitors as a specific consideration in their strategy. For example, Remedy's concerns with regard to competition were mostly associated with their capability to acquire talent rather than the potential impacts on their customer demand or product sales.

Instead, the stagnant or even decreasing console game market was perceived a rather favourable trend by Remedy and Housemarque. Thus, operation outside the market

domain that is mostly targeted by newcomers was found to provide the case firm a hedge against competition. In addition, both companies had an idea to drive their business by brand or reputation, which was noted helpful when seeking to pass over the competition. On the other hand, the declining number of market operators caused Housemarque concerns about the longevity of the end-customer demand as well as the subsistence of the network actors the firm's operations are reliant on. The aspect was not brought up by Mr. Myllyrinne, probably because the business of Remedy is more diversified and thus less vulnerable to such a contingency.

On the basis of the empirical findings discussed above, the following contribution to the ecosystem niche player theory of Iansiti & Levien (2004) may be suggested: instead of moving rapidly to a new niche area, an established niche player may benefit from the opportunities that still lie in their decreasing niche domain until the market eventually turns atrophied. Still, at the same time the firm must seek to guarantee their future survival by fostering the capability of establishing new loosely coupled connections to the thriving ecosystem platforms.

The significance of domestic business network turned out dissimilar in the operations of the case firms. While the network benefits gained by Housemarque have been only small-scale and mainly indirect by nature, Remedy has managed to exploit the Finnish network since the very beginning of their business. Generally, while these gains were principally financial at the early stage of the Remedy's business (e.g. R&D funding), it seems the firm has begun to strive for greater absorb of business intelligence along with the maturation of their business. In other words, their focus with regard to pursuit of network utilities has shifted from compensating the internal resource insufficiencies to more intentional acquire of intangible, high-level knowledge resources. This supports the findings of Coviello & Cox (2006) about the explorative, gradually changing resource acquire strategies of Born Globals. Basically, the firm has been able to establish a fairly hospitable position in the relatively compact network of Finnish game developers, which allows the linkages with some of the key players within the industry.

Worth noting is that also the personal network of Remedy's founders benefitted the firm notably in the start-up stage.

Instead, Mr. Kuittinen noted the domestic network does not really facilitate Housemarque's business as the large, publisher-level network actors are lacking. Such a contrast may be partially explained by the interviewees' different way to consider what creates value to their firm. However, it also indicates the firm's ability to realize the utilities of their business network is dependent on their capability to infiltrate in the specific network in question.

In sum, the case firms were found to exploit their business ecosystem as a source of complementary resources - especially those relating to project funding and product distribution, which is consistent with the finding of Sasi & Arenius (2008). Specifically, both companies have utilized their ecosystem infrastructure in order to resolve the challenges associated with limited resources and global market access. In turn, the utilities of domestic business network encompassed primarily intangible assets such as acquire of knowledge and business intelligence. While the domestic network of a small global firm may facilitate the business especially at the early stage, the business ecosystem and its infrastructure are the ultimate precondition for their firm's growth and survival. Hence, the typical Born Global feature concerning the importance of networks (F4) is fulfilled by the case firms (see section 2.1.1, p. 9).

5.1.2 The co-evolution strategy of the case firms

Balancing reactivity and proactivity

Generally, both case companies were required to carry out reactive actions towards the evolving market trends and channels because as small operators they did not really have the power to perform proactively with that regard. Instead, the willingness to learn and enhance internal competencies has been a key driver for the proactive performance of the firms. The empirical evidence shows both companies begun the deliberate seek of

better technology a couple of years after their establishment. Thus, it appears the firms aimed at building a solid internal system that would then allow development of more sophisticated capabilities. In addition, the build of technology base was crucial for small operators that sought for less dependency on their partners. The in-house technologies and know-how were found especially crucial to Housemarque and have stayed at the heart of their operations until today. In sum, the proactive side of the case companies' co-evolution strategy is mainly reflected in their experimental product trials the firms have initiated over the years. Learning proved as a common motive of the case firms: for example, Mr. Myllyrinne (19.12.2012, an interview) justified Remedy's decision to release a PC version of Alan Wake by '*We got to see how Steam works*'.

Especially Housemarque has actively engaged in new opportunities the firm has identified over years. However, the appropriate timing of these actions has posed considerable challenges for a small firm especially in the early phase of business (Kuittinen 2.1.2013, and interview). Generally, it seems the areas where proactive performance is possible for a small firm are delimited by the firm's ability to take risk: the aspect came up especially in the co-evolution strategy of Remedy as the risk considerations made the firm settle on a single platform strategy in 2005. Finally, resource limitations have made prioritization necessary to both firms: for example, both Housemarque and Remedy have established a spin-off company in their past in order to retain the focus on their core business.

Generally, the empirical findings are in line with what Iansiti & Levien (2004a: 219) call a holistic technology strategy: rather than capacity to perform autonomous innovation, niche players need capability to architect and integrate external technology. This enables them to better manage the large variety of different technological changes these firms tend to face simultaneously (Ibid). To summarize, the empirical findings indicate the firms must balance their reactivity and proactiveness in relation to conditions of their business ecosystem, which is in line with viewpoint of co-evolutionary organizational theories (see Levin & Volberda 1999, 2003; Levin 1999; Cantwell et al. 2009). While the external market conditions require primarily reactive

responses from a small firm, proactiveness can be seen in the firm's initiatives that aim at developing the internal capabilities so that the firm can better respond to those external conditions. Thus, proactiveness as a trait of business strategy should be distinguished from the firm's internal proactiveness that is mainly driven by the employees. Thus, the empirical evidence contributed to the existing literature by providing a more detailed specification of the matter.

Finally, Housemarque's initial business idea '*to make a hit and that's it*' was said to be unchanged and still at the heart of the firm's operations. Despite the firm's eventful history involving several attempts to pursue new opportunities, certain changeless principles that have guided the direction of Housemarque's business over time can be identified. As a basis of decision-making, the firm was said to follow the options that they are capable and interested to undertake: for example, the company has purposely opted out of developing games for Facebook game market or experimenting free-to-play models, as '*it is just not our thing*'. Similarly, the clear focus guiding the strategy of Remedy was brought up in multiple contexts by Mr. Myllyrinne. As providers of creative content, game companies need to create strategies that allow balancing the creativity and efficiency (see e.g. Cohendet & Simon 2009; Burger-Helmchen & Cohendet 2011).

Thus, although Housemarque's approach proves fairly informal overall compared to that of Remedy's, the firm's ecosystem strategy can be characterized as competence-centred, interest-driven as well as enterprising by nature. Overall, it appeared the founders' ability to hunch opportunities played an important role in guiding the direction of Housemarque as the urge of 'finding the thing' that would bring their business forward came up several times during the interview. Lately, some degree of strategic thinking has come in Housemarque's business with regard to risk management, brand building and the new capabilities required in self-publishing. As a new opportunity, the company has identified service elements to be added in the games. Kuittinen (2.1.2013, an interview) exemplifies how the aspect of strategic planning is gradually becoming adopted in business practices: '*Previously, we did not have any*

'games as a service' [aspect] in our strategy, but now we at least know it is something we should take into account [when planning for the future]'.

Risk management

Generally, the aspect of business risk was touched upon several times by Mr. Myllyrinne, indicating the related considerations play an important role in the co-evolution strategy of Remedy. To put the firm's current philosophy in short, they consider finance is a precondition for the ability to take risk, which in turn is a precondition for succeeding in the long run. In turn, risk management seemed to play a less central role in the strategy of Housemarque: Mr. Kuittinen took certain things up when asked but did not bring them up on his own initiative in particular.

In the beginning of their business, Remedy tapped into many opportunities simultaneously but sought for stability through steady partner as the firm was highly reliant on external funding. Yet until 2010 the firm's desire for sustainable growth outweighed their willingness to take substantial business risks that would have entailed greater growth potential. However, when the firm eventually became able to expand their business into digital markets, they adopted a more aggressive strategy. Thus, when permitted by the resources, a small firm - that had already become mature - responded to the evolution of their business environment by consciously beginning to take more risks.

Planning and scheduling of projects were found to cause challenges to Housemarque especially in the early years of their operations. Although the problem may be common in many industries, it is especially critical in project-based business as the ability to establish a flow of projects determines the overall survival of a small firm. As a response to such a challenge, both case companies began to seek for variation in order to reduce the risks relating to their large productions and resource dependency. Specifically, Remedy and Housemarque strove for having more simultaneous projects on-going and started to develop games that support multiple platforms. This proved the most significant way for both companies to seek to manage external risk. Furthermore,

variation in terms of project scale and type is closely linked to more continuous revenue generation, which was another aspect that was considered highly important by the interviewees.

The empirical findings are in line with the theories of Iansiti & Levien (2004a: 135) and Adner (2006) who noted the firm's strategic focus should be placed on managing risks and dependencies that occur in the ecosystem setting. In addition, empirical material supports the literature proposing variation and multiple alternatives as means to deal with risks and uncertainty in rapidly changing markets (see e.g. Aldrich et al. 1984, Eisenhard & Martin 2000; Iansiti & levien 2004a; Cantwell et al. 2009).

Out of the case firms especially Remedy has managed to gain more stability and predictability in their operations by balancing the large console game productions and smaller-scale digital publications in their business model. In addition, the reinforcement of the firm's internal culture can be seen as an additional mean of countering the uncertainty that emerges from the business environment. In turn, the role of in-house technology proved critical especially to Housemarque: flexible tools and technologies allow the firm to pursue untapped market opportunities and respond to industry trends they identify, thereby helping the firm to reduce business risk. In future, both companies were noted to strive for more independence by having a larger share of revenue coming from their self-publishing operations.

Flexibility and adaptability

Generally, both interviewees emphasized the organizational flexibility several times during the interview, which indicates the aspect is crucial to a small firm. Specifically, both case companies appeared to foster their ability to adapt to external requirements by embracing internal flexibility wherein the role of employees proved very central.

Again in the co-evolution strategy of Housemarque, the importance of internal tools and technologies stood out as they allow the firm a greater flexibility product-wise (i.e. Housemarque is able to develop games for different platforms). In addition, internal

capabilities - specifically concept know-how - were noted to contribute to the quality of products, which the firm believes is their fundamental success factor in future. Thus, as a primary tool for adjusting to their ecosystem environment, Housemarque seems to enhance their technical capacity as well as product-related competencies. Similarly, capability configuration was proposed as the main contributor to the firm's market fit by Taghian & Shaw (2010).

Consistently, the aspect of learning turned out to be significant for Remedy: by bringing the know-how from larger productions to bear smaller ones and vice versa, the firm is able to extend the variety and applicability of their skills base. This in turn helps Remedy to operate in the digital environment where the products and business models are becoming increasingly diverse. Thus, as a tool for increasing the organizational flexibility, a firm appeared to seek for a learning pattern between their different areas of expertise and thereby contribute to the technical and employee skills. The finding lends support to the literature on dynamic capabilities.

In addition, the upper-level decision-making at Housemarque was found to embrace a great flexibility as their strategic decisions tended to reflect responses to the new opportunities scented by the founders. Also the firm's practices with regard to employee and project management were highly flexible and featured a minor level of bureaucracy. Similarly, Remedy was noted to attempt to push decision-making primarily to team-level. Thus, flexibility in terms of internal management practices seems to be used to increase the organizational agility of a small firm.

Finally, the empirical evidence indicates that the ability of a small firm to co-evolve with the rapidly moving markets relies strongly on the continuous development of their internal capabilities. Consistently, Redwood & Ford (2012) identified the capabilities to obey the dynamics of business network, to understand firm's own limitations, to scan across discrete business networks, to build relationships and to develop and combine the resources and activities as the potential success factors of the Born Global firm they studied. In a creative and labor-intensive industry the contribution of employees is

crucial and this is why retaining talent is the key for the firm. A unified culture across the organization was found to help Remedy to maintain and develop their skills base. Thus, it is not only the variation in terms of the number and scale of productions, but also variation in terms of their purpose and outcome that is likely to enhance the firm's competitiveness in future. Finally, Figure 18 summarizes the key points of the cross-case analysis presented in the sections 5.1.1 and 5.1.2 (from p. 95 onwards).

The strategy of the case firms in a business ecosystem setting	The co-evolution strategy of the case firms
<p>Resources and capability development</p> <ul style="list-style-type: none"> - Competence and capabilities of employees - Learning by doing - Financial resources as the key and as a constraint <p>Planning and decision-making</p> <ul style="list-style-type: none"> - <i>Remedy</i>: A focused strategy supported by a regular planning cycle - <i>Housemarque</i>: Role of founders significant, sense of fleeting opportunities determines the strategy to a large extent <p>Key network relations</p> <ul style="list-style-type: none"> - Very different between the case firms. - The development of business ecosystems has reshaped the power relation within the network. <p>The role and importance of business network</p> <ul style="list-style-type: none"> - Highly critical for both case firms but plays also a constraining role in their business. - Used as a source of compensatory resources - Especially the infrastructure of digital ecosystems has opened up new opportunities 	<p>Balancing reactivity and proactivity</p> <ul style="list-style-type: none"> - Reactive actions towards the evolving market trends and channels, willingness to learn as the main driver for proactive performance <p>Risk management</p> <ul style="list-style-type: none"> - <i>Remedy</i>: Risk management implemented systemically, strong organizational culture as an important tool - <i>Housemarque</i>: Flexibility in terms of tools and technologies very important - Both: Seek of variation in terms of project number, scale and type. Strive for greater financial independence with help of self-publishing <p>Flexibility and adaptability</p> <ul style="list-style-type: none"> - Very crucial for both firms. Flexibility in terms of internal practices important, internal capabilities are the main tool for fostering adaptability. - <i>Remedy</i>: seeks to establish internal learning patterns - <i>Housemarque</i>: investments in internal tools and technologies

Figure 18: A summary of the cross-case analysis

5.2 Discussion

In this section, the author elaborates the case study findings further and attempts to address the original research questions with the knowledge gained from the exploration of the empirical material. A table summarizing the expected and obtained responses to the research questions is presented in the end of the section (Figure 19, p. 111).

On the basis of the cross-case analysis (section 5.1, p. 94), it can be said the case companies meet the seven characteristics that were identified as typical Born Global features in section 2.1.1 (p. 9). This is why the author proposes it is justified to consider the case companies as Born Globals and apply the related academic theories when seeking to respond to the research questions of this study. A table presenting the key points of the given justification is placed in Appendix 5 (p. 143) in order to further validate the correspondence between the case companies and Born Globals.

The strategy of Born Globals in business ecosystem setting

The empirical evidence helps to validate that the emergence of business ecosystems has radically shaped the business environment of Born Globals. As ecosystems reduce the need of small firms to tie up their limited resources, the ecosystem environment appears very attractive to Born Globals and has major implications in their strategy. Today, ecosystems allow small global firms to strengthen the weaknesses they have traditionally suffered from (for the SWOT model illustrating the new setting, see Figure 10, p. 35).

The main purpose of this study was to investigate whether the ecosystem strategy of a Born Global correspond to the strategy of ecosystem niche players. Generally, the empirical evidence supports the ecosystem theories of Moore (1996) and Iansiti & Levien (2004a) as the significance of high-value capabilities as well as the importance of co-evolution proved indisputable to both Housemarque and Remedy. In addition, the ecosystem niche strategy presented by Iansiti&Levien (2004a) seems applicable to Born Global features and can be summarized as follows: When entering an ecosystem niche

domain, the specific value adding capabilities - possibly enhanced by the entrepreneurial mind-set of Born Global managers - are critical to successful market penetration. Leveraging the external resources available in the ecosystem (i.e. the utilization of a firm's business network) facilitates the value creation capabilities of the firm. When the position in an ecosystem is being established, the company must guarantee the sustainability of its external resources by co-evolving with the key members of the ecosystem. The utilization of multiple platform strategy helps a small firm to manage the risks posed by its network dependency. Thus, the empirical evidence being in line with the theories on ecosystem niche player strategy, it can be concluded that the ecosystem strategy of Born Globals corresponds to the strategy of ecosystem niche players.

However, the evidence obtained during this research provides also some specification and novel insights into the current knowledge of ecosystem niche player strategies. In order to overcome the challenges of resource scarcity, niche operation and global market access, this study proposes Born Globals to utilize mainly explorative strategies for acquiring resources from their respective ecosystem. Also the existing literature on Born Globals lends support to this view (see e.g. Coviello & Cox 2006; Yamakawa et al. 2011). This study also found evidence that the way Born Global acquire resources may change over time. While the strategy of Housermarque built strongly on their capability of making high-quality products, Remedy emphasized the focused approach as well as the firm's culture as their key success factors. Generally, the enhancement of internal competence base – especially creative and technical capabilities – was found to be very central to the strategy of Born Globals.

Still, this study proposes the dual role of the business ecosystem is crucial to acknowledge by Born Globals: in addition to new opportunities, the ecosystem setting brings on constraints the firm strategy must address. Specifically, Born Globals were found highly reliant on their external network, and this is why the ecosystem strategy of a Born Global should focus on managing their organizational dependencies. As a means to gain additional network benefits and thereby improve the firm's strategic

position in the ecosystem, personal relations of the employees proved important. Because Born Globals have only relatively little power in their business ecosystems, their strategy features active seek of opportunities that open up in their environment.

The co-evolution strategy of Born Globals

First of all, it is important to note that both case firms underwent long periods of considerable uncertainty before their actual commercial breakthrough. Still, without any guarantee on their overall survival, both firms have managed to renew their business on constant basis and thereby co-evolve with their business ecosystems.

The findings of this study indicate Born Globals seek to co-evolve with their respective ecosystems by reshaping their strategies both reactively and proactively. Specifically, the co-evolution strategy that a Born Global is able to implement was found to be dependent on the prevailing level of resources available. In addition, the empirical evidence suggests Born Globals utilize relatively simple strategic rules and processes in order to deal with the rapidly changing environment and consequential uncertainty. Experiential learning proved essential in the co-evolution of Born Globals because it was found as their primary way of enhancing internal capabilities. Furthermore, flexibility appeared an important trait in the co-evolution strategy of these firms and was reflected especially in their in-house technology as well as internal management practices.

This study also suggests Born Globals support variation and multiple strategies as a means to adapt to their respective ecosystems. The case companies were found to focus on product development and resource acquisition in their start-up phase, which backs up the idea of Born Globals having ‘multiple strategies’ simultaneously instead of them taking place in a consecutive manner (see Sasi 2010; Sasi & Arenius 2011). This is one of the main implications the rapidly changing ecosystems are causing to small firms: in order to secure competitiveness in the long run, the firms may need to pursue new environments on constant basis. While the scarce resources may hinder newly-

established Born Globals from realizing variation in their operations strategy, the findings of this study show Born Globals still actively seek for variation in their business.

Consequently, opportunity identification was found crucial for the ability of a Born Global to evolve with their ecosystem. If a Born Global is highly reliant on external parties and suffers from severe resource scarcity, ability to hunch and tap into these opportunities may be very critical to the survival of the firm. According to the cyclical model of technological change (see Anderson & Tushman 1990), dominant design eventually leads to discontinuity and will be replaced by new dominant technologies (see also Tushman & Anderson 1986). This being said, the ecosystem participants should keep in mind that the digital platforms they currently support are not static but under incremental change. When a new dominant design comes to supersede the exiting one, these firms need to be prepared to align their businesses to the new direction platform-wise.

Along with the firm maturity, variation in terms of product types and platforms as well as sources of investment funds and revenue was found to help Born Globals to manage risks that emerge from their business ecosystem. In addition, establishment of loosely coupled connections with several key participants of the ecosystem makes a Born Global less vulnerable to external shocks. The empirical evidence also indicates that along with the business growth and greater resource base, the ecosystem strategy of a Born Global may turn to emphasize stricter focus as well as more deliberate risk-taking.

Finally, to summarize the discussion presented in this section, the author proposes the following: in addition to the obligation of Born Globals to evolve with their ecosystem, the emphasis of their ecosystem strategy should evolve in accordance with the firm's maturity level. This is because Born Globals were found to become more capable to manage the dependency on their ecosystem co-participant once their operations get more stabilized. Figure 19 presents a recapitulation of the original research questions; the preliminary expectations that were formed on the basis of the current academic

discourse; as well as the actual responses to the research questions that were obtained in the empirical part of this study. In other words, Figure 19 is a completed version of Figure 11 that was built in the end of the literature review in section 2.3.2 (p. 43).

Research Question	Expected	Obtained
<i>Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?</i>	<p>The strategies of Born Globals feature differentiation through unique capabilities and high orientation towards co-evolution with business environment; and can be thus paralleled by the strategy of ecosystem niche players.</p> <ul style="list-style-type: none"> - BGs utilize mainly explorative strategies for acquiring resources from their respective ecosystem. - Newly-established BGs support variation and multiple strategies as a mean to adapt to their respective ecosystems. - Need for market-based adaptations? 	<p>The ecosystem strategy of Born Globals corresponds to the strategy of ecosystem niche players.</p> <ul style="list-style-type: none"> - BGs utilize mainly explorative strategies for resource acquire and thereby seek to overcome the challenges of resource scarcity, niche operation and global market access. The way BGs acquire resources may change over time. - The enhancement of internal competencies is central to the ecosystem strategy of BGs. - BGs must address the dual role of business ecosystems and in consequence focus on managing organizational interdependencies. - The strategy of BGs features active seek of opportunities that open up in the ecosystem. - The personal networks of employees are important to BGs. - BGs strive for minimal market-based adaptation but seek to establish product modularity in terms of ecosystem platforms.
<i>How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?</i>	<ul style="list-style-type: none"> - BGs seek to co-evolve with their respective ecosystems by reshaping their strategies proactively. - BGs utilize relatively simple strategic rules and processes as a mean to cope with changes and uncertainty. 	<ul style="list-style-type: none"> - BGs co-evolve with their respective ecosystems by reshaping their strategies both reactively and proactively (depending on the resources available). - The co-evolution strategy BGs features relatively simple strategic rules and processes, flexibility, opportunity identification and experimental learning. - BGs may improve their co-evolution ability by implementing multiple strategies simultaneously. - The emphasis of ecosystem strategy should evolve in accordance with the maturity level of the firm.

Figure 19: A Summary of the expected and obtained responses to the original research questions

5.3 Revised Theoretical Framework

The empirical research has provided some significant insights on the initial research questions ‘*Does the ecosystem strategy of Born Global firms correspond to the strategy of ecosystem niche players?*’ and ‘*How can Born Globals improve their ability to co-evolve with their respective business ecosystems over time?*’ Based on the case study and the related discussion, a revised theoretical framework illustrating the ecosystem strategy of Born Globals can now be presented.

Basically, the preliminary theoretical framework turned out to be in line with the empirical research findings on Born Globals. The theoretical framework of this study consisted of two interrelated parts. In the study it was found that both case firms meet the typical characteristics of Born Globals. In addition, their strategies were found to correspond to the ecosystem niche player strategy, which now allows the author to specify the preliminary theoretical framework (presented originally in section 2.3.3, p. 44-45).

Furthermore, in the empirical part it was found that some of the network relations were highly critical to the case firms whereas the others played a less significant role in their business. In addition, the interdependent nature of these relations came up especially in the case of Remedy. Thus, the two-way thick and dash line arrows proved still to be a meaningful way to illustrate the ecosystem strategy of Born Globals (in the first part of the theoretical framework). However, in order to highlight the dissimilar strategic importance of the network relations, the first-tier and second-tier actors in the ecosystem are now denoted as ‘1st’ and ‘2nd’ respectively.

Some important additions should be made when revising the initial framework. On the basis of the empirical study, the author identified certain features and focus areas to characterize the strategy of the case firms. First, the utilization of business network was found central in the ecosystem strategy of Born Globals as these firms seek to gain compensatory resources from their ecosystem setting. As the second strategic focus

area, the build of internal capabilities proved highly important. These findings allow a more specific description of the ecosystem strategy of Born Globals and can thus be added to the first part of the theoretical framework.

The empirical research provided also several new insights with regard to the co-evolution strategy of Born Globals. At a very fundamental level, the retention of focus and following the firm's ultimate desire was found to characterize the co-evolution of the case firms. However, out of the strategic tools that the companies implemented actively in order to enhance their ability to co-evolve with their ecosystem, the following elements were identified: utilization of simple strategic rules; implementation of both reactive and proactive actions; continuous identification of new opportunities; strive for flexibility; management of risks (arising mainly from network dependency); as well as seek for variation. Finally, the utilization of opportunities that still lie in a stagnant or decreasing niche domain was found as a common feature in the co-evolution strategies of the case companies. Thus, these sub-elements can be added to the second part of the theoretical framework.

Figures 20 and 21 illustrate the revised theoretical framework for the ecosystem strategy of Born Globals. The framework takes into consideration the additional findings that arose from the empirical part of this study. The added elements are highlighted in bold font.

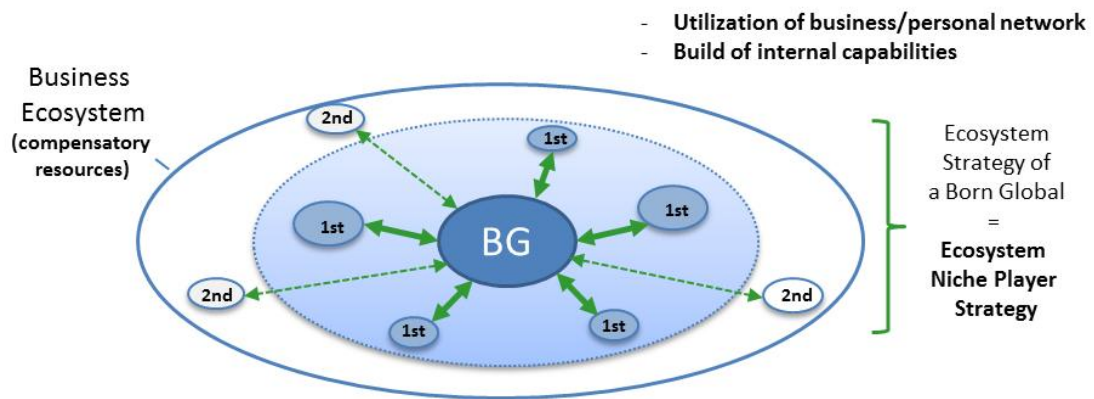


Figure 20: Revised Theoretical Framework A.
Born Global strategy in an ecosystem setting (present moment)

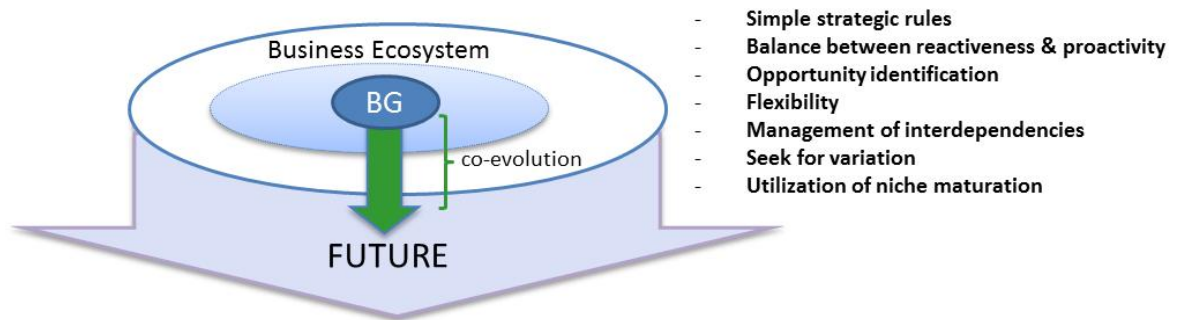


Figure 21: Revised Theoretical Framework B.
The co-evolution strategy of a Born Global (long-term perspective)

6 CONCLUSION

In this section, the theoretical premises as well as the empirical research findings are summarized. In addition, the main contributions of this study are presented, followed by a discussion on managerial implications and recommendations for further research.

6.1 Summary

As the original research problem, this study aimed to explore whether the strategy of Born Globals correspond to the strategy of ecosystem niche players. In addition, the purpose was to investigate how those firms are able to co-evolve with their business environment over time. By using case study method it was empirically validated that business ecosystem have come to play a revolutionary role in the business of small global firms such as these game firms. The summary findings for the original research problem of this study are now presented.

The ecosystem strategy of small global firms correspond the strategy of ecosystem niche players identified by Iansiti & Levien (2004a). The internal resource base, especially employees and in-house technologies, is the ultimate source of competitive advantage for small global game firms in the business ecosystem setting. In order to utilize complementary resources that lie in the firm's external environment, small global firms implement mainly explorative strategies for resource acquisition. Generally, the ecosystem strategy of small global firms is primarily resource driven by nature, thereby lending support to the resource based view of the firm (RBV).

The strategy implemented by small global firms may be a rather informal in the early phases of their business. However, their ecosystem strategy evolves towards more structured approach along with the firm growth and maturity. Regardless the firm age, the personal network of the employees plays a central role in the operations of small global firms. In consequence, the ecosystem strategy of these companies features deliberate investments in informal networks.

In line with the ecosystem theories of Moore (1996) and Iansiti & Levien (2004a), the dual role that the ecosystem plays poses major strategic considerations to small global firms. On one hand, the ecosystem is the fundamental enabler of their existence and provides these firms new business opportunities to tap into. On the other hand, the ecosystem environment directs the business of small global firms and may take a restrictive role in their operations. As a novel insight, a stagnant or decreasing niche domain may provide the firm a hospitable market to operate in, making it unnecessary to move rapidly towards emerging niches solely.

Importantly, the emergence of digital ecosystems has shaped the operational environment of small global software firms radically. Previously, their operations were strongly guided by publisher relations, making these companies suffer from weak, irregular revenue flows. The infrastructure of digital ecosystems has allowed the firms more stable financial standing and greater operational autonomy. At the same time, the new setting has increased the riskiness of their business and created a call for new organizational capabilities.

In order to co-evolve with their business ecosystem, small global firms perform both reactive and proactive actions. The build and enhancement of internal capabilities; as well as the ability to identify fleeting opportunities on constant basis are critical to the ability of small global firms to co-evolve with their ecosystems. Supported by these two means, small global firms strive also for variation: specifically, variation in terms of product type and platforms; number of projects; as well as sources of funding help small global firms to manage the risk relating to their operations. The interdependency between ecosystem fellow participants is a key consideration for small firms. As a response, the co-evolution strategy of small global firms features high degree of organizational flexibility.

In line with the theory of Eisenhardt & Sull (2001), small global firms utilize relatively simple strategic rules in order to deal with the rapidly evolving business environment and the related uncertainty. By contrast, this study found only little or no support for the

alternative strategy theories proposed by Eisendhardt & Brown (1998), Voelpel et al. (2006) or Adner (2006).

6.2 Theoretical contributions

The objective of this study was to extend the currently very limited understanding of the ecosystem strategies of Born Globals. As a starting point for the study, several gaps in the existing literature were identified (see section 2.3.1, p. 36), which demonstrated the urge to examine the Born Global phenomenon more profoundly. In addition to the extensive literature bringing together relevant theories from the fields of Born Global, business ecosystem and strategy literature, the main contributions of this study include

- In-depth empirical research on two Finnish game companies
- The thematic network that was created for analytical purposes
- The revised theoretical framework that was finally suggested

First and foremost, this study contributes to the international business literature by providing several new insights into the business strategy of Born Globals. Previously, the related literature has mainly focused on the internationalization phase of these firms and has often overlooked the considerations posed by their operational environment. In order to broaden the scope of research, this study identified the key components that form a basis for the formulation and implementation of the ecosystem strategy of Born Globals. Furthermore, this study specified the strategic tools these firms utilize for enhancing their ability to co-evolve with their respective business ecosystems. As these topics have been yet only little examined, the findings on the ecosystem strategies of the two case firms proved very fruitful in general. Specifically, they provide a reasonable extension to the research work on Finnish Born Globals that has been undertaken praiseworthy by scholars such as Luostarinen & Gabrielsson 2004, 2006 and Sasi et al. 2009.

Second, the uniqueness of this study arises from the rather unusual opportunity to investigate the strategy of Born Globals in the long term. Although the case interviews were conducted not until lately (i.e. during the actual research process), the author was able to collect material that covered the entire trajectory of the case firms. Similar kind of approach has been previously applied by scholars such as Sasi (2010) and Redwood & Ford (2012). However, the focus on the strategic implications resulting from the evolution of the business ecosystems makes this study highly unique. The value of the findings arises especially from their capability to extend the current knowledge of how the strategy of Born Globals evolves over time: while Eisenhardt & Sull (2001) considered simple strategic rules as particularly suitable for young companies (see section 2.2.3.2, p. 25), the results of this study backs up their suitability for Born Globals later on too.

Third, this study lends further support to the previous research findings concerning the importance of employees in the strategy of Born Globals. Specifically, this study indicates that a small Finland-based company conducting global business can access business areas outside their common reach through the personal network of the firm's employees. Furthermore, this study found evidence that the entrepreneur may play a highly decisive role in the business of Born Globals. In other words, out of the typical features of Born Globals identified by various researchers (see section 2.1.1, p. 9); *Entrepreneurial mindset and/or experience of managers* (F2) and *the importance of networks and/or personal relations* (F4) seem to play a particularly significant role in the strategy of Born Globals. As a novel finding, the founders' ability to hunch fleeting opportunities is proposed as a factor that may steer the ecosystem strategies of these firms. Overall, these results contribute to narrow the gap between the Born Global and strategy literature because they can be considered as the key dynamic capabilities of Born Globals (for the description of dynamic capabilities; see section 2.2.3.2, p. 25).

Fourth, the theories of Moore (1996) and Iansiti & Levien (2004a) form an insightful basis for studying the strategies of business ecosystem participants. Fundamentally, this study validated that the core components of niche player strategies (section 2.2.3.1, p.

22) are featured by Born Global firms. In addition, this study extends the current knowledge of the ecosystem strategy of a single small firm: in particular, the proposition according which the ecosystem strategy of Born Globals should not only follow the evolvement of their ecosystem environment but also the level of the firm's own maturity elaborated the current theories further. In addition, the firm's possibility to utilize their ecosystem interfaces as a supportive tool in their capability building provided a novel standpoint to the existing literature.

Fifth, the findings that did *not* support the prior theories also provide a valuable research contribution. Specifically, there was only little or no empirical evidence found for the strategy theories of time pacing or purposeful organizational misfit (section 2.2.3.2, p. 25) – even though one could expect them to be advantageous in creative industries such as gaming. Thus, this study extends the current understanding on these strategies by indicating that time pacing or misfit strategies may be too radical or demanding for small companies. Instead, the findings indicate that the creativity and innovativeness of these firms is mainly fostered internally by the employees. Furthermore, on the basis of the empirical findings, this study proposes the following important specification to be taken into account when examining the strategies of small global firms: proactiveness as a trait of business strategy (cf. Lewin et al. 1999; Coviello 2006; Autio et al. 2010; Yamakawa et al. 2011; Redwood & Ford 2012) should be distinguished from the firm's internal proactiveness that is mainly driven by the employees.

Finally, in the literature review of this study it was found that researchers are not fully united on whether the product strategy of Born Globals should feature market-based adaptations or not. Thus, the following finding provides a valuable contribution to the current Born Global research: the case firms were found to seek for minimum market adaptation with regard to their regional (end-customer) markets. However, both firms strived to adapt their products to multiple platforms and thereby have many variations of their single products. Thus, the findings of this study indicate the ecosystem strategy of Born Globals to feature product modularity in terms of ecosystem platforms. The author hopes this contributes to clarify the on-going academic debate.

6.3 Managerial implications

On the basis of the results of this study, the following recommendations can be made to the executives and managers of Born Global firms. The recommendations are provided in a bullet point form because the author believes it contributes to the clarity of the message and thereby serves the interest of the target audience (i.e. corporate representatives) the best.

- Generally, it is critical to acknowledge the dual role the business ecosystem plays in the operations of the firm. In order to succeed in any business ecosystem, the strategy of the firm must take into account the fundamental interdependency that characterise the business operations in the ecosystem setting. In particular, the firm should seek to manage and leverage these interdependencies in order to improve their relative network position against the more powerful ecosystem participants.
- Firms should take note that their ability to co-evolve with business ecosystem can be enhanced by the following means: favouring simple strategic rules; finding a balance between reactive and proactive actions; identifying new opportunities on constant basis; featuring flexibility especially with regard to the firm's internal practices; and seeking to establish variation in order to manage the business risks.
- If the firm utilizes the business ecosystem as a source of complementary resources, the capability to build and retain network relations should be emphasized in the strategy of the firm. In addition, the value of more informal relations should not be underestimated: rather, the firm should consider making strategic investments in personal relations in order to gain additional business benefits.

- Whilst continuously monitoring the evolution of the business ecosystem and new opportunities that open up, it is important to keep in mind that the firm should not try to pursue every possible opportunity they identify. The key question for the management is whether the firm should keep implementing the current practices or continue into new ecosystem environments (i.e. pursue multiple strategies simultaneously). In order to avoid the loss of focus, Born Globals should carefully consider whether the new initiatives fit into the strategic scope of the firm.

- If the firm operates in the business of digital goods, the products should be created to support multiple digital platforms. Overall, the technology cycle is critical for the management to acknowledge: the dominant design that prevails in the ecosystem will be eventually replaced by new technologies, which requires organizational adaptability and certain preparedness. The flexible in-house technology helps the firm to create platform-wise variation and thereby mitigate the risk of their business. In turn, the actual content of digital products should feature minor adaptations in order to allow global scalability.

Finally, for Born Globals operating in creative industries, the influx of new ideas appeared crucial to the success of the firm. This is why these companies should pay particular attention to their capability to manage and retain talent. In seek of fostering the organizational creativity, the firm's internal culture and the affinity between the employees may prove highly important.

6.4 Recommendations for further research

This study contributed to filling the several research gaps that stem from three directions - specifically, from the fields of Born Global; business ecosystem; and strategy research. However, there is a considerable need to conduct more research on the strategies of Born Globals in the business ecosystem setting. This study leaves room for further investigation of many related aspects, some of which are suggested below.

First, in order to contribute to the understanding of the differences associated with the national context, it would be very interesting to examine case companies that originate from another small economy. The second aspect deals with the type and number of the case companies. This study focused on two firms with long and eventful corporate histories. Thus, more case companies should be involved in related future studies in order to obtain more generalizable results. Furthermore, by including also less mature game firms in the sample, valuable insights with regard to strategies of young Born Globals in the context of digital business ecosystems could be gained.

The case firms of this study operate in game industry. However, as the third recommendation for further studies, it would be important to extend the scope of research to cover other types of software businesses too. With help of cross-industry comparison, valuable information on the generalizability of the research findings as well as the industry-specific factors could be obtained. Finally, the findings of this study indicated that the ability of an entrepreneur to ‘hunch’ new business opportunities may play a very important role in the strategy of a Born Global. It would be very interesting to conduct more research on the topic and examine how do entrepreneurs shape the strategic direction of these companies.

REFERENCES

- Adner, Ron (2006): Match Your Innovation Strategy to Your Innovation Ecosystem. *Harvard Business Review* 84 (4) 98-107.
- Adner, Ron and Levinthal, Daniel A. (2004). What Is Not a Real Option: Considering Boundaries For The Application Of Real Options to Business Strategy. *Academy of Management Review*, 29 (1) 74-85.
- Anderson, Philip and Tushman, Michael L. (1990). Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change. *Administrative Science Quarterly*, 35, 604-633.
- Arenius Pia, Sasi Viveca and Gabrielsson Mika (2006). Rapid Internationalization Enabled by the Internet: The Case of a Knowledge Intensive Company. *J Int Entrepr.*, 3, 279-290.
- Attride-Stirling, Jennifer (2001). Thematic Networks: an Analytic Tool for Qualitative Research. *Qualitative Research*, 1 (3) 385-405.
- Autio, Erkki (2005). Creative tension: the significance of Ben Oviatt's and Patricia McDougall's article toward a theory of international new ventures. *Journal of International Business Studies*, Jan2005, 36 (1) 9-19.
- Autio, Erkki, George, Gerard and Alexy, Oliver (2010). International Entrepreneurship and Capability Development – Qualitative Evidence and Future Research Directions. *Entrepreneurship Theory and Practice*, Jan2011, 11-37.
- Barney, Jay (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Mar91, 17 (1), 99-120.
- Bartlett, Christopher A. and Ghoshal, Sumantra (1989). *Managing Across Borders: The Transnational Solution*. Harvard Business School Press, Boston.
- Bingham, Christopher B. and Eisenhardt, Kathleen M. (2011). Rational heuristics: the 'simple rules' that strategists learn from process experience. *Strategic Management Journal*. Dec2011, 32 (13) 1437-1464.
- Boxberg, Katja (2012). Pelialan läpimurto yhä saavuttamatta. *Kauppalehti* 25.9.2012. 4-5.
- Bradley, S., Kim, C., Kim, J. and Lee, I. (2012): Toward and Evolution Strategy for the Digital Goods Business. *Management Decision*, 50 (2) 234-252.

Bryman, Alan (2004). *Social Research Methods*. 2nd edn. Oxford University Press Inc., New York.

Brynjolfsson, Erik, Quimby, John, Urban, Glen, Van Alstyne, Marshall and Verrill, David (2007). Tools and Frameworks for Digital Business Ecosystems. In Corallo, Angelo, Passiante, Giuseppina and Prencipe, Andrea (ed.) *The Digital Business Ecosystem*. Edward Elgar Publishing Limited. Cheltenham, United Kingdom, 198-216.

Burger-Helmchen Thierry and Cohendet Patrick (2011). User Communities and Social Software in the Video Game Industry. *Long Range Planning*, 44, 317-343.

Canalys (2012). *Top 25 US Developers Account for Half of App Revenue*. Press release 2012/121. 4.12.2012. <http://www.canalys.com/newsroom/top-25-us-developers-account-half-app-revenue> (Retrieved in 1.1.2013)

Cantwell, John, Dunning, John H. and Lundan, Sarianna M. (2009) An Evolutionary Approach to Understanding International Business Activity: The Co-evolution of MNEs and The Institutional Environment. *Journal of International Business Studies* (2010), 41, 567-586.

Casas Ramunas and Dambrauskaite Vilma (2011). Impact of External Business Environment Factors on Internationalization of Lithuanian Born Global Companies. *Ekonomika*, 90 (3), 120-134.

Caves R. E. and Porter M. E. (1977). From entry barriers to mobility barriers: conjectural decisions and contrived deterrence to new competition. *Quarterly Journal of Economics*, 91 (2) 241–262.

Chandler, A. D, J R . (1962). *Strategy and Structure: Chapters in the History of American Industrial Enterprise*, MIT Press, Cambridge, MA.

Cheng, Deng Neng and Liang Ting-Peng (2011). Knowledge Evolution Strategies and Organizational Performance: a Strategic Fit Analysis. *Electronic Commerce Research and Applications*, 10, 75-84.

Cohen, Wesley M. and Levinthal, Daniel A (1990). Absorptive Capacity: a New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35 (1) 128-152.

Conner, Kathleen R (1991). A Historical Comparison of Resource-Based Theory and Five Schools of Thought Within Industrial Organization Economics: Do We Have a New Theory of the Firm? *Journal of Management*, 17 (1) 121-134.

Corallo, Angelo, Passiante, Giuseppina and Prencipe, Andrea (2007). *The Digital Business Ecosystem*. Edward Elgar Publishing Limited, Cheltenham.

- Corallo, Angelo and Protopapa Stefania (2007). Business Networks and Ecosystems: rethinking the Biological Metaphor. In Nachira F., Dini P., Nicolai A., Le Louarn M. and Riviera Léon, L. (ed.) *Digital Business Ecosystems*. 60-64. <http://www.digital-ecosystems.org/dbe-book-2007/> (retrieved in 8.11. 2012)
- Coviello, Nicole E. and Cox, Martin P. (2006). The Resource Dynamics of International New Venture Networks. *J Int Entrepr*, 2006, 4, 113-132.
- Coviello, Nicole E. (2006) The Network Dynamics of International New Ventures. *Journal of International Business Studies*, 37, 713-731.
- Davis, Jason P., Eisenhardt, Kathleen M. and Bingham, Christopher B. (2009). Optimal Structure, Market Dynamism, and the Strategy of Simple Rules. *Administrative Science Quarterly*, 54 (3) 413-452.
- Dini, Paolo (2007). A Scientific Foundation for Digital Ecosystems. In Nachira F., Dini P., Nicolai A., Le Louarn M. and Riviera Léon, L. (ed.) *Digital Business Ecosystems*. 23-46. <http://www.digital-ecosystems.org/dbe-book-2007/> (retrieved in 8.11. 2012)
- Dini, Paolo and Nicolai, Andrea (2003). D.B.E. – The Digital Business Ecosystem. http://www.digital-ecosystems.org/cluster/dbe/dbe_summary_cc.pdf (retrieved in 8.11.2012)
- Dome.fi (2010). Remedy Entertainment – Espoolaisesta Kellarista maailmanmaineeseen. 24.5.2010 <http://dome.fi/pelit/artikkelit/yleiset/remedy-entertainment-espoolaisesta-kellarista-maailmanmaineeseen> (retrieved in 31.12.2012)
- Donaldson, Lex (1987). Strategy and Structural Adjustment to Regain Fit and Performance: In Defence of Contingency Theory. *Journal of Management Studies*, 24 (1) 1-24.
- Dunning, John H. (1995) Reappraising the Eclectic Paradigm In an Age of Alliance Capitalism. *Journal of International Business Studies*, 26 (3) 461-490.
- Dunning, John H. (2000). *Relational Assets, Networks and International Business Activity*. (Conference paper) Paper presented in EIBA conference, Maastricht, 2000.
- Dunning, John H. and Wymbs, Cliff (2001). The Challenge of Electronic Markets for International Business Theory. *Int. J. of the Economics of Business*, 8 (2) 273-301.
- Dyer Jr., W. Gibb and Wilkins, Alan L (1991). Better Stories, Not Better Constructs, To Generate Better Theory: a Rejoinder to Eisenhardt. *Academy of Management Review*, 16 (3) 613-619.

- Etemad, Hamid (2004). Internationalization of Small and Medium-sized Enterprises: A Grounded Theoretical Framework and an Overview. *Canadian Journal of Administrative Sciences*, 21 (1) 1-21.
- Eisenhardt, Kathleen M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14 (4) 532-550.
- Eisenhardt, Kathleen M. & Brown, Shona L. (1998). Time Pacing: Competing In Markets that Won't Stand Still. *Harvard Business Review*, 76 (2) 59-69.
- Eisenhardt, Kathleen M. & Gahmic, D. Charles (2000). Coevolving. *Harvard Business Review*, 78 (1) 91-101.
- Eisenhardt, Kathleen M. and Graebner, Melissa E. (2007). Theory Building From Cases; Opportunities and Challenges. *Academy of Management Journal*, 50 (1) 25-32.
- Eisenhardt, Kathleen M. and Martin, Jeffrey A. (2000). Dynamic Capabilities: What Are They? *Strategic Management Journal*, 21, 1105-1121.
- Eisenhardt, Kathleen M. & Sull, Donald L. (2001). Strategy as Simple Rules. *Harvard Business Review*, 79 (1) 106-116.
- Eriksson, Päivi and Kovalainen, Anne (2008). *Qualitative Methods in Business Research*. Sage Publications Ltd, London.
- Eskola, Jari & Suoranta, Juha (2005). *Johdatus Laadulliseen Tutkimukseen*. Vastapaino, Tampere.
- Falay, Zeynep, Salimäki, Markku, Ainamo, Antti and Gabrielsson, Mika (2007): Design-intensive Born Globals: a Multiple Case Study of Marketing Management. *Journal of Marketing Management*, 23 (9/10) 877-899.
- Gabrielsson Mika and Gabrielsson Peter (2010). Internet-based Sales Channel Strategies of Born Global Firms. *International Business Review*, 2011, 20, 88-99.
- Gabrielsson, M. & Kirpalani, M. (2004). Born Globals: How to Reach New Business Space Rapidly, *International Business Review*, 13 (5) 555-571.
- Gamersbook 2010. 'About Us'. 16.9.2010.
<http://www.gamersbook.com/scene/developers/remedy-entertainment/about/>
 (retrieved in 31.12.2012)
- George, Gerard, Zahra, Shaker A., Autio, Erkki and Sapienza, Harry J. (2004). By Leaps and Rebounds: Learning and The Development of International Market Entry

Capabilities in Start-Ups. *Academy of Management Best Conference Paper* 2004. 1-6.

Ghazinoory, Sepehr, Adbu, Mansoureh & Azadegan-Mehr Mandana (2011). SWOT Methodology: A State-of-the-Art Review for the Past, A Framework for the Future. *Journal of Business Economics and Management*, 12 (1) 24-48.

Gossain, Sanjiv and Kandiah, Gajen (1998). Reinventing Value: The New Business Ecosystem. *Strategy and Leadership*, 26 (5) 28-33.

Granqvist, Nina (2004). New Industry Creation in Knowledge-driven Businesses – Case Mobile Games Industry in Finland.
http://www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/oklc5/papers/c-3_granqvist.pdf (Retrieved in 11.1.2013)

Grant, Robert M. (1996). Prospering in Dynamically Competitive Environments: Organizational Capability as Knowledge Integration. *Organization Science*, 7 (4) 375-387.

Gray, David E. (2004). *Doing Research in the Real World*. Sage Publications Inc., London.

Gupta, Anil K. and Govindarajan Vijay (2000). Knowledge Flows Within Multinational Corporations. *Strategic Management Journal*, 21, 473-496.

Hagel III, J., Brown, J.S. & Davison, L. (2008). Shaping Strategy in a World Constant Disruption. *Harvard Business Review*, October 2008, 80-89.

Halinen, Aino and Törnroos, Jan-Åke (2005). Using Case Methods in the Study of Contemporary Business Networks. *Journal of Business Research*, 58 (9) 1285-1297.

Hamel, Gary (1999). The Strategos Manifesto.
<http://www.strategosnet.com/about/manifesto.html> (retrieved in 15.10.2012)

Hendershott, T. and Zhang, J. (2006). A Model of Direct and Intermediated Sales. *Journal of Economics and Management Strategy*, 15 (2) 276-316.

Hirsjärvi, Sirkka and Hurme, Helena (2009). *Tutkimushaastattelu. Teemahaastattelun Teoria ja Käytäntö*. Yliopistopaino, Helsinki.

Hirvonen, Timo (2004). From Wood to Nokia: The Impact of the ICT Sector in the Finnish Economy. *ECFIN Country Focus*, 1 (11) 1-7.
http://ec.europa.eu/economy_finance/publications/publication1417_en.pdf
(Retrieved in 30.12.2012)

Housemarque 2012a: 'Housemarque Vision' <http://www.housemarque.com/about-us/housemarque-vision/> (Retrieved in 3.1.2013)

Housemarque 2012b: 'For Investors' <http://www.housemarque.com/about-us/for-investors/> (Retrieved in 2.1.2013)

Hymer, Stephen H. (1976). *The International Operations of National Firms: a Study of Direct Investments*. MIT Press, Cambridge.

Iansiti, Marco & Levien, Roy (2004a). *The Keystone Advantage. What the New Dynamics of Business Ecosystems Mean for Strategy, Innovation, and Sustainability*. Harvard Business School Publishing Corporation, Boston.

Iansiti, Marco & Levien, Roy (2004b). Strategy as Ecology. *Harvard Business Review*, 82 (3) 68-78.

Isenberg, Daniel J. (2008): The Global Entrepreneur. *Harvard Business Review*, 86 (12) 107-111.

Johanson, Jan and Vahlne, Jan-Erik (1977). The Internationalisation Process of the Firm—A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, 8 (1) 25-34.

Jolly, V., Alahuhta, M., & Jeannet, J.-P. (1992). Challenging the incumbents: How high technology start-ups complete globally. *Journal of Strategic Change*, 1, 71-82.

Kogut Bruce and Zander Udo (1992). Knowledge of The Firm, Combinative Capabilities, and The Replication of Technology. *Organization Science*, 3 (3) 383-396.

Kogut Bruce and Zander Udo (1993). Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation. *Journal of International Business Studies*, 24 (4) 625-645.

Kogut Bruce and Zander Udo (2003). Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation. *Journal of International Business Studies*, 34, 516-529.

Koiso-Kanttila, Nina (2004) Digital Content Marketing: a Literature Synthesis. *Journal of Marketing Management*, 20, 45-65.

Kovalainen, Jari (2009). Ilmesty Sitten, Kun Se On Valmis. *Kauppalehti*, 9.2.2009, 10.

Kovalainen, Jari (2012). Pelitalo Otti Langat Omiin Käsiinsä. *Kauppalehti*, 7.2.2012, 14.

- Kuittinen, Ilari (2013). CEO, Housemarque Oy. An interview in Helsinki on 02.01.2013.
- Kvale, Steinar (1996). *Interview: An Introduction to Qualitative Research Interviewing*. Sage Publications Inc., London.
- Kyriakopoulos, Kyriakos and Moorman, Christine (2004). Tradeoffs in marketing exploitation and exploration strategies: The overlooked role of market orientation. *International Journal of Research in Marketing*, 21 (3) 219-240.
- Laanti, R., Gabrielsson, M., & Gabrielsson, P (2007). The globalization strategies of business-to-business born global firms in the wireless technology industry. *Industrial Marketing Management*, 36 (8), 1104 – 1117.
- Lam, Chuan-Leong (2007). The Growing Volatility of the Global Economy from a Complex System Perspective. In Corallo, Angelo, Passiante, Giuseppina and Prencipe, Andrea (ed.) *The Digital Business Ecosystem*. Edward Elgar Publishing Limited. Cheltenham, United Kingdom. 117-126.
- Lawrence, P. R. and Lorsch, J. W. (1967). *Organization and Environment: Managing Differentiation and Integration*. Division of Research, Graduate School of Business Administration, Harvard University, Boston.
- Levinthal, Daniel A. and March, James G. (1993). The Myopia of Learning. *Strategic Management Journal*, 14, 95-112.
- Lewin, Arie Y., Long, Chris P. and Carroll, Timothy N. (1999) The Coevolution of New Organizational Forms. *Organization Science*, 10 (5) 535-550.
- Lewin, Arie Y. and Volberda, Henk W. (1999). Prolegomena on Coevolution: A Framework for Research on Strategy and New Organizational Forms. *Organization Science*, 10 (5) 519-534.
- Lewin, Arie Y. and Volberda, Henk W. (2003). Guest Editors' Introduction. Co-evolutionary Dynamics Within and Between Firms: From Evolution to Co-evolution. *Journal of Management Studies*, 10 (8) 2111-2134.
- Lin, Yan (2009). Virtual Organizing in Born Global Organizations: Infrastructure, Coordination, and Identification. Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning. 2009, 356-363.
- Luostarinen, Reijo and Gabrielsson, Mika (2004). Finnish perspectives of international entrepreneurship. In Dana, L. P. (Ed.), *Handbook of Research on International Entrepreneurship*, Edward Elgar, Cheltenham.

- Luostarinen, Reijo and Gabrielsson Mika (2006). Globalization and Marketing Strategies of Born Globals in SMOPECs. *Thunderbird International Business Review*, 48 (6) 773-801.
- Madhok, Anoop and Phene, Anupama (2001). The Co-evolutionary Advantage: Strategic Management Theory and the Eclectic Paradigm. *International Journal of the Economics of Business*, 8 (2) 243-256.
- Majumdar, Swapan Kumar (2007). MAP-STEPS: a Framework for Opportunity Assessment and Development of a Sustainable Business Model for eBusiness. In Corallo, Angelo, Passiante, Giuseppina and Prencipe, Andrea (ed.) *The Digital Business Ecosystem*. Edward Elgar Publishing Limited. Cheltenham. 184-197.
- Maula, Marjatta (1999). *Multinational Companies as Learning and Evolving Systems. A Multiple Case-study of Knowledge-intensive Service Companies. An Application of Autopoiesis Theory*. Helsinki School of Economics and Business Administration, Doctoral Dissertation A-154. HeSe print, Helsinki. 1-423.
- Mayer, David and Kenney, Martin (2004). Economic Actions Does Not Take Place in a Vacuum; Understanding Cisco's Acquisition and Development Strategy. *Industry & Innovation*, 11 (4) 299-325.
- McDougall, Patricia P. and Oviatt, Benjamin M (2003). Some Fundamental Issues in International Entrepreneurship <http://www.hajarian.com/esterategic/tarjomeh/88-1/farahzadi.pdf> (retrieved in 13.11.2012)
- McDougall, Patricia P., Shane, Scott & Oviatt, Benjamin M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9 (6) 469-487.
- Moore, James F. (1993). Predators and Prey: A New Ecology of Competition. *Harvard Business Review*. May-June 1993, 75-86.
- Moore, James F. (1996). *The Death of Competition. Leadership and Strategy in the Age of Business Ecosystems*. John Wiley & Sons Ltd, West Sussex.
- Moore, James F. (2006). Business Ecosystems and the View From the Firm. *The Antitrust Bulletin*, 51 (1) 31-75.
- Moore, James F. and Curry, Sheree R. (1996). The Death of Competition. *Fortune*, 133 (7) 142-144.
- Myllyrinne, Matias (2012). CEO, Remedy Entertainment Oy. An interview in Espoo on 19.12.2012.

Nachira, Francesco, Dini, Paolo and Nicolai, Andrea (2007) A Network of Digital Business Ecosystems for Europe: Roots, Processes and Perspectives. In Nachira F., Dini P., Nicolai A., Le Louarn M. and Riviera Léon, L. (ed.) *Digital Business Ecosystems*. 1-20. <http://www.digital-ecosystems.org/dbe-book-2007/> (retrieved in 8.11. 2012)

Nachira, Francesco and Dini Paolo (2007). The Paradigm of Structural Coupling in Digital Ecosystems. In Corallo, Angelo, Passiante, Giuseppina and Prencipe, Andrea (ed.) *The Digital Business Ecosystem*. Edward Elgar Publishing Limited. Cheltenham. 33-52.

Nelskylä, Lena (2012). Ei Mikään Peruscell. *Nyt*, 7.12.2012 http://nyt.fi/20121207-supercell-rynnii-eteenpaein-barbaarimaisella-tahdilla/?ref=tf_iNytboksi (Retrieved in 1.1.2013)

Nelson Richard R. and Winter, Sidney G. (1982). *An Evolutionary Theory of Economic Change*. Belknap Press of Harvard University Press, Cambridge, MA.

Neogames (2011). The Finnish Game Industry 2010-2011. 3-15
<http://hermia-fi-bin.directo.fi/@Bin/1337618f0be1ce3169da0876ffcf146b/1351346565/application/pdf/928763/Finnish%20Games%20Industry%202010-2011.pdf> (retrieved in 22.10.2012)

Noy, Eli (2010). Niche Strategy: Merging Economic and Marketing Theories with Population Ecology Arguments. *Journal of Strategic Marketing*, 18 (1) 77-86.

Porter, Michael E. (1979). The structure within industries and companies' performance. *Review of Economics and Statistics*, 61 (2) 214–227.

Porter, Michael E. (1980). *Competitive Strategy*. The Free Press & Macmillan, New York.

O'Callaghan Ramon (2007). Towards Dynamic Clustering: Capabilities and IT Enablers. (<http://www.digital-ecosystems.org/book/pdf/2.0.pdf>) (retrieved in 12.10.2012)

Oviatt, Benjamin M. and McDougall, Patricia P. (1994). Toward a theory of international new ventures, *Journal of International Business Studies*, 25 (1) 45–64.

Oviatt, Benjamin M., & McDougall, Patricia P. (1995). Global Start-ups: Entrepreneurs on a Worldwide Stage. *Academy of Management Executive*, 9 (2), 30-43.

Pfeffer, Jeffrey and Salancik, Gerald R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row, New York.

- Rennie, Michael W. (1993). Born Global. *The McKinsey Quarterly*, 4. 45-52.
- Redwood, Michael and Ford, David (2012). The Role of a Single Actor in Technical Innovation and Network Evolution: An Historical Analysis of the Leather Network. *Journal of Customer Behaviour*, 11 (2) 181-196.
- Rouvinen, Petri & Ylä-Anttila Pekka (2003). Case Study: Little Finland's Transformation to a Wireless Giant. In Dutta, Soumitra, Lanvin, Bruno and Paua, Fiona (ed). *The Global Information Technology Report 2003-2004*. Oxford University Press, New York, 87-108.
- Rowley, Jennifer (2012). Conducting Research Interviews. *Management Research Review*, 35 (3/4) 260-271.
- Rubenstein, Herbert R. and Grundy, Tony (1999). *Breakthrough Inc: High-Growth Strategies for Entrepreneurial Organizations*. Pearson Education Limited, Edinbough.
- Saarikoski, Petri and Suominen, Jaakko (2009). Computer Hobbyists and the Gaming Industry in Finland. *IEEE Annals of the History of Computing*, July-September 2009, 20-33.
- Sasi, Viveca (2010). From Hype to Bursting Bubble – Rapid Internationalization of a Born Global Company. In Sasi (2011): *Essays on Resource Scarcity, Early Rapid Internationalization and Born Global Firms*. Aalto University publication series, Doctoral Dissertations 142/2011. Unigrafia Oy, Helsinki, 153-174.
- Sasi, Viveca (2011). A Re-examination of the Stages Model of Internationalization: A Theory for Born Globals? In Sasi (2011): *Essays on Resource Scarcity, Early Rapid Internationalization and Born Global Firms*. Aalto University publication series, Doctoral Dissertations 142/2011. Unigrafia Oy, Helsinki, 10-35.
- Sasi Viveca and Arenius Pia (2008). International New Ventures and Social Networks: Advantage or Liability? *European Management Journal*, 26, 400-411.
- Sasi, Viveca and Arenius, Pia (2011). Strategies for Circumventing Born Global Firms' Resource Scarcity Dilemma. In Sasi (2011): *Essays on Resource Scarcity, Early Rapid Internationalization and Born Global Firms*. Aalto University publication series, Doctoral Dissertations 142/2011. Unigrafia Oy, Helsinki, 153-174.
- Sasi, Viveca, Arenius Pia, Näkkäläjärvi P., and Sperling, G. (2009). Social Networks and Rapid Internationalization of New Ventures in Israel and Finland. In

Sasi, Viveca (2011): *Essays on Resource Scarcity, Early Rapid Internationalization and Born Global Firms*. Aalto University publication series, Doctoral Dissertations 142/2011. Unigrafia Oy, Helsinki, 107-134.

Suomen Pelitoimialan Strategia 2010-2015: Visio 2020. 2/2010.
<http://hermia-fi-bin.directo.fi/@Bin/d71f612c0f4af6e48d7ef1306813e266/1361292126/application/pdf/777120/Pelistrategia%202010-2015.pdf> (retrieved in 22.10.2012)

Stanley, Jo & Briscoe, Gerard (2010). The ABC of Digital Business Ecosystems. Communications Law. <http://arxiv.org/ftp/arxiv/papers/1005/1005.1899.pdf> (retrieved 12.10.2012)

Steinbock, Dan (2002). *Finland's Wireless Valley; Domestic Policies, Globalizing Industry*. Tekes, Technology Review 138/2003. November 2002.

Steinbock, Dan (2004). *What Next? Finnish ICT Cluster and Globalization*. Sisäasiainministeriön Julkaisuja 38/2004. Suomen Printman Oy, Hyvinkää.
http://www.intermin.fi/download/25130_382004.pdf (Retrieved in 30.12.2012)

Sull, Donald and Eisenhardt, Kathleen M. (2012). Simple Rules for a Complex World. *Harvard Business Review*, 90 (9) 68-74.

Taghian, Mehdi and Shaw, Robin N. (2010). Market Fit and Business Performance: an Empirical Investigation. *Journal of Strategic Marketing*, 18 (5) 395-415.

Tallman, Stephen B (1991). Strategic management models and resource-based strategies among MNEs in a host market. *Strategic Management Journal*, 12, 69-82.

Teece, David J. (2011). Dynamic Capabilities: A Guide for Managers. *Ivey Business Journal*, 75 (2) 29-32.

Teece, David J., Pisano, Gary and Shuen Amy (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18 (7) 509-533.

Telesca, Luigi and Koshutansky Hristo (2007). A Trusted Negotiation Environment for Digital Ecosystem. In Nachira F., Dini P., Nicolai A., Le Louarn M. and Riviera Léon, L. (ed.) *Digital Business Ecosystems*. 141-146. <http://www.digital-ecosystems.org/dbe-book-2007/> (retrieved in 13.11.2012)

Tuomi, Jouni & Sarajärvi, Anneli (2009). *Laadullinen tutkimus ja sisällönanalyysi*. Tammi, Helsinki.

Tushman, Michael L. and Anderson Philip (1986). Technological Discontinuities and Organizational Environments. *Administrative Science Quarterly*, 31, 439-465.

Voelpel, Sven C., Leibold, Marius and Tekie, Eden B. (2006). Managing Purposeful Organizational Misfit: Exploring the Nature of Industry and Organizational Misfit to Enable Strategic Change. *Journal of Change Management*, 6 (3) 257-276.

Wehrich, H. (1982) The TOWS Matrix for Situational Analysis. *Long Range Planning*, 15 (2) 54-66.

Wernerfelt, Birger (1984) A Resource-based View of the Firm. *Strategic Management Journal*, 5 (2) 171-180.

Yamakawa, Yasuhiro, Yang, Haibin and Lin, Zhiang (John) (2010). Exploration versus Exploitation in Alliance Portfolio: Performance Implications of Organizational, Strategic and Environmental Fit. *Research Policy*, 2011, 20, 287-296.

Yin, Robert K. (2009). *Case Study Research: Design and Methods*. Sage Publications Inc, California.

Yli-Renko Helena & Autio Erko (1997). The Network Embeddedness of New, Technology-Based Firms: Developing a Systemic Evolution Model. *Small Business Economics*, 1998, 11, 253-267.

Zaheer, Srilata (1995). Overcoming the Liability of Foreignness. *Academy of Management Journal*, 38 (2) 341-363.

Zahra, Shaker A. (2005). Theory of International New Ventures: a Decade of Research. *Journal of International Business Studies*, 36 (1) 20-28.

APPENDIXES

Appendix 1. The case interview details and the background information of the interviewees

Interviews						
Company	Source	Date	Location	Duration	Language of the interview	Transcribed material
Remedy Entertainment Oy	Matias Myllyrinne (CEO)	19.12.2012	Espoo	01:41:36	English	23pg.
Housemarque Oy	Ilari Kuittinen (CEO)	02.01.2013	Helsinki	01:52:40	Finnish	19pg.

Appendix 2. The Outline of the Case Interviews

1. Introductory Questions

- a) Can you tell about the key persons of the firm and briefly describe their responsibilities and background.
- b) How would you describe the external operational environment of the firm?
- c) Describe the nature of your relationships with suppliers, customers, competitors and other important contacts in the firm's network.
- d) Please describe the firm's development pattern with regard to the following aspects:
 - Products & offering
 - Operations strategy
 - Markets
- e) Thinking about the firm's history, please identify the main challenges that you have faced during the different stages of the firm's development?
- f) When did it become obvious that the firm seeks to target global markets?

2. Critical Resources and Capabilities

- a) Please specify the most critical internal and external resources of the firm
 - How have these evolved since the foundation of the firm?
- b) Please specify the key capabilities of the firm.
 - How have these evolved since the foundation of the firm?
 - Why have they been critical?
- c) How have you managed to adjust your resource base to the rapidly changing environment?

3. Network & Environment

- a)** What kind of role has
- the business network
 - the personal networks of key employees played in the firm's operations over the history?
Please describe.
- b)** Thinking about the development of digital ecosystems (e.g. Apple and Google),
- When did the firm discover the emergence of such ecosystems and what did they mean to your business?
 - How do you see your company's role within such ecosystems?
 - How does the future of digital ecosystems appear to you?
- c)** How does the firm deal with risks posed by the rapidly changing environment and uncertainty?
- d)** Currently, what is the importance of digital distribution to the firm compared to the publisher-driven model? In case the traditional distribution model is still implemented by the company, please explain why.

4. Strategy

- a)** Generally, which specific characteristics of the firm's strategy have been the most significant enablers of your prior business performance?
- b)** How has the emphasis of your strategy evolved since the foundation of the firm?
- c)** Please explain how the external factors have affected (enabled and restricted) the strategy you firm has been able to implement over time.
- d)** When a critical decision-making point occurs, what kind of matters and principles guide the strategic decisions of the firm?
- e)** Does your strategy embrace multiple alternatives, variation and/or experiment of new ideas? If yes, please explain why the firm considers them important.
- f)** Does the company make market-based adaptations to the products? Please explain why/why not.
- g)** How is the strategy you described above implemented in practice?
- Do you have a formal procedure that you seek to follow closely or try to keep the strategy processes relatively simple and suggestive?
- h)** Please evaluate the strengths and weaknesses of the firm's strategy. Why is it particularly

suitable for your type of organization?

5. Opportunity Identification

- a) How has the rapid growth of the industry impacted the firm and how have you responded? (e.g. the level of competition)
- b) Thinking about how the firm evolves with the constantly developing environment, do you seek to establish competitiveness-enhancing initiatives unprompted or rather to take actions as a response to the environmental changes that occur?
- c) Please describe the firm's outlook on new business opportunities. Are you moderate in terms of entering into something new or pursue emerging opportunities aggressively?

6. Future

- a) How do you see the firm's business and development pattern in future?
- b) What do you consider as the key factors that enhance your competitiveness in the rapidly changing environment in future?

Does anything additional with regard to the relationship between your strategy and business ecosystem come to your mind?

Is there any related material that you could distribute?

Appendix 3. A Timeline of Housemarque Oy's History

1995	HTML 2.0 standard	Housemarque founded
1996	Electronic Data Interchange (EDI)	Super Stardust (PC) PC CD ROM by GameTek UK Alien Incident (PC) PC CD ROM by GameTek UK
1997		The Reap (PC) PC CD ROM by Take2
1998		Supreme Snowboarding (Boarder Zone in NA) (PC) PC CD ROM by Infogrames
1999		Housemarque establishes a joint-venture SpringToys Ltd together with Sonera and Equitec Partners
2000		Housemarque establishes a first ever game programming program
2001		
2002	Extensible Markup Language (XML) 1.0	Transworld Snowboarding (Retail - Console) Microsoft Xbox, under Ataru brand by Infogrames
2003	Official release of Steam (Valve Corporation) Neogames established 2003 in Finland N-Gage launched by Nokia	Flo Boarding (Mobile game) Bundled with N-Gage device by Nokia 'Floboarding II' and 'Final' (PC), Both relating to Nokia Game 2003
2004	Mobile game industry adopted to Tekes' Fenix program Xbox Live Arcade launched (Microsoft)	
2005		Gizmondo Motocross 2005 (Mobile game) for Gizmondo mobile platform by Gizmondo The Chronicles of Narnia (3D) (Mobile game) for J2ME & Brew mobile platform by Buena Vista Internet Group
2006	PlayStation Network, PSN (Sony)	Tin Star (Nokia high-end 3D demo for Nokia GDC keynote) Consulting and optimizing work done for Sony's 'Killzone: Liberation'
2007		Super Stardust HD (downloadable console) PS3 (PSN) by Sony
2008	Apple begins to support third-party app development App Store for iPhone (Apple) Android Market (later Google Play) (Google)	Golf: Tee it Up (downloadable console) Xbox 360 (XBLA) by Activision Super Stardust Portable (downloadable console), PSP (PSN)
2009		
2010	Steam takes on cross-platform functionality Windows Phone 7 market place (later Windows Phone Store) (Microsoft) App Store for iPad (Apple) Nintendo eShop (Nintendo) Windows Store (Microsoft)	Dead Nation (downloadable console) Playstation 3 (PSN)
2011		Outland (downloadable console), PS3 (PSN) & Xbox 360 (XBLA) by Ubisoft (Housemarque's first multiplatform release) Dead Nation: Road of Devastation, Self-published
2012		Furmins HD (Mobile game), The first self-published and funded game for iOS Super Stardust Delta (downloadable console) PS Vita OSN by Sony Free DLC update to Dead Nation: Road of Devastation released Angry Birds Trilogy (Retail - Console) for Xbox 360, PS3 and Nintendo 3DS (NB not downloadable) by Activision
2013		

1996-1998:
- Con Quest (PC Online)
(An online MMO experiment published by Sonera)
- Six 'advertisement' games on PC

Appendix 4. A Timeline of Remedy Entertainment Oy's History

1995	HTML 2.0 standard	Remedy Entertainment founded
1996	Electronic Data Interchange (EDI)	Death Rally (PC) by Apogee Software Ltd
1997		a 3D benchmark program Final Reality (later 3DMark) created Remedy establishes Futuremark to handle Final Reality the development of Max Payne begins
2001		Max Payne (PC) by Gathering of Developers (The PS2 version of Max Payne was developed by Rockstar Games, a publishing label of Take-Two Interactive Software)
2002	Extensible Markup Language (XML) 1.0	Remedy sells the IP rights of Max Payne for \$43M
2003	Official release of Steam (Valve Corporation) Neogames established 2003 in Finland N-Gage launched by Nokia	Max Payne 2: Fall of Max Payne (PC) by Rockstar Games (The PS2 and Xbox versions of Max Payne 2 developed by Rockstar Vienna)
2004	Mobile game industry adapted to Tekes' Femix program Xbox Live Arcade launched (Microsoft)	
2005		the development of Alan Wake begins
2006	PlayStation Network, PSN (Sony)	
2007		
2008	Apple begins to support third-party app development App Store for iPhone (Apple) Android Market (later Google Play) (Google)	
2009		
2010	Steam takes on cross-platform functionality Windows Phone 7 market place (later Windows Phone Store) (Microsoft) App Store for iPad (Apple) Nintendo eShop (Nintendo)	Alan Wake (Retail - Console), Xbox 360 by Microsoft Corporations (two additional episodes of Alan Wake made available as downloadable content (Xbox Live) later in the same year)
2011		a remake of Death Rally released for iOS, the first digitally distributed game of Remedy
2012	Windows Store (Microsoft)	a remake of Death Rally released for Android and PC Alan Wake's American Nightmare (downloadable console), Xbox 360 (XBLA) by Microsoft Studios a PC version of Alan Wake co-developed with Finnish Nitro Games released on the Steam platform
2013		

Appendix 5. Born Global Characteristics Applied to Case Companies

Born Global Feature	Identified by	A parallel with the case companies	Potential linkage to their strategy formulation
Global vision	Casas & Dambrauskaite, 2011; Jolly et al. 1992; Luostarinen & Gabrielsson, 2004; 2006; Oviatt & McDougall, 1995	Housemarque and Remedy targeted global markets from the very start	Encouraged by the entrepreneurial mindset of managers.
Entrepreneurial mindset and/or experience	Casas & Dambrauskaite, 2011; Laanti, et al., 2007; Luostarinen & Gabrielsson, 2006; Oviatt & McDougall, 1995; Sasi & Arenius, 2008	The past undertakings of both case firms illustrate the entrepreneurial mindset of managers / founders	Supports the execution of global vision.
Limited resources	Arenius et al., 2006; Casas & Dambrauskaite, 2011; Luostarinen & Gabrielsson, 2006; Oviatt & McDougall, 1995; Sasi & Arenius, 2008	The case companies were obtained to have suffered from scarce resources (especially with regard to funding)	Need to compensate the limitations through a flexible strategy and network utilization. Liabilities of newness and foreignness experienced by Remedy.
The importance of networks and/or personal relations	Jolly et al. 1992; Laanti, et al., 2007; Luostarinen & Gabrielsson, 2006; Oviatt & McDougall, 1995; Sasi & Arenius, 2008	Both companies highly reliant on their business network and ecosystem. Personal network important.	Interdependencies and external conditions to be taken into account.
Niche operations	Casas & Dambrauskaite, 2011; Dunning & Wymbs, 2001; Luostarinen & Gabrielsson, 2004; 2006; Rennie, 1993	Niche players in digital goods business	Need to reach the critical mass
Unconventional product, operation and marketing strategies	Luostarinen & Gabrielsson, 2004; 2006; Oviatt & McDougall, 1995	The internationalization of both case companies differed significantly from the traditional stages model	Strategy shaped by resource scarcity and niche market needs, facilitated by entrepreneurial mindset
Utilization of modern technologies	Casas & Dambrauskaite, 2011; Dunning & Wymbs, 2001; Luostarinen & Gabrielsson, 2004; 2006; Oviatt & McDougall, 1995; Rennie 1993	The in-house technology as well as digital ecosystem infrastructure highly important to case companies	Technology as an important strategic consideration