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ENTREPRENEURIAL INTERNATIONALIZATION: A PROCESS PERSPECTIVE

Sascha Fuerst

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ABSTRACT

The pre-internationalization period from venture foundation to its first international market entry is researched extensively by scholars in the field of international entrepreneurship. However, we know less about the internationalization process per se and especially of how it unfolds over time beyond the firms initial entry into global markets. Moreover, learning and networking and their interplay are considered important activities underpinning the process of internationalization. Learning does not happen in isolation – it happens in relationships. Besides our understanding of the importance of learning and networking as behavioral processes underlying internationalization, we only have a scarce understanding of how these two processes play out over time as the new venture internationalizes.

In order to shed more light on the interplay of learning and networking during entrepreneurial internationalization, I applied event-driven process research and captured learning and networking processes as they unfolded in real-time over a 32 month period within an international new venture from the global mobile video game industry in Colombia (South America).

My research is able to make important contributions to the field of international entrepreneurship. First, I provide a method of how process theory can be created based on longitudinal, real-time process data. Second, I am showing how experiential learning as a process of transformation of experience plays out at the level of the entrepreneur and the team as the process of entrepreneurial internationalization unfolds. Third, my framework shows that the role of the network goes beyond the common view in international entrepreneurship literature of the network as a source of knowledge. Fourth, my research illustrates empirically of how dynamic capabilities emerge in a new venture and how they are able to reconfigure the resource base of the firm in a concrete way on the micro-level. Fifth, my research is able to extend our current knowledge on the cyclical nature between learning and networking by providing empirical evidence of the feedback loop between these two processes and the triggers and underlying mechanisms causing a spiraling effect. Sixth, I argue that future-oriented sensemaking in interaction with others is central to strategy-making during entrepreneurial internationalization.

KEYWORDS: Entrepreneurial internationalization, international entrepreneurship, learning, networking, process research, process theory

TIIVISTELMÄ

Yrityksen kansainvälistymistä edeltävä ajanjakso (perustamisesta ensimmäisille markkinoille) on yksi tutkituimmista teemoista kansainvälisessä yrittäjyydessä. Itse kansainvälistymisprosessi ja erityisesti sen muotoutuminen ajan kuluessa on jäänyt vähemmälle huomiolle. Tutkijat ovat todenneet että oppiminen ja verkostoituminen sekä niiden yhdistäminen ovat tärkeitä prosessin etenemisen kannalta – oppiminen kun tapahtuu liikesuhteissa. Meillä on kuitenkin vielä opittavaa siinä, miten oppiminen ja verkostoituminen kehittyvät rinnakkain kun uusi yritys kansainvälistyy.

Tämä tutkimus keskittyy oppimisen ja verkostoitumisen vuorovaikutukseen yrittäjämäisessä kansainvälistymisessä. Tutkimus on tapahtumalähtöinen prosessitutkimus kolumbialaisesta, globaalisti toimivasta videopeliyrityksestä. Yrityksen oppimis- ja verkostoitumisprosesseja seurattiin reaaliajassa 32 kuukauden ajan.

Tutkimus tuottaa uutta tietoa erityisesti kansainvälisen yrittäjyyden tutkimukseen. Ensinnäkin, tutkimus tarjoaa esimerkin siitä kuinka prosessiteoriaa voidaan kehittää perustuen pitkittäiseen, reaaliaikaiseen prosessiaineistoon. Toisaalta, tutkimus osoittaa kuinka kokemuksellinen oppiminen kehittyy kansainvälistymisprosessin aikana, sekä yksilön, johtoryhmän että yrityksen tasolla. Aikaisemmasta tutkimuksesta poiketen yrityksen verkostoa ei tarkastella vain relevantin tiedon lähteenä, vaan arvokkaana rajapintana yrityksen oppimiselle. Tutkimuksessa käy myös ilmi miten yrityksen osaaminen, erityisesti ns. dynaamiset kyvykkyydet, kehittyy prosessin aikana ja miten yritys voi järjestää resurssinsa uudelleen siten, että ne paremmin palvelevat yrityksen kansainvälistymistavoitteita. Oppiminen ja verkostoituminen on tutkimuksessa kuvattu syklisinä prosesseina ja kuvaus tavoittaa sekä yhtymäkohdat prosessien välillä että ärsykkeet, jotka vievät prosessia eteenpäin/taaksepäin. Tutkimus osoittaa, että tulevaisuusssuuntautunut vuorovaikutus ympäristön kanssa on keskeistä strategiatyössä, kun on kyse yrittäjämäisestä kansainvälistymisestä.

AVAINSANAT: Yrittäjämäinen kansainvälistyminen, kansainvälinen yrittäjyys, oppiminen, verkostoituminen, prosessitutkimus, prosessiteoria

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My doctoral studies have been an international entrepreneurial endeavor themselves. Coming from Germany and after working already for several years in the international business department at Universidad EAFIT in Medellin (Colombia), I felt that it was time to embark the journey of doctoral studies. It was not clear to me where to pursue the studies. I knew it must be somewhere 'abroad' since there were no doctoral studies in international business offered in Colombia. During that time I met Peter while working at University of Wellington in New Zealand, who coordinated the virtual, cross-cultural business challenge Global Enterprise Experience my students from Colombia used to participate. When Peter finally moved back from New Zealand to Finland I learned about the doctoral program of Turku School of Economics … The rest is history. Thank you Peter for crossing my life at this stage and for making this dream come true!

Living and working in Colombia and at the same time pursuing doctoral studies in Finland has been a balancing and sometimes challenging act. I am therefore deeply grateful for all the support received from both Universidad EAFIT and Turku School of Economics. At Universidad EAFIT I am especially thankful to the rector Juan Luis Mejia Arango and our former dean Francisco Lopez Gallego who provided their utmost support for making this journey happen. Other people have been crucial in order to sustain the journey along the years: Thank you Julio Acosta Arango, Felix Londoño, Gabriel Jaime Arango, Maria Alejandra Gonzalez-Perez, Paola Podesta, and Manuel Acevedo for believing in me.

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I was fortunate to have the opportunity to interact with a community of scholars that made me interested in and opened my eyes for process research. Thank you Peter, Niina, Eriikka Paavilainen-Mäntymäki, Leila Hurmerinta, and Valtteri Kaartemo for your advice and discussions. Applying a process perspective to my research has certainly been the most interesting intellectual endeavor of my academic career and it will undoubtedly influence my future activities of research and teaching.

I would also like to thank Nicole Coviello and Marian Jones who provided valuable feedback at the early stage of my research. The same gratitude goes to Stephanie Fernhaber and Alex Rialp-Criado who agreed to preexamine my thesis and to Alex to act as the opponent.

My dissertation research would of course not have been possible without the cooperation of the entrepreneurs Camilo Gomez and Luis Correa from C2 Game Studio in Medellin (Colombia). Conducting process research is not only demanding on behalf of the researcher but also on behalf of the participants. Thank you Camilo and Luis for your time and interest to participate in this study!

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My journey as a doctoral student, however, was not only shaped by academic occurrences. At the very beginning of my studies I met my wife Maria. Together we created a family that provided the backbone of this journey. Therefore, my deepest gratitude goes to my wonderful wife Maria, our daughter Bianca, and our son Maximilian for your love and unconditional support throughout my studies.

Medellin, Colombia, 28 October 2017

Sascha Fuerst

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1 INTRODUCTION

The introductory chapter has the aim to provide the hook upfront in order to catch the reader's attention (Bansal & Corley 2012). I begin with explaining my personal motivation for the study that builds on earlier research I conducted. I then introduce the phenomenon of entrepreneurial internationalization, the learning-networking relationship in international entrepreneurship, and the process perspective I adopted in order to provide answer to my research question of how processes of learning and networking influence each other during entrepreneurial internationalization. In the chapter that follows I introduce the contributions of my study with the intention to gain the reader's interest of finding out how the contributions were build. Finally, I describe the structure of the thesis and how it relates to the research process.

1.1 Motivation and background for the study

During 2007 I conducted research in the emerging 3D-animation industry in Colombia (Fuerst 2010; Furst, 2010) in order to understand its linkage with the global advertising and television value chains. I found it fascinating to learn how micro-firms in Colombia with less than ten employees engaged in businesses with large multinational firms abroad. This sparked my interest in the international entrepreneurship literature and I began to conduct research on born global firms writing case studies (Fuerst 2010a, 2013). I learned about the challenges faced by micro-firms in Colombia to position themselves in global industries in order to attract customers. International markets seemed to be particularly interesting for these small firms as the general manager of one of the case firms commented:

> *We are not so interested in our home market [Colombia] because it is not very attractive related to profit and experience. Being in international markets provides us with more experience – experience regarding competitiveness. Our international market experience makes us look more attractive, more competitive. It is very different to do business with foreigners than with nationals. For instance, you have to deal with another language [English] and then there is the importance of punctuality. Here they are more*

> *relaxed concerning deadlines. The culture is very different. The learning we experience internationally definitely makes us more competitive.*
> (Interview, Carlos Orozco, General Manager of Dewak, 2010)

Being exposed to international clients abroad seemed to permit these firms to develop capabilities that makes them more competitive not only locally but also within their respective global industries. Dealing with knowledge-intensive products and digital distribution formats allowed these micro-firms to reach and communicate with customers all over the world through the Internet.

During 2010 when I began to work on my research plan two important trends emerged in the global video game industry that opened up new possibilities for 3D-animation firms in Colombia. On the one hand, mobile video games began to emerge largely due to the success of the game Angry Birds by the Finnish video game company Rovio Entertainment, and, on the other hand, digital distribution platforms appeared for mobile games such as the App Store. The digital distribution of video games like the App Store opened up new possibilities for Colombia's 3D-animation firms to participate in the global video game industry since they did not depend anymore on capital intensive physical distribution of video games. Hence, some of the firms that focused on 3D-animation in Colombia began to explore business opportunities within the emerging mobile video game industry.

My research experience within the 3D-animation industry and my subsequent interest in the phenomenon of born global firms informed by the international entrepreneurship literature was an important antecedent for my dissertation research. I decided to focus on the phenomenon of entrepreneurial internationalization considered as one of the research areas of the field of international entrepreneurship (Jones et al. 2011). I was especially interested in understanding of how a micro-firm is able to enter a global industry and to build its position vis-à-vis other competitors at a global scale including larger multinational firms. Due to the emergence of the mobile video game industry at that time I had the unique opportunity to observe in real-time of how such changes unfold within a firm. I therefore decided to identify a firm suitable for my research within the shifting industry from 3D-animation to video gaming. My interest in the research during 2010 was largely driven by the question of *how entrepreneurial internationalization unfolds over time*.

Observing how the first international market entry unfolded in real-time was particular important for me since it established an important base for the subsequent process of internationalization, after first entry, that I was interested to observe. Therefore, the venture should be in the process of internationalizing its products – before its first international market entry. The firm should also be

sufficiently new to the market in order to observe early firm internationalization in contrast to older, established companies. Another crucial aspect was the willingness of the entrepreneurs to cooperate with the process of longitudinal, real-time data collection.

One of the firm's that participated in my earlier research on the role of small and medium-sized enterprises in global value chains provided me the lead to their partner *C2 Game Studio* who recently signed a contract with a globally-renowned publisher for mobile video games in order to publish their first mobile video game through the App Store. This sparked my interest and I requested an interview with the two founders in order to check if the venture would suit the purpose of my research. The story that the two entrepreneurs provided looked promising to me in order to research how entrepreneurial internationalization unfolds in the fast growing and dynamic mobile video game industry. The firm also seemed to be sufficiently new in order to experience early internationalization. Until that moment, the firm officially existed for three years and started to work on video games for a year only. The entrepreneurs also seemed to be willing to participate in the longitudinal, real-time data collection process which was important due to the time commitment of the entrepreneurs for the study.

1.2 Entrepreneurial internationalization and the process perspective

Entrepreneurial internationalization relates to the cross-national border behavior of entrepreneurial actors and the study of such behavior belongs to the field of international entrepreneurship (Jones et al. 2011; Oviatt & McDougall 2005). Jones et al. (2011) identified three types of research that mark the field of international entrepreneurship: Type A research that focuses on cross-border entrepreneurship (i.e. entrepreneurial internationalization), Type B research that studies the differences of entrepreneurial behavior by country and/or culture (i.e. international comparisons of entrepreneurship), and Type C research that compares cross-border entrepreneurship across countries and cultures (i.e. comparative entrepreneurial internationalization).

For the purpose of my research I focus my attention on *entrepreneurial internationalization* (type A research) as a particular branch of international entrepreneurship (Jones et al. 2011) and consider the study of international entrepreneurship as both comprised of entrepreneurship and international business (McDougall & Oviatt 2000). Hence, my interest is in *cross-border entrepreneurship* observing the internationalization process of a particular international

new venture from one country instead of comparing the internationalization behavior of a variety of firms across countries or comparing domestic entrepreneurship across countries.

Why studying the process of entrepreneurial internationalization from a theoretical perspective? We increasingly witness firms that participate in global markets soon after foundation or even instantly at their moment of startup. The pre-internationalization period from venture foundation to its first international market entry is researched extensively by scholars in the field of international entrepreneurship (Casillas & Acedo 2013). The internationalization process however often does not begin with the foundation of the firm and ends with its initial market entry – it can also be traced back to the pre-founding period and subsequent periods after first entry. Although we know much about the pre-internationalization period and the factors that influence its speed, we know less about the internationalization process *per se* and especially of how it unfolds over time beyond the firms initial entry into global markets (Casillas & Acedo 2013; Jones et al. 2011; Prashantham & Young 2011; Zahra 2005).

Ventures that go global early and rapidly are said to behave differently from other new ventures that rather focus on domestic markets before entering international markets. The entrepreneur of such an international venture is often more risk-taking, proactive, and innovative in exploring and exploiting opportunities across national borders compared to his or her domestic counterpart (Knight et al. 2004; Madsen & Servais 1997; Mathews & Zander 2007; McDougall & Oviatt 2000; McNaughton 2003). In short, early and rapid internationalization requires an entrepreneurial behavior that crosses borders and that some refer to as entrepreneurial internationalization (Jones et al. 2011).

We only have a limited understanding about how the process of entrepreneurial internationalization unfolds over time. In order to provide a more comprehensive understanding about this process I try to capture entrepreneurial internationalization more holistically by considering a broader time span before and beyond the usual initial market entry. In doing so I follow Jones and Coviello (2005) and consider entrepreneurial internationalization a *time-based behavioral process*.

What are the processes that influence entrepreneurial internationalization as a behavioral process? Two prominent perspectives within the international entrepreneurship literature are the firm's international networking activities and the learning that creates knowledge needed for internationalization such as knowledge about foreign markets, international business development, or knowledge about product technology and trends (e.g., Eriksson et al. 1997; Fletcher & Harris 2012; Prashantham & Dhanaraj 2010; Tolstoy 2010). *Relationship- and learning-based processes* are considered to describe well the underlying behavioral processes of internationalization (Jones & Coviello, 2005).

While networking and learning are dynamic by nature, its static representations are the network that results from networking and the knowledge that is gained from activities of learning.

The international entrepreneurship literature considers *knowledge and networks* to constitute import elements for providing explanations regarding the early and rapid internationalization of new ventures. Coviello and Munro (1997) recognized early that network relationships not only provide potential access to international markets but also international market knowledge. The relationship between a firm's network of external contacts and its international market knowledge was further empirically tested by Yli-Renko et al. (2002). The authors found a positive and statistically significant relationship between the managements' network of contacts and the firm's foreign market knowledge. This finding highlighted the importance of the entrepreneur's personal, external relationships for gaining access to information about international market trends and technology. Subsequent research acknowledges the important role of the international new venture's network as a source for knowledge (e.g., Fernhaber et al. 2009; Musteen et al. 2010; Presutti et al. 2007; Yeoh, 2004; Zhou et al. 2007). However, these empirical studies applied a *cross-sectional research design* and were not able to provide insights into the dynamics of knowledge creation from network contacts, that is, these studies did not consider networking and learning as actual behavioral processes underlying entrepreneurial internationalization. Nevertheless, they provide important evidence of the strong relationship between the firm's (international) network and knowledge for internationalization.

Learning and networking are considered important processes underlying entrepreneurial internationalization. We also know about the strong relationship between the international new venture's network of contacts and the new knowledge gained from the network. What we don't know is of how this relationship plays out over time while the firm experiences first market entry and beyond. That is, the dynamics of learning and networking and their interactions over time.

The pre-understanding about the influential role of the new venture's international network of contacts (e.g., customers, suppliers, alliance partners, trade associations, friends, relatives) for the access to knowledge for early and rapid internationalization and my interest in a more holistic understanding about the entrepreneurial internationalization process *per se*, let to the following research question: *How do processes of learning and networking influence each other during entrepreneurial internationalization?*

The study of a time-based behavioral process of entrepreneurial internationalization requires a *longitudinal research design* that allows to observe and cap-

ture evidence of how the process unfolds over time. International entrepreneurship as a field of study benefits from more longitudinal, process-oriented research in order to provide more insightful explanations regarding the internationalization process *per se* of the international new venture. The absence of longitudinal research designs in international entrepreneurship is nothing new. Zahra and George (2002) already pointed out that the lack of longitudinal designs is a major weakness of international entrepreneurship research. This was also confirmed by Coviello and Jones's (2004) assessment of methodological issues in international entrepreneurship research. The authors emphasize on the time dimension in order to gain insights into the causal relationships in entrepreneurial internationalization behavior. Over ten years after Coviello and Jones's (2004) call for the employment of longitudinal methodologies in international entrepreneurship research, Nummela (2015) found that the field has not advanced in respect. Longitudinal designs still dominate as a methodological suggestion the future research agenda of most published research in international entrepreneurship. Likewise, Rialp et al. (2015) emphasize the need for future research to recognize internationalization as a dynamic, time-sensitive process. In short, calls for longitudinal research designs are persistent over the last decade but hardly anything has been achieved empirically.

Researchers in the fields of organization and management have long tried to understand development and change processes in organizations (e.g., Burgelman 1983; Gersick 1994; Langley & Truax 1994; Mintzberg 1978; Pettigrew 1987; Van de Ven et al. 1989). Van de Ven and Huber (1990, 213) noted that organizational change is studied from two perspectives in an input-process-output model by asking:

> *1) What are the antecedents or consequences of changes in organizational forms or administrative practices?*
> *2) How does an organizational change emerge, develop, grow or terminate over time?*

Answering the first 'what' question requires to establish a causal relationship between the observed input (independent variable) and the outcome (dependent variable) (*variance approach*). In contrast, an answer to the second 'how' question requires the examination of the actual process of change by describing and explaining the temporal sequence of events that unfold during organizational change (*process approach*).

Comparing Van de Ven and Huber's (1990) arguments to my own research, I reformulate the two question above as followed: 1) What are the antecedents and outcomes of entrepreneurial internationalization in terms of network and

knowledge interactions? 2) How does entrepreneurial internationalization unfold over time in terms of networking and learning interactions?

In international entrepreneurship, Yli-Renko et al. (2002) provide evidence of a positive relationship between a firm's social capital (input) and the knowledge intensity of its products and foreign market knowledge (output). Furthermore, knowledge intensity and foreign market knowledge (now input) are positively related to the firm's international sales growth (output). Hence, the study by Yli-Renko et al. (2002) addresses the first question on the antecedents and outcomes of entrepreneurial internationalization: Social capital constitutes both an antecedent for knowledge intensity/foreign market knowledge and international sales growth. However, the study does not provide an answer of 'how' for instance foreign market knowledge is created from social capital which rather relates to the second question. This question is addressed by Prashantham and Dhanaraj (2010) within the international entrepreneurship literature who address 'how' social capital creates technology and market knowledge which ultimately leads to international growth of the new venture. The longitudinal, case-based research design allowed the authors to establish the temporal sequence of events as they unfolded in real-time over a three-year period in order to provide insights into the actual learning process that turned social capital into knowledge.

In sum, the two research questions require different methodologies. The 'what' question that inquires about the relationship between antecedents and outcomes follows a variance approach (Mohr 1982) or an outcome-driven explanation (Aldrich 2001), whereas the 'how' question requires a process methodological approach (Mohr 1982) or an event-driven explanation (Aldrich 2001).

Mohr (1982) in his work on organization theory first distinguished between variance theory and process theory in order to explain strategic change. Variance theory explains change in terms of independent variables causing changes in dependent variables, and process theory derives explanations in the form of a sequence of events leading to an outcome. Figure 1 illustrates the distinction between the two different forms of scientific explanation.

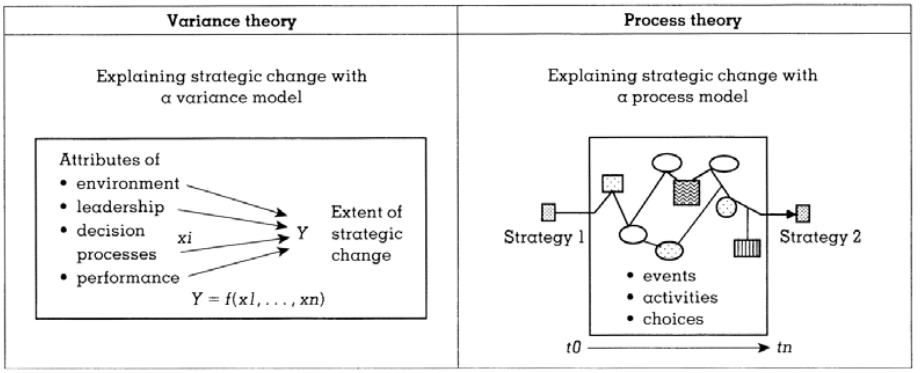

Figure 1 Variance and process theory (Langley 1999, adapted from Mohr 1982)

Aldrich (2001) calls for more event-driven explanations in order to overcome the shortcomings of outcome-driven research designs. *Event-driven explanations* are built forward from the observed or recorded event to the outcome, whereas *outcome-driven explanations* are built backward from the observed outcome to prior causally significant events. Figures 2 and 3 illustrate the logic of the two different kinds of explanations.

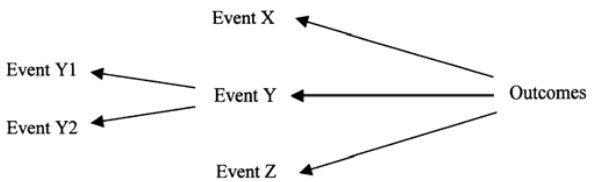

Figure 2 Outcome-driven explanations (Aldrich 2001)

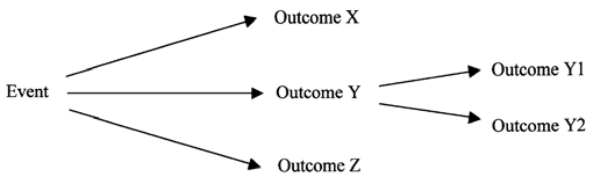

Figure 3 Event-driven explanations (Aldrich 2001)

Observing an outcome and linking it back to earlier possible occurring events is constraint by several aspects (Aldrich 2001): 1) Informants that experienced events in the past might no longer be available for interviews which introduces sample selection bias into the research design; 2) Relevant archival information might not be available anymore which makes it difficult to trace back outcomes

to relevant events; 3) When the outcome is already known people tend to create explanations that benefit themselves which means that people often overstate successes and suppress mistakes; 4) People tend to be short-sighted. Important past events that were not recognized during the time they occurred still remain unacknowledged during later retrospective accounts; 5) Informants simply may not recall earlier events (recall bias). Hence, event-driven research designs that observe how events unfold in real-time are especially useful in order to avoid outcome-driven explanatory biases.

Within international entrepreneurship, Prashantham and Dhanaraj (2010) and Voudouris et al. (2011) apply an event-driven research design that focuses on the collection of data unfolding in real-time. The former follows events over a three year period and the latter over a seven year period. Longitudinal research designs are generally lacking in international entrepreneurship research (Coviello & Jones 2004; Nummela 2015; Rialp et al. 2015). That is even more so for event-driven driven process research designs that follow the unfolding of events in real-time. The literature refers to several difficulties that hinder event-driven process research in real-time (Langley 2009; Van de Ven & Engleman 2004): The difficulty to find informants/firms willing to take part in a longitudinal study over an extended period of time; the difficulty of identification of new ventures in early stages of development; the general lack of knowledge among scholars about process research methods; the time investment on behalf of the researcher.

Research in the field of international entrepreneurship is still dominated by outcome-driven research based on variance theory. Event-driven process research has the potential to overcome many of the shortcomings of variance-based explanations and provides an adequate methodology to research the time-based behavioral process of entrepreneurial internationalization in real-time by answering ‘how’ questions. Hence, event-driven process research provides a suitable research strategy in order to address my research question of how processes of learning and networking influence each other during entrepreneurial internationalization.

1.3 Expected contribution of the study

As presented in the previous chapter I understand entrepreneurial internationalization as a time-based behavioral process. A process that is shaped by events manifested in the present but also influenced by the past and projected into the future beyond the venture’s initial entry into international markets. Two behavioral processes underlying internationalization are the particular lens of my inquiry: networking and learning and their reciprocal influence over time. Both

processes are prominent approaches in international entrepreneurship literature in order to explain the internationalization process of the venture.

Variance-based or outcome-driven research on entrepreneurial internationalization helped to uncover the important relationship between the firm's international network and international market knowledge. This approach let us recognize the importance of an international network as a potential source for information. However, such view does not deliver insights into the dynamics of networking and learning and how they are reciprocally influencing each other. Therefore a process view built on event-driven explanations provides an alternative in order to complement our insights gained from the variance-based approach.

Explaining entrepreneurial internationalization through an event-driven approach is almost absent in international entrepreneurship. This approach however would enable us to derive more meaningful explanations regarding 'how' entrepreneurs make use of an international network of contacts in order to learn the knowledge necessary for early and rapid internationalization. I therefore expected to contribute twofold to the literature on international entrepreneurship. On the one hand, I provide a *micro-perspective at the level of the individual entrepreneurs* of how learning and networking unfolds, and, on the other hand, to make a methodological contribution of *how to conduct event-driven process research focusing on the collection of real-time* data within the context of entrepreneurial internationalization, that is, how to collect and analyze process data in order to inductively create process theory.

When I started out with the research, I expected to be able to shed light on the experiential learning process *per se*. As to the best of my knowledge, no one has actually shown how experiential learning occurs at the level of the individual entrepreneur during internationalization. This is surprising since experiential learning is an important feature of research in international business (Johanson & Vahlne 1977, 2009), entrepreneurship (Cope 2005; Corbett 2005; Dimov 2007), and international entrepreneurship (Bunz et al. 2017; Coviello & Munro 1997; Mejri & Umemoto 2010; Michailova & Wilson 2008).

By showing how *experiential learning* happens through the transformation of experience my research is able to contribute to a better understanding about the process of how experiential knowledge is accumulated and *"on how co-learning occurs between the entrepreneur, team, and network […]"* (Jones et al. 2011, 643).

Process researchers acknowledge the challenges and difficulties of conducting event-driven process research focusing on real-time data (Langley 2009; Langley & Tsoukas 2010; Van de Ven & Engleman 2004; Welch & Paavilainen-Mäntymäki 2014):

> *Why do we see so little event-driven process research in entrepreneurship when so many cite the need to develop better understanding of entrepreneurship processes? Several possible reasons may explain the dominance of outcome-driven methods in entrepreneurship research. Some relate to methodological difficulties in conducting event-driven process research in entrepreneurship. They include inability to access research sites willing to participate in longitudinal field research, inability to access reliable archival documents, and difficulty in identifying new ventures at early stages of development. Some relate to the lack of knowledge in the management research community about process research methods. Doctoral training programs often focus on variance theories and cross-sectional methods with less attention to process theory and event-driven or longitudinal methods. Students and early career faculty are often advised not to do longitudinal research. Lacking training and experience in process theory and methods, subsequent generations of management researchers perpetuate the cycle of continued focus on variance theory and methods.* (Van de Ven & Engleman 2004, 346)

I was aware that it would not be an easy task to conduct a process study following the unfolding of events in real-time. If I succeeded, this would make an important contribution to the literature of showing how such studies can be conducted starting from their design, collection of process data, and more importantly the process of theory creation. I suggest my study has been able to show of how it can be done and most importantly I contribute an example of *creation of process theory* (see Chapter 6.3 on the methodological contribution).

Although my study is positioned within the field of international entrepreneurship, my findings are able to inform a broader area of literature. The findings are especially able to extent our current understanding on *dynamic capabilities* (see Chapter 6.1.3 on networking learning abilities) and *strategy-making* from a strategy-as-practice perspective (see Chapter 6.1.5 on the emergence of the strategy).

An important contribution of my research is to illustrate empirically of how *dynamic capabilities* emerge in a new venture and how they are able to reconfigure the resource base of the firm in a concrete way on the micro-level (Zahra et al. 2006). Research on dynamic capabilities has been criticized to be mainly focused on conceptual understanding and for their lack of understanding at the micro-level (Vogel & Güttel 2013). I therefore provide insights into the capability lifecycle (Helfat & Peteraf 2003) that not only corresponds to the creation of new capabilities but also to their development and maturity. I am also making

a case for the cyclical nature and interplay between dynamic capabilities. Extant literature discusses the interplay between substantive, entrepreneurial capabilities, and dynamic capabilities (Zahra et al. 2006; Aramand & Valliere 2012) but not the interplay between different dynamic capabilities.

Regarding the field of *strategy-as-practice*, my research is able to extend our current knowledge on two important aspects. On the one hand, my findings broaden our view of agency in strategy-making (Vaara & Whittington 2012), and, on the other hand, they elucidate emergence in strategy-making before purposeful and deliberate planning sets in (Chia & Rasche 2010).

1.4 The research process and structure of the thesis

The research process and the reporting of the research are related but do not necessary follow the same structure. In the following I describe of how I conducted my research and of how I report my research within the thesis.
While some studies uncovered the international network of the new venture as an important source for knowledge about international markets, technology, and internationalization in general, others try to emphasize on the actual processes of learning and networking and their interactions (e.g., Casillas et al. 2009; Freeman et al. 2010; Prashantham & Dhanaraj 2010; Voudouris et al. 2011).

However, it was not until I collected my data that I conducted an in-depth literature review on learning and networking in international entrepreneurship. I intentionally did so in order to avoid being biased with extant theory during data collection (Glaser 1978; Lincoln & Guba 1985; Locke et al. 2008). Knowing too much about how extant literature relates learning and networking might have influenced the way of how I interpret information from the empirical data and therefore might have influenced the direction of the ongoing process of data collection. My intention was to be flexible with different emerging perspectives and to keep an open mind as much as possible in order to be open for different possibilities of the learning-networking interplay. From the outset it was clear to me that the intention of my research is to inductively build theory.

As previously mentioned I entered the field with a *pre-understanding* about the relationships between a firm's network and the knowledge gained from the network. The mainly cross-sectional, variance-based research provides compelling arguments about the importance of the network and knowledge for entrepreneurial internationalization. I also consulted literature on process research in order to gain a better understanding about the methods used in order to collect longitudinal data in retrospective and as they unfolded in real-time. I got inspired by *qualitative diary research and visualization techniques* in order to capture and present process data but I also had to use my *own creativity and*

practical wisdom in order to deal with the complexity of collecting and managing the vast amount of real-time information in order to avoid what Pettigrew (1990) termed ‘death by data asphyxiation’.

The systematic documentation of the incoming real-time data from the diary logs, the follow-up interviews, the social network notifications, and the documents, I accomplished with a software tool for mind mapping. I already used the software for personal and work-related purposes and found it interesting to explore its usage for the purpose of managing my research data during this particular process of data collection. The *ongoing visualization and structuring of the data* within the mind map served two purposes. On the one hand, it allowed to become aware about instances of networking and learning and their interactions in order to sharpen focus of subsequent interviews (*the pre-analysis function*) and, on the other hand, of being constantly alert about possible discontinuities or simply to remind the entrepreneur about earlier discussed topics that did not re-appear in subsequent diary logs (*the reminder function*).

The visual mapping of the continuously incoming real-time data provided an adequate technique in order to get a pre-understanding about the different networking and learning activities the entrepreneurs engaged and to direct the ongoing data collection. This process constitutes of what Miles et al. (2014) refer to as *data condensation*. Therefore, the different types of data I collected continuously got condensed into different categories such as business development, event participation, and business planning. I also established relationships between for instance outcomes of event participation and business development and event participation and business planning. During this process I already decided which data deserve closer attention for follow-up and analysis during this particular stage of data collection.

Although the *visual mapping* with the mind map software allowed me to gain a pre-understanding about the networking and learning dynamics of the entrepreneurs, I felt that I needed a more detailed understanding about the focal processes, especially at the intersection of networking and learning. For instance, I asked myself who were the important factors that contributed to the learning of the entrepreneurs? What networking activities do the entrepreneurs engage in more often? What are the predominant learning activities that happen during internationalization? When and how do these activities of networking and learning overlap? In order to answer these questions I turned to *coding* making use of Pettigrew’s (1987, 1990) framework of content, process, and context using a software for qualitative data analysis, MAXQDA.

The overlaps between codes and the code frequencies made me aware about themes that seemed to play an important role during the process of entrepreneurial internationalization. However, the analysis up to this point still did not allow me to gain insights into the *temporal character of the two focal processes*

– how change unfolds over time. I therefore turned to the visual mapping function of MAXQDA, MAXMaps. MAXMaps allows to create a non-hierarchical structure of network relationships among codes. Constructing *network models of code interrelationships* provided an adequate tool in order to visualize changes over time (Miles et al., 2014). After creating a hierarchical structure of codes and subsequently exploring their dynamics over time through network models, I needed to get a bigger picture of the chronological unfolding of events. I therefore turned to the creation of an *event-listing matrix* (Miles et al., 2014).

Once I considered the map to be complete I looked at how proximate events are thematically related and when they started and ended. This resembles of what Langley (1999) refer to as a *temporal bracketing strategy* for the sense-making of process data. Then I began to undertake an *at-the-glance review* of the data within the matrix and used colored stickers in order to highlight discontinuities, critical events, inflection points. I also drew lines between events in order to illustrate their connections. The matrix itself created an outline for the *narrative*. Hence, the narrative provides the development history of C2 Game Studio in a chronological order from the perspective of networking and learning and their interactions.

In order to identify patterns in my data I developed a *set of questions* that I derived from the literature on the analysis of process data (Pettigrew 1990, 1997, 2012; Saldaña 2003; Van de Ven 1992). The set of questions allowed me to approach my data from different perspectives in order to loosen-up thinking and to generate more variety in the process of drawing conclusions. In a next step I started *comparing my insights with the extant literature* on learning-networking interactions in international entrepreneurship and also consulted additional literature mainly from adult learning and management learning in order to sharpen my observations and to build early versions of the conceptual framework. Once I completed a version, I went back to the data in order to see if the framework fits my empirical observations. Therefore, I particularly looked again at the code dynamics in the network models, the event-listing matrix, and the results of the questions for deliberation of ideas. I contrasted the results from the analysis with the particular version of the model in order to construct and revise the connections between the elements.

This process of *conceptual leaping* was achieved through various iterating steps between actively engaging with the data through coding, stepping back and trying to comprehend the data more holistically based on their visualization with the event-listing matrix, the comparison of findings with literature, and the draft and refinement of the conceptual framework. Five insights emerged from the development of the conceptual framework of learning-networking interactions which I discuss as theoretical contributions. The theoretical contributions come along with practical implications and ideas for future research.

The structure of my thesis resembles the research process but also shows differences. There are two differences I would like to highlight. They exist in order to enhance readability and understanding of the logical flow of the thesis.

First. Although I conducted the in-depth literature review on the learning-networking interactions in international entrepreneurship after I collected the data, I place the review of the literature (Chapter 2) before the presentation of the actual findings in order for the reader to become informed about extant research on the learning-networking nexus. Being knowledgeable about the insights and weaknesses of the current discussions within the field of international entrepreneurship provides an interesting background in order to appreciate the theory I construct. The insights gained from the literature review in Chapter 2, I then discuss with my findings in Chapter 6.1 on the theoretical contributions.

Second. Although the narrative is an intermediate result of theory creation, I present the narrative on the process of entrepreneurial internationalization upfront in Chapter 4 before presenting the theory development in Chapter 5. The narrative is based on the event-listing matrix and provides a rich but focused description of the learning and networking events related to the firm's development. I find it useful for the reader to first gain a holistic understanding about the case before learning about the emergence of the theoretical framework through the process of conceptual leaping. Importantly, the narrative provides the background and context where my conceptual framework is embedded.

Taking into consideration the differences between the actual research process and the structure of how I present my study within this thesis, the rest of the thesis is structured as follows. Chapter 2 presents to the reader the current conceptualizations and empirical insights, on the one hand, on the static knowledge-network link and its importance for entrepreneurial internationalization, and, on the other hand, on the dynamic learning-networking nexus in international entrepreneurship. Chapter 3 presents the process perspective of my study and outlines the research process. I compare variance and process approaches, outline the different meanings for process, present the different sensitizing devices and heuristics for the identification of patterns within process data, and describe the research process more in-depth that I already introduced within this chapter. I also talk about the quality of the research process in order for the reader to better judge if my findings are trustworthy, compelling, and useful. Chapter 4 presents the story of how learning and networking unfolds within C2 Game Study following the sequential structure of the different time-bracketed periods. Then I outline in Chapter 5 the process of theory creation based on the empirical data. This concerns the conceptual leap that generates abstract theoretical ideas from the empirical data. Chapter 6 compares my findings with the extant theory I presented in Chapter 2 on the learning-networking relationship in international

entrepreneurship but also with additional literature I draw on from entrepreneurial learning, adult learning, management learning, organizational learning, organizational sensemaking, social network theory, capability development, generative mechanisms in process research, and strategy-as-practice. The remainder of Chapter 6 presents the practical implications of my findings as related to the entrepreneur, policy-maker, and educator, the methodological contribution, the limitations of the study, and provides ideas for future research building on my findings.

2 THE LEARNING-NETWORKING RELATIONSHIP IN INTERNATIONAL ENTREPRENEURSHIP

This chapter presents the results of the literature review I conducted on the knowledge-network and learning-networking nexus in international entrepreneurship. I entered the field with a pre-understanding about the importance of the knowledge-network relationship for entrepreneurial internationalization but it was not until I finished collecting the data that I conducted the in-depth literature review in order to avoid being biased with a particular view on learning and networking during data collection. I present the literature review at this point because I think it is important for the reader to comprehend the current conversation on the knowledge-network and the learning-networking nexus in international entrepreneurship as an important background on the theoretical and methodological debates before continue reading about the process approach and the actual creation of theory from the empirical data. Being knowledgeable about the current debates of the phenomenon in the field of international entrepreneurship helps the reader to better frame of what I continue to describe in terms of methodology, methods, and theory creation.

For the *literature review* I built on existing reviews and complemented by key-word search in databases for academic literature. I first analyzed De Clercq et al. (2012) and Jones et al. (2011) for articles that relate network/networking and knowledge/learning. Since De Clercq et al. (2012) and Jones et al. (2011) only include literature for the periods 1994-2010 and 1989-2009, respectively, I complemented the search for the period 2011-2015 using the Proquest ABI/INFORM Global and EBSCO Business Source Complete databases. See Annex 1 for a more detailed description of the literature review process and the search strings I made use of. In a next step I content-analyzed the articles by using MAXQDA (Version 11), a software for qualitative data analysis, according to the following criteria: Author; Year of publication; Journal; Method (Conceptual, Empirical); Theoretical grounding; Findings (static versus dynamic aspects of network/networking, knowledge/learning); Future research opportunities. See Annex 1 for a snapshot of the code-system created in MAXQDA.

In the following I take the reader on to the journey that analyses and identifies the current debate on the learning-networking nexus in international entrepreneurship. First, I take the reader back to the early days of international entrepre-

neurship research during the 1990's when knowledge and networks where recognized as important foundations for entrepreneurial internationalization to happen (Chapter 2.1). Then I provide an overview of research that builds on the earlier foundations of knowledge and network and considers the network as an important source of knowledge that facilitates internationalization of the new venture (Chapter 2.2). These static conceptualizations were increasingly researched from a process perspective trying to understand the dynamics of knowledge creation through learning and the creation of networks through networking. I therefore introduce the reader in Chapter 2.3 to the dynamic conceptualizations that build on the insights from the static conceptualizations. I identified four categories of papers related to different combinations on knowledge-learning and network-networking. Finally, in Chapter 2.4 I synthesize the literature on the learning-networking relationship in international entrepreneurship highlighting the gaps in research.

2.1 The foundations of knowledge and networks for entrepreneurial internationalization

Knowledge and networks constitute import elements for providing explanations regarding the early internationalization of new ventures. The pioneering research by McDougall and colleagues considers alternative governance structures such as networks a necessary condition for the existence of an international new venture (Oviatt & McDougall 1994). Knowledge is attributed the role of a unique resource and constitute a sufficient element for the sustainable competitive advantage of the international new venture.

McDougall et al. (1994) explore the formation of international new ventures through case study research. They propose that international new ventures exist due to the *unique competencies of their founders*, that is, their personal background, knowledge, and networks. The founding entrepreneurs possess prior international work experience related to the business activity of the nascent enterprise and, hence, exploit their existing international business and product-related knowledge and existing international network contacts in the context of their new venture. The founders deliberately choose to focus on international markets in order to develop further their existing international business competencies and to avoid any path-dependence on domestic competencies. The use of strategic alliances or networks (i.e. hybrid-governance structures) is the preferred form of conducting international business activities due to the resource-constraints of the new venture.

Extant theory of international business (i.e. monopolistic advantage theory, product life-cycle theory, Uppsala internationalization process model, oligopolistic reaction theory, internalization theory) missed to explain the formation of international new ventures because of their focus on the internationalization activities of larger, established companies at the firm-level. The phenomenon of the international new venture, however, seemed to be better explained by taking into consideration the *individual or group-level of analysis* (i.e. the founder or founding team and their existing personal networks) (McDougall et al. 1994; Oviatt & McDougall 1994).

Knowledge within the international new venture comprises two aspects. On the one hand, knowledge relates to the *knowledge-intensity of the firm's processes and products*, and, on the other hand, to the knowledge that the entrepreneur already possesses about foreign markets from previous work experience.

Autio et al. (2000) provided important empirical evidence regarding the positive effect between the knowledge-intensity of entrepreneurial new ventures and their rapid international growth. The authors argue that the knowledge that is inherent in a firm's activities and outcomes provide an important competitive advantage, similar to Oviatt and McDougall's (1994) view on knowledge as a unique resource for a sustainable international new venture. The contribution of knowledge-intensity to international sales growth is attributed to two facts (Autio et al. 2000): Due to their learning skills firms that are knowledge-intensive are better able to *adapt to changing conditions in dynamic environments* than firms that depend on tangible resources; *knowledge is a mobile resource* and is easier to be combined with fixed assets such as distribution channels in foreign markets.

Further empirical evidence regarding the positive relation between knowledge-intensive small firms and early internationalization is provided by McNaughton (2002, 2003). Bell et al. (2003) further distinguish between knowledge-intensive and knowledge-based new ventures. *Knowledge-based ventures* solely exist through the emergence of new technology such as Internet and software. *Knowledge-intensive firms*, however, only make use of new technologies in order to improve their processes and productivity but are not necessarily based only on knowledge. The unique focus on knowledge alone leads to a more accelerated internationalization of the knowledge-based firm compared to the knowledge-intensive new venture.

The personal background and knowledge gained through work experience prior to the formation of the international new venture is considered an *important predictor for early internationalization* (Jones et al. 2011). Madsen and Servais (1997) posit that the previous professional experience and knowledge of the founding entrepreneur has an important influence on the internationalization path of the venture. Besides McDougall et al. (1994), other early studies

that found a positive relationship between the entrepreneur's prior knowledge about foreign markets and the early internationalization of the new venture include Bloodgood et al. (1996), Reuber and Fischer (1997), Shrader et al. (2000), and Westhead et al. (2001). Bloodgood et al. (1996) found that the *international work experience* of the board of directors is associated with the extent of the firm's internationalization (i.e. number of value chain activities located abroad). However, their data do not reveal if this relationship is a result of prior network contacts abroad or knowledge about foreign markets.

Regarding the importance of the network, McDougall and colleagues (McDougall et al. 1994; Oviatt & McDougall 1994) already refer to the significance of the network for early internationalization. Early explorative research by Bell (1995) attributes some merit to the *network approach* in order to explain the often complex, dynamic, and non-linear internationalization behavior of small computer software firms. Similarly Madsen and Servais (1997) consider the network approach a promising perspective for gaining new insights into the phenomenon of early internationalization. Subsequently, Coviello and Munro (1995, 1997) establish the network perspective as an important theoretical lens to examine the internationalization process of entrepreneurial firms. The position of the firm within a network of relationships often creates opportunities that determine foreign market selection and entry mode. Thus, market selection and entry mode do not result out of a strategic decision of the entrepreneur alone but out of the interaction with network contacts (Coviello & Munro 1995). The network perspective also demonstrates that international market development activities of small, entrepreneurial firms are not only driven by endogenous, experiential learning but are also greatly influenced by the external network of relationships (Coviello & Munro 1997).

In summary, knowledge and networks have been important elements for explaining the phenomenon of early internationalization since the emergence of the field of international entrepreneurship. During the 1990's more research has been conducted related to the knowledge aspect of the international new venture and only few research investigates empirically the network (Bell 1995; Coviello & Munro 1995, 1997). The research though did not consider an explicit link between a firm's network of contacts and the creation of new knowledge. The mainly explorative, case-based work however laid an important foundation for subsequent research into the role of knowledge and networks for entrepreneurial internationalization of the new venture which I present in the following two chapters.

2.2 The static conceptualizations between knowledge and the network

Coviello and Munro (1997) recognized early that network relationships not only provide potential access to international markets but also international market knowledge. The relationship between a *firm's network of external contacts* and its international market knowledge was further empirically tested by Yli-Renko et al. (2002). The authors found a positive and statistically significant relationship between the managements' network of contacts and the firm's foreign market knowledge. This finding highlighted the importance of the entrepreneur's personal, external relationships for gaining access to information about international market trends and technology, for example. Yli-Renko et al. rooted their study in the concept of social capital. *Social capital* can be considered as the resources that are embedded within and derived from the relationships of the entrepreneur (Nahapiet & Ghoshal, 1998). Hence, information and knowledge about international markets can be mobilized through an entrepreneur's social capital. Besides the positive relationship of the new venture´s external social capital and its foreign market knowledge, the study also found a strong positive relationship between the firm's internal social capital together with its external social capital and the knowledge-intensity inherent in the firm's activities and products. This finding revealed that interactions between the different members of the firm (i.e. *internal social capital*) and interactions between the firm and its external contacts (i.e. *external social capital*) leads to the creation of knowledge and contributes to the knowledge-intensity of the new venture's activities and products. Both knowledge-intensity and foreign market knowledge are positively related to the firm's international sales growth.

The empirical results of Yli-Renko et al. (2002) make a clear point for the fact that the international new venture's social capital as embedded in its external network of contacts contributes positively to the firm's technological learning (i.e. *knowledge-intensity*) and managerial learning about foreign markets (i.e. *foreign market knowledge*). Due to the cross-sectional nature of the research, however, the study is not able to explain the actual learning process that transforms social capital into knowledge and eventually leads to growth in international markets.

Yli-Renko et al.'s (2002) landmark study inspired others to explore further the relationship between the international new venture's *social capital* and its impact on knowledge creation (Fernhaber et al. 2009; Musteen et al. 2014; Musteen et al. 2010; Prashantham 2005; Presutti et al. 2007; Yeoh, 2004; Zhou et al. 2007). Others build on the *network approach* in international entrepreneurship in general referring to the above mentioned early pioneering studies of the field such as Bell (1995), Coviello and Munro (1995, 1997), and Oviatt and

McDougall (1994) in order to link the international new venture's network to knowledge acquisition (Baronchelli & Cassia 2014; Gil-Pechuan et al. 2013; Oviatt & McDougall 2005; Yeoh 2004). Andersson (2011) used *effectuation theory* (Sarasvathy 2001) to illustrate how a born global firm's early internationalization pattern is influenced by the knowledge and network of its distributors. Bengtsson (2004) draws on *organizational learning theory* (Huber 1991) to show how born globals can rapidly build foreign market knowledge by learning from the experience of others through grafting, vicarious learning, and searching and noticing. Common to all studies is the fact that the network (i.e. external relationships) is considered an important source of knowledge that facilitates internationalization of the new venture.

The studies that built on social capital theory elaborate on the relational and structural dimensions of social capital. Most research agrees and confirms that weak ties and (geographically) diverse networks contribute positively to knowledge acquisition whereas strong personal ties might lead to over-embeddedness and restrain from knowledge acquisition. An exception is Musteen et al. (2014) who found a positive relationship between the firm's network of strong ties and the acquisition of foreign market knowledge. The authors argue that a more frequent interaction between the parties leads to a higher level of trust and easier knowledge sharing about international market information.

In summary, extant research as outlined above acknowledges the important role of the international new venture's network as a *source for knowledge*.[1] However, the majority of the empirical studies applied a *cross-sectional research design* and were not able to provide insights into the dynamics of knowledge creation from network contacts. The two studies that applied a case-based qualitative research strategy made use of dynamic conceptualizations such as effectuation theory and organizational learning but neither emphasize on their dynamics (Andersson 2011; Bengtsson 2004). The single-cases were rather used to illustrate the general usefulness of effectuation theory and the different organizational learning types for explaining the internationalization of born globals.

Apart from considering the network as an important source of knowledge, the conceptual papers too did not elaborate on, for instance, the learning process or network dynamics for knowledge creation (Oviatt & McDougall 2005; Prashantham 2005; Weerawardena et al. 2007). In the following chapter I present the papers that take on a dynamic conceptualization between knowledge/learning and network/networking as compared to the static conceptualizations within this chapter that only considered that fact of gaining knowledge from a static network but for instance missed to describe the learning

[1] Annex 2 lists the source references of all 14 articles that were identified as 'static' conceptualizations in the literature review.

that occurred from a static network or the knowledge gained from a dynamically, evolving network.

2.3 The dynamic conceptualizations between knowledge and the network: From knowledge to learning and network to networking

The literature that ascribes a dynamic perspective to the interplay between an international new venture's network of contacts and knowledge creation can be divided into four categories[2]: 1) Papers that emphasize changing knowledge needs over time or dynamic aspects of organizational learning but fail to provide the dynamic perspective on the actual learning or networking process (i.e. *knowledge-network type of studies*); 2) Studies with a focus on the dynamic aspect of network development but who fail to explicate the knowledge creation process (i.e. *knowledge-networking type of studies*); 3) Articles that elaborate on the learning process for knowledge creation through a 'static' network (i.e. *learning-network type of studies*); 4) Papers that consider the dynamic process of learning in interplay with a changing network (i.e. *learning-networking type of papers*). The categorization of the articles is represented in a two-by-two matrix (see Table 1). The articles in Quadrant 1 differ from the articles presented in Chapter 2.2 on the static conceptualization between knowledge and the network in that they ground their studies in dynamic conceptualizations of organizational learning but do not elaborate on the learning process per se. Hence, they do not explore the full dynamics of the learning process and consider the network as given.

Table 1 Classification of literature on the dynamic knowledge-network interactions (n=39)

	Knowledge (Outcome)	**Learning (Process)**
Network (Outcome)	Quadrant 1 *Missed dynamic* n=6	Quadrant 3 *Learning-focused* n=13
Networking (Process)	Quadrant 2 *Networking-focused* n=2	Quadrant 4 *True dynamic* n=18

[2] The four categories are derived from the literature review. The source references of the articles are provided in Annex 2.

The six articles that belong to *Quadrant 1* are evenly distributed between conceptual papers (Fernhaber et al. 2007; Mejri & Umemoto 2010), and articles that apply a quantitative (Bruneel et al. 2010; Fernhaber & Li 2010) and qualitative method (Chandra et al. 2009; Fletcher & Harris 2012). The majority of the articles take organizational learning theory as the point of departure for their conceptualizations (Bruneel et al. 2010; Fernhaber & Li 2010; Fernhaber et al. 2007; Fletcher & Harris 2012). Huber's (1991) different learning types (i.e. congenital learning, experiential learning, vicarious learning, grafting, searching and noticing), interorganizational imitation (DiMaggio & Powell 1983; Haunschild & Miner 1997), and Levitt and March's (1988) three learning types (i.e. learning from direct experience, learning from experience of others, learning by imitating others) are the predominant themes of the theoretical approach. The articles do not ground further their arguments in network-related theories. Most probably due to the fact that different organizational learning types implicitly assume interaction with others (e.g., vicarious learning, grafting, learning from experience of others).

Despite the fact that most studies are based on learning theories, the articles do not elaborate on learning per se, that is, the process of creation of new knowledge. For instance, Bruneel et al. (2010) posit that congenital learning and learning from others is more important during the early stages of firm development and that their usefulness diminishes over time being increasingly replaced by experiential learning. The authors, however, do not show how learning actually takes place. They rather leave it open for future research. Similar, Fletcher and Harris (2012) link different learning types to their sources and knowledge outcomes but do not show how learning actually happens in order for internationalization knowledge to be vicariously created from the firm's network of consultants for example. The articles in this quadrant also do not address how the firm's network for knowledge acquisition came about and developed. Network contacts are rather considered as given. Yet, Fletcher and Harris (2012) stress the fact that many firms do not possess previous networks and the importance of the creation of new networks for knowledge acquisition. Bruneel et al. (2010) acknowledge the potential changing roles of a firm's exchange partners over time but leave the inquiry open for future longitudinal studies.

In summary, the articles in Quadrant 1 build on dynamic conceptualizations of knowledge acquisition but do not explicate the learning process per se. Further, the authors do not address the creation and development of networks for knowledge acquisition but rather consider the network as given and static. Case-based longitudinal studies are recommended for future research in order to capture the dynamics of learning and networking.

The two empirical articles that comprise *Quadrant 2* take a dynamic perspective toward the network but do not inquire about the learning process of how

knowledge is created from the changing network. Loane and Bell (2006) ground their study in the evolutionary knowledge-based view (Kuivalainen 2003) and the network literature on small firm internationalization (e.g., Coviello & Munro 1995, 1997; Sharma & Blomstermo 2003). The evolutionary knowledge-based view emphasizes on the dynamically evolving routines and capabilities that are acquired from an international network of relationships. Pettersen and Tobiassen (2012) argue for the importance of researching networks during different stages of the firm's life-cycle referring to network dynamics from the (international) entrepreneurship literature (Coviello 2006; Hite & Hesterly 2001). Thus, both articles build on dynamic conceptualizations of the network. While Pettersen and Tobiassen (2012) consider evolving network configurations during different stages of a firm's life-cycle, the network in Loane and Bell's (2006) view is constantly evolving and not comprised to different stages. Notably, Loane and Bell (2006) focus on the ongoing acquisition, development, maintenance, and exploitation of networks and their impact on internationalization activities.

Most interestingly, Loane and Bell (2006) show how internationalizing entrepreneurial firms had to build new networks from the ground up for knowledge acquisition. This finding revealed an important short-coming of extant research that usually assumes networks to be pre-existing. While both articles consider the network as evolving, the authors do not show how learning takes place. The network actors either provide access to knowledge or the entrepreneur leverages newly created or existing networks. The actual process of learning and the strategic intent behind networking is left for future research.

The articles in *Quadrant 3* elaborate on the process of learning from a static network. The majority of the papers are conceptual (Keen & Wu 2011; Michailova & Wilson 2008; Peiris et al. 2012; Prashantham & Floyd 2012; Prashantham & Young 2011; Zhu et al. 2006), five articles make use of a qualitative research approach (Evers et al. 2012; Gabrielsson et al. 2008; Kauppinen & Juho 2012; Odorici & Presutti 2013; Zou & Ghauri 2010), and two papers apply quantitative methods (Park & Rhee 2012; Schwens & Kabst 2009).

The most common conceptualization of learning within the quadrant is absorptive capacity (Cohen & Levinthal 1990; Zahra & George 2002; Zahra & Hayton 2008). Others focus on entrepreneurial learning (Cope 2005; Holcomb et al. 2009), Levitt and March's (1988) learning theory, the concept of exploration and exploitation in organizational learning (March 1991), the development of dynamic capabilities as a process of learning (Eisenhardt & Martin 2000; Teece 2007; Zollo & Winter 2002), and social learning theory (Bandura 1977; Engeström 2001). The articles stress the fact that learning or knowledge creation happens in relationships. The relationships that the entrepreneurs interact are pre-existent and do not need to be created newly or developed as compared to

Loane and Bell's (2006) dynamic view of networking in Quadrant 2. Evers et al. (2012), for instance, consider learning interactions with particular stakeholder groups but remain silent on how these contacts came into existence and how they might transform over time contributing differently to the firm's learning. Michailova and Wilson (2008) posit that the interaction with a mentor enhances the international experiential learning process but rather assume the existence of a mentor and do not show how this relationships came into existence and developed. Prashantham and Floyd (2012) address learning through reflection and sense-making processes with a partner but do not elaborate on the process of how social capital is built in order to aid sense-making. Schwens and Kabst (2009) show how learning from customers, suppliers, and partners relates positively to early internationalization. Again, the authors relate learning interactions to a pre-existing network.

All in all, the articles address the dynamic process of learning as mainly rooted in the concept of absorptive capacity from the organizational learning literature. Others contribute with distinct, fresh perspectives such as entrepreneurial learning from the entrepreneurship literature and social learning theory from the learning literature. It becomes evident that the dynamics of learning requires a longitudinal research approach in order to track changes over time, to investigate the impact of learning during different stages of the firm's life-cycle, or to study learning during the post-international market entry phase as expressed by several articles in their recommendations for future research.

Articles in *Quadrant 4* take on a dynamic perspective on both knowledge and the network. Knowledge acquisition is a dynamic process of learning in interaction with an evolving network. From the 18 articles that comprise the quadrant, eleven papers make use of a case-based, qualitative research approach (Chandra et al. 2012; Chetty & Campbell-Hunt 2004, Coviello & Cox 2006; Fuerst & Zettinig 2015; Harris & Wheeler 2005; Johanson & Vahlne 2003; Pellegrino & McNaughton 2015; Prashantham & Dhanaraj 2010; Schweizer 2013; Sharma & Blomstermo 2003; Voudouris et al. 2011;), five articles are conceptual (Casillas et al. 2009; Freeman et al. 2010; Johanson & Vahlne 2009; Welch & Welch 1996; Zettinig & Benson-Rea 2008), and two papers apply a quantitative method (Tolstoy 2010; Wu & Hsu 2013). Prominent conceptualizations for learning are rooted in organizational learning theory such as the concept of absorptive capacity, March's (1991) exploration and exploitation, and Huber's (1991) different learning types for knowledge acquisition. The dynamic view on networking is mainly grounded in the literature on inter-personal relationships in business networks (Hakansson & Snehota 1995; Johanson & Mattson 1988) and the Uppsala model on the internationalization process (Johanson & Vahlne 2003, 2009), as well as the social network approach (Burt 1982; Granovetter 1992) and social capital (Nahapiet & Ghoshal, 1998).

Similar to the papers in Quadrant 3, a prominent view is that learning happens in relationships. Many articles within Quadrant 4 consider activities of learning and networking as continuous, cyclical, and interacting based on feedback loops (Casillas et al. 2009; Chandra et al. 2012; Freeman et al. 2010; Johanson & Vahlne 2009; Sharma & Blomstermo 2003; Voudouris et al. 2011; Welch & Welch 1996). The knowledge that is acquired through learning from the firm's changing network of relationships leads to further opportunities for networking and learning, and so forth. Hence, the dynamics of learning and networking is not only based on interactions between the learner and the network but also inherent in the continuous, cyclical process based on feedback loops from the learning outcomes achieved through activities of networking. Such view is only possible if both learning and networking are considered dynamically, evolving processes. The need for more longitudinal studies based on exploratory, case-based data is a persistent recommendation for future studies in this quadrant.

Overall, the papers within *Quadrant 4* take on a dynamic view regarding the learning-networking relationship. However, important gaps remain that relate to method and theory as outlined in the recommendations for future research within the articles: Further longitudinal research is demanded in order to reveal the learning process and to provide insights into the creation of networks and their development over time in the context of learning; the application of proper methods for the collection and analysis of process data is required; future research should ground the analysis of their data in learning theories and network theories.

2.4 Synthesis and research problematization

Knowledge and networks are *important predictors* for early internationalization (Jones et al. 2011). It is often the knowledge and networks gained from prior international work experience of the entrepreneur that facilitate early cross-border activities. Therefore, entrepreneurial internationalization seems to be better explained at the individual or group-level than at the level of the firm (McDougall et al. 1994).

Knowledge and networks are not separate – they relate to each other. Networks for instance have been found to be not only useful for access to international markets but also as an important source for knowledge about international markets and technology (Coviello & Munro 1997; Yli-Renko et al. 2002). Subsequent studies confirmed the importance of the new venture's international network of contacts as a source for knowledge and opportunity for learning (e.g., Baronchelli & Cassia 2014; Fernhaber et al. 2009; Gil-Pechuan et al. 2013; Musteen et al. 2014; Oviatt & McDougall 2005; Yeoh 2004). Due to the mainly

cross-sectional nature of these studies, they merely emphasize the linear causality between a firm's network and the knowledge created but do not elaborate on the dynamics of networking, knowledge creation, and their interactions.

The studies that take on a dynamic view towards networking and learning fall into particular categories. Studies are classified to emphasize on learning from a static network (Quadrant 3), focus on knowledge outcomes from an evolving network (Quadrant 2), investigate learning and network concurrently (Quadrant 4), or build on dynamic conceptualizations of knowledge creation and the network but miss to elaborate on the dynamics (Quadrant 1).

The articles belonging to *Quadrant 1* ground their studies in dynamic conceptualizations of organizational learning but do not elaborate on the learning process per se. Hence, they do not explore the full dynamics of the learning process and consider the network as given. Network theories are not considered. Longitudinal, case-based research is recommended in order to deliver insights into network building and the learning process. Articles in *Quadrant 2* conclude with similar recommendations for future research. These articles ground their studies in network theory derived from entrepreneurship and international entrepreneurship literature. In contrast to Quadrant 1 the studies do not consider learning theory. Hence, the focus is on dynamic conceptualizations of the network.

Quadrant 3 articles consider learning to happen in relationships. Networks are pre-existent and do not need to be created or developed. The articles mainly build their studies on learning theories and few, mainly conceptual papers, combine learning and network theories (Park & Rhee 2012; Peiris et al. 2012; Prashantham & Young 2011; Zhu et al. 2006; Zou & Ghauri 2010). More longitudinal studies to track changes over time is a consistent recommendation for future research within this quadrant, the same as the necessity to put a dynamic perspective onto the network in relation with the learning opportunities it provides.

Articles in *Quadrant 4* also consider learning to happen in relationships and similar to Quadrant 3 papers build on organizational learning theories and some, mainly conceptual papers, combine learning with network theories (Casillas et al. 2009; Freeman et al. 2010; Johanson & Vahlne 2003, 2009; Sharma & Blomstermo 2003; Welch & Welch 1996). Notably, many of the papers in this quadrant (Casillas et al. 2009; Chandra et al. 2012; Freeman et al. 2010; Johanson & Vahlne 2009; Sharma & Blomstermo 2003; Voudouris et al. 2011; Welch & Welch 1996) recognize the cyclical nature between knowledge created from network activities and further networking. Hence, these papers not only take a dynamic perspective on learning and networking but also consider the cyclical causality between the two concepts. Table 2 provides an overview about the theoretical grounding of the articles that represent dynamic conceptualizations

of learning and networking interactions and the recommendations for future research as expressed within these articles.

Table 2 Theoretical grounding and future research recommendations of Quadrant 4 articles

Theoretical grounding of the articles that represent dynamic conceptualizations	**Future research recommendations within the articles that represent dynamic conceptualizations**
• Absorptive capacity (Cohen & Levinthal 1990; Zahra & George 2002; Zahra & Hayton 2008) • Exploration and exploitation in organizational learning (March 1991) • Organizational learning types (Huber 1991; Levitt & March 1988) • Entrepreneurial learning (Cope 2005; Holcomb et al. 2009) • Dynamic capabilities as a process of learning (Eisenhardt & Martin 2000; Teece 2007; Zollo & Winter 2002) • Inter-personal relationships in business networks (Hakansson & Snehota 1995; Johanson & Mattson 1988) • Uppsala model on the internationalization process (Johanson & Vahlne 2003, 2009) • Social network approach (Burt 1982; Granovetter 1992) • Social capital (Nahapiet & Ghoshal, 1998) • Social learning theory (Bandura 1977; Engeström 2001) • Entrepreneurship and IE network literature (Coviello & Munro 1995, 1997; Coviello 2006; Hite & Hesterly 2001; Sharma & Blomstermo 2003)	*Regarding methodology* • Longitudinal studies based on exploratory, case-based data. • Combine process view with process methodology/methods in order to derive process theory. • Longitudinal studies that observe how events unfold in real-time. • Research on the level of the individual entrepreneur in order to uncover the micro-foundations of networking and learning. *Regarding theory* • Combine network theories with learning theories and vice versa. • Empirical research on the circular causality between networking and learning. • Creation of networks and their development over time in relation to the learning they provide. • The role of non-business, social relationships for learning. • Network development and learning as linear, continuous versus discontinuous processes.

Although the papers advance our understanding about how learning happens in relationship with an evolving network, the articles leave many questions un-

answered for future research. The need for more *longitudinal, case-based research* is a consistent recommendation throughout the articles. Only nine out of the 32 empirical papers made use of longitudinal research designs (i.e. Chandra et al. 2012; Evers et al. 2012; Fletcher & Harris 2012; Fuerst & Zettinig 2015; Kauppinen & Juho 2012; Pellegrino & McNaughton 2015; Prashantham & Dhanaraj 2010; Schweizer 2013; Voudouris et al. 2011) and only six articles addressed longitudinal process data with *methods* suitable for the collection and analysis of process data (i.e. Chandra et al. 2012; Fuerst & Zettinig 2015; Kauppinen & Juho 2012; Pellegrino & McNaughton 2015; Prashantham & Dhanaraj 2010; Voudouris et al. 2011).

Despite McDougall et al.'s (1994) early call for more research on the level of the entrepreneur more research is still necessary in order to advance our understanding about learning-networking interactions at the *level of the individual*. As seen by some of the mainly conceptual papers the potential to *combine learning with network theories* seems to be a promising path. De Clercq et al. (2012, 163) already comment that there is a need in international entrepreneurship *"to align [our] deeply contextualized studies of new venture internationalization with core literature in learning theory."*

Especially theories that look at *network dynamics* deserve more attention (Coviello 2006; Hite & Hesterly 2001). We still lack an understanding about how new networks are created for the purpose of knowledge acquisition, how the network is configured and reconfigured during the process of learning, and the role of non-business relationships for learning. Furthermore, networking activities seem to follow a linear process of, for instance, a continuous increase in social capital and network contacts over time. Few studies capture the discontinuities inherent in networking and learning activities (an exception is Prashantham & Dhanaraj 2010).

In line with the dynamic nature of the papers in Quadrant 4 the *circular causality* between the network and knowledge deserves further attention. Circular causality is conceptually predicted but no one has shown it empirically.

Tackling many of the issues open for future research does not only require a process perspective on behalf of the researcher but needs to be approached with a process methodology and methods suitable to create longitudinal process data and to derive process theory and models. Therefore, in the following chapter I present the process theoretical approach of my thesis which I believe is able to shed more light on the networking-learning interactions and its development over time.

3 THE PROCESS PERSPECTIVE AND THE RESEARCH APPROACH

This chapter presents the process perspective and the research process. The process perspective is ultimately linked to how (process) data are captured, collected, and analyzed. I adopted the process perspective in order to provide answer to my research question of how do processes of learning and networking influence each other during entrepreneurial internationalization.

In this chapter I introduce first the process perspective in order to familiarize the reader with its underlying philosophy, its characteristics compared to the more common variance approach in social scientific research, and the particular methods used in process research in order to detect and uncover patterns of temporal progressions in process data. Next, I introduce the research setting of my case firm C2 Game Studio and the context of the global mobile video game industry. Providing insights into the firm and the characteristics of the industry allows the reader to appreciate and judge the usefulness of researching the learning-networking interactions in that particular context. I then continue to describe the research process of data collection, management, and analysis. I finalize the chapter describing the criteria I used in order to provide evidence of the trustworthiness of my findings. Overall, providing evidence of the research process makes the study more transparent and trustworthy (Bansal & Corley 2012; Lincoln & Gupta 1985).

3.1 The philosophical perspective

This chapter has the intention to familiarize the reader with the philosophical perspective I adopted in order to conduct my research. The philosophical assumptions my research is based on do no only determine how social reality is perceived by the researcher and how knowledge is constructed, it also influences the methods used in order to uncover the workings of the social world (Cunliffe 2011; Morgan & Smircich 1980). *How do processes of learning and networking influence each other during entrepreneurial internationalization is the driving question of my research.* In order to provide answers to this question I adopted a process approach as compared to a variance approach. Making use of a process approach requires the examination of the actual process of change

by describing and explaining the temporal sequence of events that unfold during organizational change (see Chapter 1.2 on variance and process approaches).

A process ontology rests on *process metaphysics* that rather emphasizes on activities than substances (Rescher 1996). This differences is traced back to Heraclitus and Democritus and their differing view about reality. For Heraclitus there are no perduring things like substances. Things are merely reifications of processes, similar to the river that *"is not an **object** but an ever-changing flow; the sun is not a **thing**, but a flaming fire. Everything in nature is a matter of process, of activity, of change."* (Rescher 1996, 10, emphasis in the original). For Democritus in contrast the world is made up of unchanging substances that only change their interrelations but not their properties. Hence, the process metaphysics prioritizes *"activity over substance, process over product, change over persistence, and novelty over continuity"* (Rescher 1996, 31).

Langley and Tsoukas (2010) citing Farmer (1997) highlight the notion of a process metaphysics that every event alters the character of an already established pattern, and, hence, that every moment is qualitatively different from each other. For instance, a student reading in the morning in the library and reading at home in the evening is not the same student since the activity of reading is different each time. As the reader will find out later in the findings of my research, activities such as the participation in industry events differ qualitatively depending on the current learning and networking abilities of the entrepreneur. Therefore, my framework is ultimately tight to a process metaphysics considering the developmental growth of the entrepreneur in terms of learning, experiences, and abilities. The entrepreneur does not stay the same – he or she is a human being in becoming based on a continuous and spiraling process of experiential learning.

In line with a process metaphysics I consider an organization like an international new venture as a *dynamic bundle of processes*. In my case the international new venture consists of a dynamic, interrelated bundle of learning and networking processes. Substances or things like the international new ventures as such and the entrepreneurs do not remain unchanged. They are constantly evolving: The entrepreneur experiences a developmental growth in terms of learning (see Chapter 6.1.4 on experiential learning as a continuous and spiraling cycle) and even the firm is continuously reshaped in its identity through the constant search for a suitable business model based on the learning of the individual entrepreneurs (see Chapter 6.1.5 on strategy emergence).

A process metaphysics *"rests on a relational ontology, namely the recognition that everything that is has no existence apart from its relation to other things. […] Focusing on **inter**-actions is preferred to analyzing self-standing actions."* (Langley & Tsoukas 2010, 3, emphasis in the original) This implies that experiences and events do not stand on each other but they grow out of each

other. The experiential learning cycle I describe in my framework corresponds to the *relational ontology* recognizing the embeddedness of learning in interaction with others based on the accumulation of experiences (see Chapter 6.1.1 on the role of the network during experiential learning).

A process ontology is related to the *objectivist ontology*. Process research considers organizations as quasi-stable structures and as sites of human action in which organization emerges (Tsoukas & Chia 2002). A process ontology therefore differs from naïve realism that considers reality to exist independently from our interactions studying concrete structures, entities, or events. Process theory rather resembles *critical realism* that acknowledges the existence of a real world but that cannot fully be understood due to partial or positioned perspectives (Cunliffe 2011). Miles, Huberman, and Saldaña (2014, 7) label themselves as pragmatic realists who *"believe that social phenomena exist not only in the mind but also in the world-and that some reasonably stable relationships can be found among the idiosyncratic messiness of life. There are regularities and sequences that link together phenomena. From these patterns, we can derive the constructs that underlie individual and social life. The fact that most of these constructs are invisible to the human eye does not make them invalid. After all, we all are surrounded by lawful physical mechanisms of which we're, at most, remotely aware."*

I concur with their view that observable patterns underlie invisible constructs that relate to the *mechanisms* referred to by both process researchers and critical realists (Langley 1999; Pettigrew 1990; Sayer 2000; Van de Ven 1992). My research is mainly preoccupied with the detection and identification of patterns. However, I also detect underlying mechanisms in form of the interplay between a teleological and a dialectical change motor (see Chapter 6.1.4 on the continuous and spiraling cycle of experiential learning). Especially the dialectical change motor is preoccupied with context where the world-view of the individual entrepreneur clashes with the world-view of others and generates a conflict. Generally, the framework I construct puts emphasis on the context where intentionality or human agency alone do not explain entrepreneurial internationalization due to it embeddedness in existing social structures (the relational ontology of process research). Explanations are therefore embedded within their context. This concurs of what Welch, Piekkari, Plakoyiannaki, and Paavilainen-Mäntymäki (2010) refer to as *contextualized explanations* for theorizing from case studies building on a critical realist philosophical orientation.

All in all, my research is based on a process ontology putting emphasis on activities over substances. The relational ontology of process metaphysics puts context and relationships center-stage. Theorizing follows contextualized explanation where the context forms part of the explanation and does not exist in isolation from the phenomenon. Furthermore, the process ontology resembles a

critical realist perspective recognizing the subjective nature of knowledge and the existence of unobservable mechanisms underlying observable patterns. The process ontology is placed within objectivism following Morgan and Smircich's (1980) and Cunliffe's (2011) typologies for classifying qualitative research. Grounding my research in a process ontology also has implications on the methods used in order to collect the empirical data which I outline in the following chapter.

3.2 Process approach

Poole, Van de Ven, Dooley, and Holmes (2000) elaborated more profoundly on the difference between process and variance approaches to social scientific research building on Abbott (1988, 1990) who distinguishes stochastic and narrative explanations in sociology. For the structure of this chapter I follow Poole et al. (2000) and also adapt the description to my particular research setting of an international new venture embedded in processes of learning and networking.

The evolving central subject in a process study can be entities like the individual entrepreneur, the entrepreneurial team, and the international new venture. *The entity such as the individual entrepreneur can make events happen and at the same time he or she is influenced by events.* The particular learning and networking capabilities (i.e. attributes) of the entrepreneur might change over time and so may the entrepreneur change. Qualitative changes like an increasing stock of knowledge or a heightened awareness about learning opportunities transform the entrepreneur over time. Similar, on the level of the international new venture, the firm might shift its focus from a purely domestic venture to a global start-up even with a different product offer. This transforms the venture in qualitative aspects such as a different strategic orientation in terms of business planning, technology, and human resources. Changes in attributes and changes in the central entity are difficult to capture by a variance approach. However, these changes become the central interest of inquiry in a process approach.

Events are the most valid representation in change processes since they best represent the inherent complexity of developmental processes. While the variance approach disassembles complex particulars into combinations of independent variable properties, the process approach considers events as the best way to simplify complex activities of social reality.

Aristotle defined four causes of why changes occurs: Material, formal, efficient, and final. *"Respectively, they indicate that from which something was made (material cause), the pattern by which it is made (formal cause), that from*

which comes the immediate origin of movement or rest (efficient cause), and the end for which it is made (final cause).” (Poole et al. 2000, 42).

Applying these definitions to the situation of the entrepreneur in relation to his or her international new venture, I propose to ask the following question: Why does the international new venture exist? In terms of material cause, the international new venture exists because of its entrepreneurs, investors, products, etc. In terms of final cause, the international new venture exists because of the entrepreneurs’ objectives to realize their passion, to become wealthy, to make a living, to contribute to society, etc. In terms of formal cause, the international new venture exists because of their particularly planned business model. In terms of efficient cause, the international new venture exists because of the specific knowledge and abilities of its founders, the knowledge-intensity and innovativeness of its products, etc.

Narrative explanations in process approaches not only employ efficient causality but also admit final and formal causality. Transitions between events and between phases can often be explained based on efficient causality. The explanation of the development of larger patterns, however, requires a broader causal scheme. For instance, contacting a potential international distributor and subsequently negotiating an international sales deal can be explained by the proactive business attitude of the entrepreneur. The repeating negotiations with potential distributors and the resulting creation of a global network of sales agents, however, is better explained by the international new venture’s objective to become the dominant global market player in its industry which might also be part of the planned business model. Hence, final and formal causality are sometimes identical. Variance-based research emphasizes on efficient causality as a force acting on the central entity. It is perceived as a push-type causality. This contrasts with the pull-type causality of the narrative or process approach where final causality pulls the firm towards an envisioned objective. Final causality is not considered a valid generative mechanism in variance approaches. Thus, process approaches do not only admit efficient causality but also formal and final causality for explanation.

Both variance and process explanations are evaluated based on their generality, that is, how generative mechanisms can be applied to a broad range of similar cases. For variance explanations this means that the generative mechanism should operate uniformly and consistently across different cases and contexts. This assumes the mechanism to work at equal speed, in the same way, and in a continuous fashion over time.

Unlike variance explanations, process explanations do not focus on uniformity and consistency but on versatility. The generality of a process explanation lies in its ability to encompass a broad domain of developmental patterns for a variety of cases and contexts. The versatility stems from the complexity of

narratives and their underlying event sequences. Narratives might differ in event sequences and contextual factors but nevertheless may share the same plot or through-line of a story (i.e. its underlying logic or generative mechanisms). Thus, narrative explanations of process theory need to encompass the particularities of individual cases that share a common developmental process.

Langley et al. (2013) observe two types of inference from the particular to the general for process generalization: 1) Climbing the ladder of abstraction through analytical generalization by inferring the general theoretical phenomenon of which the observed particular is a part. This implies a detailed understanding of the particular. In other words, rich and detailed case descriptions contribute to the potential transferability of theoretical ideas (Lincoln & Guba 1985); 2) Creating a generic story from a narrative means to move from surface observations to more abstract process theory, or to move from description to explanation (Pentland 1999). The story itself is an abstract conceptual model based on a plot or generative mechanisms.

Formal, final, and efficient causalities are all at work within a narrative. A process theory that accounts for the different types of causalities within different cases and contexts can be said to be versatile. For instance, Prashantham and Dhanaraj (2010) identify the mechanism of agency through which entrepreneurs take advantage of learning opportunities through their social capital. Exploiting learning opportunities from social capital is not automatic, it requires conscious actions (i.e. agency) on behalf of the entrepreneur. The authors recognize that entrepreneurs are not uniformly adept at appropriating social capital and that heterogeneity in agency leads to different international growth outcomes. Hence, agency as a mechanism is able to explain the exploitation of learning opportunities from social capital for a variety of cases and contexts.

In a variance approach the temporal order in which different independent variable come into play to act on a dependent variable is indifferent as long as all variables are able to operate. In a process approach, however, *the temporal ordering of different event sequences is critical to the outcome*. The specific order of events determines when efficient causes operate, and the duration of these events determines the lengths of these causes. For example, if the entrepreneur first engages in more self-directed learning and explores new business opportunities through experiential, trial-and-error learning he or she might develop relevant international market knowledge slower than if the entrepreneur learns vicariously alongside an internationally experienced partner. In each path of learning different forces come into play that influence outcomes differently. Vicarious learning might lead to a faster knowledge acquisition but also bears the risk of knowledge getting entrenched than if knowledge is acquired freely without the intervention of a partner. This might also have an effect on the sub-

sequent identification and exploitation of further international business opportunities. Hence, the temporal sequence of events becomes critical and might shape the path differently for the entrepreneur who wants to internationalize the new venture.

Process theories are able to explain the state of development at any point in time through the immediate and distal prior events and causal influences. A particular cause that operated in the past continues to influence the entity because it forms part of the entity's history. For example, the experience of the first international market entry might still have a bearing on how the international new venture selects current modes of entry even if the firm experienced several market entries since the first one. This contrasts variance approaches that emphasize on immediate causation. The variables that predict the current state of an entity contain all the information related to its immediate past. How an entity was shaped by the different occurrences of its past is irrelevant to explain the entity's history in a variance approach since each state is directly a result of its immediate past. Some events might be more enduring than others. This requires the process researcher to look beyond the entity's immediate past in order to uncover the causal factor at play.

As previously noted the central entity and its attributes might experience qualitative changes over the course of time. This implies that *the entity, its attributes, and ascribed events may change in meaning over time*. The international network of the new venture in the pre-internationalization period might have a different meaning for the firm than during post-internationalization. Whereas the initial network might rather be used for international opportunity identification the same network might later be used for the implementation of the new business opportunity. Similarly the event of international trade fair assistance might have a different meaning for the firm at an early stage of development for spotting new international business opportunities than during later stages when the firm already consolidated its international market presence. These changes of meaning over time are not captured by variance approaches which require its attributes to maintain a unitary identify and meaning over time.

3.3 Process research methods

Studies that focus on how managerial and organizational phenomena emerge, change, and unfold over time, emphasize on the *temporal progression of activities* as elements of explanation and understanding (Langley et al. 2013). The appreciation of different forms of progression is helpful in order to derive an understanding about process dynamics in the form of event sequences. As Langley notes (2009, 416):

> *Process analysis often seeks to identify repetitive temporal patterns among activities and events. How are events ordered? What is the typical sequence of phases? Are there different paths and cycles through the phases? What are the branch points where different paths may diverge? How are phases and activities interconnected?*

Van de Ven (1992) remarks that there are *three different meanings of processes*: 1) A logic that explains a causal relationships between independent (input) and dependent (output) variables; 2) A category of concepts or variables of individual or organizational actions; 3) A sequence of events that describes how things change over time.

On the one hand, Yli-Renko et al. (2002) provides an example of a study for the *first meaning of process*. The authors assume technological and managerial learning as the logic that causally links social capital with knowledge outputs. However, the actual learning process is not directly observed but rather used to explain why the independent variable exerts a causal influence on the dependent variable. On the other hand, Prashantham and Dhanaraj (2010) provides an example for the *third meaning of process* where the authors uncovered event sequences of the unfolding social capital and international growth trajectories. Tolstoy (2010), another Quadrant 4 paper from the literature review, fits the *second meaning of process*. The author makes use of concepts of organizational action such as network development, knowledge combination, and knowledge creation. The three different process concepts (i.e. network development, knowledge combination, knowledge creation) are operationalized as constructs and measured as fixed entities in the form of variables that exert a causal influence on each other. Similar to the first meaning of process, the actual process of for instance network development is not directly observed but rather operationalized as a fixed entity. This conceptualization of reality only allows to measure if change occurred but not how. In order to address *how change occurs*, requires a story that narrates the sequence of events as they unfold which resembles the third meaning of process (Van de Ven 1992).

What are then the methods used in order to analyze patterns in the sense of the third meaning of process? The analysis of process data requires the researchers to be attentive to possible emerging trends and patterns from the data. Different *sensitizing devices* are proposed by the community of process researchers in order to loosen up thinking and stimulate variety with the aim to detect, on the one hand, *patterns and trends in process data*, and, on the other hand, possible *generative mechanisms*, that is, the underlying logic that produces the temporal pattern (Langley 2009).

Van de Ven (1992) suggests a *typology of developmental progressions* for the analysis of process data (e.g., unitary/multiple/cumulative progression). Langley (1999) offers three *sense-making strategies* with the particular aim of identification of pattern in process data (i.e. quantification strategy, grounded theory strategy, visual mapping strategy). Pettigrew (1990) puts forward the assumption of the *temporal interconnectedness* between the past, present, and the emerging future ('catching reality in flight') and *causal assumptions* that causation is neither linear nor singular, i.e. changes have multiple causes and are better explained by loops than lines. Saldaña (2003) provides a set of *descriptive questions* as a guide to discern patterns from longitudinal data (e.g., what increases/emerges/cumulates/decreases/ceases through time?). And, Pentland (1999) sees patterns to be analyzed at *the surface level of a narrative*, that is, the actual text as told by the narrator.

What these *heuristics* have in common is that they focus on the identification of patterns within process data. An empirically observed pattern is similar to an empirically observed correlation (Langley 2009). It provides an important understanding about regularities in event sequences – it is descriptive by nature. In order to move from surface observations to more abstract process theory, one moves from description to explanation (Langley et al. 2013). Explanation requires the identification of the underlying logic or the generative mechanism that produces the observed empirical pattern.

In the following I present different pattern recognition heuristics derived from the process literature. These heuristics become important for the analysis of my process data. I do not elaborate more briefly on the different sensitizing devices regarding generative mechanisms. Although I will discuss generative mechanisms as part of my findings in Chapter 6.1.4 on experiential learning as a continuous and spiraling cycle, it was not the intention of my research to identify and describe the underlying mechanisms of my framework. I rather leave that open for future research. Table 3 provides an overview about different sensitizing devices for the identification of patterns and their underlying generative mechanisms.

Van de Ven (1992) note that the most common form of progression in the strategy literature is the *linear sequence of stages* or *phases of development*. This compares to the articles I looked at in the literature review in Chapter 2.3 on the dynamic conceptualizations between knowledge and the network. For instance Casillas et al.'s (2009) knowledge model considers a sequence of different phases that influence a firm's internationalization (i.e. the availability of prior knowledge, a search for new knowledge, the combination of prior knowledge with new knowledge and action, and the learning process that arises from the outcome of these actions), and Schweizer (2013) puts forward a process of four interrelated phases of sequential development in order for a firm to

overcome its liability of outsidership (i.e. realization of the existence of liability of outsidership through internal/external triggers, identification of the relevant network, re-bundling resources and capabilities, and accessing, managing, and leveraging opportunities identified in the new network).

Table 3 Sensitizing devices for detection of patterns and generative mechanisms

Author	**Identification of patterns**	**Identification of generative mechanisms**
Van de Ven (1992)	Typology of developmental progressions: Unitary progression, multiple progressions, cumulative progression, conjunctive progressions, recurrent progressions.	Change motors: Life-cycle, dialectics, teleology, evolution.
Langley (1999)	Sense-making strategies: Quantification strategy, grounded theory strategy, visual mapping strategy.	Sense-making strategies: Narrative strategy, quantification strategy, alternate templates strategy, temporal bracketing strategy.
Pettigrew (1990/1997/2012)	Guiding assumptions: Temporal interconnectedness, causal assumptions.	Interpretation of patterns. Repetitive questioning about 'how' guides constant search for underlying mechanisms. E.g. part of the conscious intentions of key actors; features of the context; elements in the interactive field.
Saldaña (2003)	Descriptive questions	Analytic and interpretive questions
Pentland (1990)	Surface structure of a narrative "as told".	'Deep structure' as in a fabula: Events, actors, and their relationships. Generative mechanisms that drive event sequences in fabulas, for instance 'change motors' or routines.
Jay 2013; Klarner & Raisch 2013; Monin et al. 2013)		Tension, contradiction, paradox.

Besides the linear sequence of development, others forms of progression should be taken into account, especially for the study of processes that follow the third meaning: Unitary progression, multiple progressions, cumulative progression, conjunctive progressions, recurrent progressions (Van de Ven 1992). A *unitary progression* consists of a sequence of qualitatively different stages or phases of activities. The number of each subset of activities for each stage of phase can vary but must occur in a single, ordered progression. In contrast, *multiple progressions* consider more than one path of developmental progression. For instance, a sequence of events might diverge at the beginning of a particular phase, then progress in parallel, and converge towards the end of the phase. *Cumulative progression* occurs when elements from earlier stages are brought forward in new stages, that is, when they accumulate over subsequent stages. Cumulative progression can both happen in unitary and multiple progressions. In a *conjunctive progression* events are causally related. This means that events in one pathway may influence events in other pathways. The influence may occur through chance (probabilistic), logical integration of event sequences (inclusion), or connection between events in form of a developmental bridge (mediation). Conjunctive progression may be found in unitary, multiple, and cumulative progression. *Recurrent progressions* refer to repeating event sequences or activities between stages or phases.

A particularly useful device that helps to identify the temporal progression of event sequences provides *visual mapping* (Langley 1999). Graphical representations are able to visualize the unfolding of a large number of events along many dimensions in a compressed format. For instance, Gehman et al. (2013) visually mapped the unfolding of critical events regarding the emergence of values practices in a university. During data collection the authors realized that many activities of different stakeholder at the university level and the external environment seemed to be connected during the emergence of the honor code. The visual map then helped to identify how initially unconnected streams of activities came together over time. The visual map the authors provide depicts chronologically the unfolding of critical events related to each stakeholder. Another example of visual mapping appears in Langley and Truax (1994) who studied the process of adoption of new technology in small manufacturing firms. Their visual map represent codings in multiple ways: Events are graphically represented as decisions, activities, or events external to the firm; these events are associated with one or several areas of analysis (e.g., product, finance, technology, human resources); the effect of each event on the technology adoption process (e.g., positive, negative); the degree of continuity among linked events. Visual maps provide a useful strategy for the analysis of process data in order to describe temporal progressions, relationships between activities and event sequences, and between different levels of analysis, for instance between the

inner and outer environment of the firm. *"However, unless supported by other methods, the conclusions derived from it can have a rather mechanical quality, dealing more with the surface structure of activity sequences than with the underlying forces driving them."* (Langley 1999, 702-703). Therefore, Langley (1999) offers other types of sense-making strategies in order to uncover the underlying mechanisms which I will refer to later in this chapter.

The *grounded theory strategy* is offered as another sense-making strategy by Langley (1999) able to identify patterns in event sequences. The strategy originates from Glaser and Strauss (1967) and was subsequently refined by Strauss and Corbin (1990) in its first edition. Essentially, the strategy generates theory from bottom-up, rooted or grounded in the original evidence such as interview transcripts. Grounded theory offers a technique for systematic coding (e.g., axial coding, process coding) from particular incidents through to categories that describe the observed phenomenon in more general terms. Consequently, each emerging category consists of subcategories and associated dimensions and properties that are continuously refined as more incidents are analyzed and compared. Langley (1999) notes that the grounded theory strategy is especially useful for processes that occur on the microlevel of the individual or group, are rich in detail, and preferably consist of a large number of comparable incidents. This is due to the funnel characteristic of the strategy which aims at building more general categories based on a larger number of small units of data (i.e. incidents).

The third strategy offered by Langley (1999) for pattern identification in process data is the *quantification strategy*. This strategy quantifies qualitative process data for statistical analysis. Van de Ven and Poole (1990) argue that the complexity of longitudinal, qualitative process data make them difficult to analyze. In order to identify the patterns inherent in process data, further data reduction techniques needs to be applied. More specifically the authors propose the transformation of qualitative data into quantitative dichotomous variables permitting the examination of time-dependent patterns of relations among event constructs through statistical methods. However, statistical methods as applied in variance studies are less useful for this exercise since they focus on difference (variance) or correlation between spatial orders (variables) and not similarities and differences between temporal orders (discrete events). The sequence methods (Abbott 1990) are more appropriate for analyzing sequence and order in coded event data. Poole et al. (2000) proposes several statistical methods such as stochastic modeling techniques, granger causality, and phasic analysis that are useful for the identification of time-dependent patterns and relationships in event sequence data. Although the strategy is capable of taking out much of the complexity and messiness of qualitative, longitudinal process data, the data also

lose their contextual richness and variability through the process of transformation. Langley (1999, 698) commented that *"there is a certain irony in the idea that researchers who give themselves the trouble of collecting rich qualitative data in real organizations are so uncomfortable with this richness that they immediately rush to transform it, through another extremely demanding process, into a much thinner data set that can be managed in traditional ways."*

The qualitative strategies of visual mapping and grounded theorizing, and the quantification strategy are all useful for the identification of patterns in qualitative process data as proposed by Langley (1999). What they have in common is their inductive, bottom-up, character to generate patterns of event sequences based on observed incidents.

Pettigrew (1990) contends a view of *contextualism* for the study of process data. Processes are *embedded in context* and both shape and are being shaped by the context. Thus, the economic, political, social, sectorial environment (outer environment) of the new venture as well as the inner structural, cultural, and political environment (inner environment) of the firm have a bearing on how processes play out over time. Multiple processes occur at a particular level of analysis (e.g. processes of learning and networking at the level of the entrepreneur) and similar processes happen at different levels of analysis (e.g. internationalization at the level of the firm and the sectorial level). Change is often triggered by asymmetries between level and context (Pettigrew 1997). This for instance implies that technological changes at the sectorial level might happen faster than at the firm level which might trigger the development of relevant catch-up strategies/capabilities on behalf of the firm. Furthermore, the *temporal interconnectedness* of events shape the pace and direction of processes. Antecedent conditions influence the present and the emerging future. However, as Pettigrew (1997, 341) commented *"there is no assumption of predetermined timetables, of ordered and inevitable sequences or stages. Trajectories of strategy processes are probabilistic and uncertain because of changing contexts and human action."*. The assumption of the reciprocal influence of processes and context at multiple levels of analysis affirms the *interdependence between context and action*. The role of human agency becomes important in that it helps to shape processes through the subjective interpretations of actors' learning. For instance, the learning and networking activities of the entrepreneur might be both constrained by features of context of the international new venture's market and product orientation and also shape context by influencing future strategic planning. This of course also applies to the outer context where the entrepreneur's networking behavior might be influenced by the networking culture and tradition of the particular sector, and the entrepreneur's networking actions influence the behavior of particular actors in the outer context. Thereby, Pettigrew (1997) recognizes Giddens' (1979) theoretical contribution of superseding

the dualism of structure and agency. Another important assumption that guide Pettigrew's (1990) processual research consists in the search for *holistic rather than singular and linear explanations* of process. Changes rather have multiple causes and are better explained by loops than lines.

Pettigrew does not offer particular techniques like Langleys' (1999) sense-making strategies for pattern recognition or the identification of generative mechanisms in process data. He rather contends an *openness* on behalf of the process researcher with what he or she is able to recognize in the data. Pattern recognition does not only occur inductively from the data but is also influenced by the researcher's prior knowledge, frames of reference, and research themes. Thus, inductive pattern recognition always goes along with deductive elements (Pettigrew 1997).

The temporal interconnectedness of events and the assumption about non-linearity of processes provide an interesting angle for pattern recognition whereas the generative mechanisms may stem from the conscious intentions of the actors or originate in the context or reside in the interactive field between context and process (Pettigrew 1997).

The observation of the temporal interconnectedness of events and their possible non-linearity combines well with Van de Ven's (1992) typology of developmental progressions and Langley's (1999) visual mapping strategy. For instance, the temporal interconnectedness of event sequences can be constructed from retrospective case histories and real-time observations by making use of a visual mapping strategy. Then, the process researcher can analyze the visually represented event sequences for their temporal progressions.

Saldaña (2003) too advocates analysis strategies like grounded theorizing and the visual representation of process data. Due to the complexity and volume of longitudinal data he also contends a *series of questions* in order to guide the researcher in his or her effort to identify patterns in process data. The primary question consists in asking *what changes through time?* More particular set of questions however are needed in order to frame, describe, analyze and interpret process data. He builds on Wolcott's (1994) three levels of description, analysis, and interpretation for the analysis of qualitative data. *Description* relates to chronological data that describe when and what kinds of changes occur in whom. After the researcher established their interrelationships or their temporal interconnectedness in Pettigrew's words, the process of *analysis* inquires about how and why those changes might have occurred. Finally, "[e]xplaining the nature and meaning of those changes, or developing a theory with transferability of the study's findings to other contexts, is interpretation." (Saldaña 2003, 63).

Themes, patterns, and trends are all related to meaningful human actions across time. Saldaña (2003, 64) proposes seven descriptive questions in order to guide the researcher in his or her effort for pattern recognition:

1) What increases or emerges through time?
2) What is cumulative through time?
3) What kinds of surges or epiphanies occur through time?
4) What decreases or cease through time?
5) What remains constant or consistent through time?
6) What is idiosyncratic through time?
7) What is missing through time?

What increases or emerges through time can be quantitative or qualitative in character. The increase in an entrepreneur's networking activities over time like an increasing search for new contacts and more frequent interactions with partners all indicate an quantitative increase in activities, whereas an increased awareness for the usefulness of networking interactions rather relates to a qualitative change.

Saldaña (2003) also points to the differences between the terms growth and development. Whereas *growth* implies a quantitative increase over time, such as network size, number of contacts, *development* is rather associated with qualitative characteristics across time, such as transformation and improvements. For example, through the development of networking capabilities, the entrepreneur might grow the size of the new venture's network over time.

A *cumulative affect* occurs as the result of successive experiences related to growth and development. What cumulates is qualitative in character such as the "capacity for self-awareness accumulates and evolves as particular life experiences are gained, accompanied with introspective thought and personal reflection on those experiences." (Saldaña 2003, 107). In order to identify cumulative change it is necessary to compare the different time periods "before", "during", and "after" change occurred.

When change happens suddenly or when a significant event leads to a different level, direction, or quality of participant change, then a *surge* or *epiphany* occurs, respectively. For example, a chance encounter might lead to a change in one's worldview, or a surge of networking activities might be observed at particular points in time.

The same as some proportions of the data show an increase and emergence over time, others might *decrease or cease through time*. Saldaña (2003), however, notes that we should be careful while analyzing decrease and increase and ask ourselves if the observed action relates to a decrease or an increase. For instance, a decrease of the entrepreneur's interactions with a partner might be interpreted as a deterioration of the business relationship and at the same time as an increase in awareness about the malfunctioning of the relationship. In many cases, changes in one area is probably linked to changes in other areas

(e.g., a decrease in one area is coupled with an increase and cumulative effects in others, and so on).

What *remains constant or consistent through time* might be an indicator of patterns. These patterns might consist of daily routines or even daily rituals for the entrepreneur's sense of continuity and stability in his or her working. The researcher's task then is to discern if apparently constant data are operating as background noise or a foreground issues for analysis. Product development might be a constant issue for the international new venture operating continuously in the background. This activity however might occur at different speeds triggered by external events such as trade fair presentations or product launch activities. Hence, the particular rhythms of product development periods might become an interesting aspect for pattern identification.

On the one hand, consistent repetitions and rhythms of processes reveal patterns. On the other hand, data patterns might reveal themselves as inconsistent, multidirectional, and unpredictable. Such pattern relate to *idiosyncrasy in data*. But, as Saldaña (2003, 121) remarks *"patterns can also consist of multirhythmic, asymmetrical, and seemingly fluctuating strings of action, such as an improvisational jazz session […]"* At the end, patterns are context depended and are constructions and interpretations of the researcher. Idiosyncrasy, however, might also appear due to a faulty coding system or an insufficient amount of longitudinal data. For example, what appears to be inconsistent and messy data in short term might play out as a consistent pattern in the longer run.

Data that the researcher intuitively expects to find during analysis might be absent. This could require a modification of the interview protocol in order to inquire about the *missing data*. Contextual conditions could also inhibit the presence or emergence of particular processes. Missing data could also be the consequence of an observed decrease earlier. Saldaña (2003, 125) encourages to contemplate on the question of what is missing through time as a useful *"exercise to both reflect on how the absence of something may influence and affect participants, and to exhaust the possibilities of what might have been, could have been, or should have been present during the study."*

Patterns of process data are also found in narratives as they are told by participants. The text that is produced by the narrator (e.g., the interviewee) reflects what people account for and make sense of their actions and that from others (Pentland 1999). The narrative view for theorizing from process data is put forward by Pentland (1999). He distinguishes different levels of structure in narrative with the surface level being the actual text of the story as told by the participant. On the next underlying level follows the story which is the version of a fabula from a particular point of view. Whereas the fabula on the next underlying level provides a generic description of a particular set of events and their

relationships. Finally, the generating mechanisms explain the underlying structures that enable or constrain the fabula. Pentland (1999) remarks that in order to move from description to explanation, one needs to move from surface level data of the actual text to the underlying generic mechanisms of the fabula. Pentland (1999) is less concerned with how to detect surface level pattern in the text and more with how to explain the underlying structures that create these patterns which I will discuss in more detail in the following section on generic mechanisms.

All in all, the identification of repetitive, temporal patterns is a central concern for process theorists. Patterns that describe the unfolding of particular event sequences over time provide the surface structure which is directly observable. However, in order to explain causation and movement of patterns it is necessary to uncover the deep structure that underlies the surface structure. The identification of generative mechanisms is particularly challenging because these are not directly observable.

Different heuristics are proposed by the community of process researchers with the aim to derive explanations regarding the underlying structure of event sequences. Van de Ven and Poole (1995) offer four process theories for the explanation of organizational development and change (i.e. evolution, life cycle, dialectic, teleology). Langley (1999) considers the four sense-making strategies of narrative, alternate templates, temporal bracketing, and quantification strategy as adequate for the unrevealing of mechanisms. Pettigrew (1990, 1997) suggests the repetitive questioning of ‘how’ as to guide the search for generative mechanisms. Saldaña (2003) adds analytic and interpretive questions to his repertoire of questions that aim at the explanation of the how and the why of changes. Pentland (1999) considers generative mechanisms to drive event sequences in fabulas at the deep structure of narratives. More recent process conceptualizations are tension, contradiction, and paradox that drive patterns of change (Jay 2013; Klarner & Raisch 2013; Monin et al. 2013).

As mentioned at the beginning of this chapter, my particular research interest as driven by my research question is how do processes of learning and networking influence each other during entrepreneurial internationalization. My understanding rather focuses on the patterns of these interactions than on the underlying mechanisms that cause and drive the observed patterns. Although I discuss generative mechanisms as part of my findings in Chapter 6.1.4 on experiential learning as a continuous and spiraling cycle, I rather leave this inquiry open for future research.

3.4 The research setting and context

As outlined in the introduction (see Chapter 1.1), one of the firm's that participated in my earlier research on the role of small and medium sized enterprises in global value chains provided me the lead to their partner C2 Game Studio who recently signed a contract with a globally-renowned publisher for mobile video games in order to publish their first video game. This sparked my interest and I requested an interview with the two founders in order to check if the venture would suit my research.

During the initial interview in June 2011, I learned that C2 Game Studios was officially registered at Medellin's chamber of commerce during March 2008. It was founded by the two entrepreneurs Luis and Camilo. From the outset the two entrepreneurs had the vision to create video games for international markets. However, before working on the creation of their first video game they decided to acquire experience with the development engine for video games Unity and offered design and development services regarding interactive 3D simulations and visualizations to local clients.

After operating two years on the local market and gaining relevant experience and programming skills with Unity, Camilo and Luis finally decided to start working on their first video games. Therefore they visited the Game Developers Conference (GDC) in March 2010 in the U.S. where they got to know Seismic Games, a US-based video game content creator and consultancy firm for video game producers. Seismic Games served as an important intermediator for C2 Game Studio in order to participate in several video game bidding procedures for potential clients from the U.S. and Australia. Although none of the biddings resulted in an actual business, C2 Game Studio acquired important knowledge about how to structure and estimate a video game development project based on the design of a potential international client. This provided a unique learning opportunity dealing with customers in the global video game industry compared to projects that were so far focused on simulation and visualization projects for clients in Colombia only.

The rise of digital distribution formats such as the App Store and a general trend towards mobile video games let to the decision to develop their first game as a mobile game sold through the App Store. The highly competitive market situation in the App Store required the cooperation with a specialized publisher for mobile video games. Once the development of the game reached a more mature state in March 2011, Camilo contacted a renowned UK-based mobile video game publisher for independent studios. The entrepreneurs were fortunate. The publisher liked the game and saw a great potential in it. After the contract was signed in May 2011 the publisher assigned the game to an internal

producer in order to polish and prepare the game for sales through the App Store.

The story that the two entrepreneurs provided looked promising to me in order to research how entrepreneurial internationalization unfolds in the fast growing and dynamic mobile video game industry. I had the unique opportunity of experiencing the first initial market entry in real-time and beyond. The firm also seemed to be sufficiently new in order to experience early internationalization. When I entered, the firm officially existed for three years and started to work on video games for a year only. The entrepreneurs also seemed to be willing to participate in the longitudinal, real-time data collection process which was important due to the time commitment of the entrepreneurs for the study.

Focusing on one case allowed me to study the unfolding of learning-networking interactions in-depth in their natural setting and context. Case studies provide rich, empirical descriptions of particular instances and are useful in order to understand the dynamics present within *single settings* (Eisenhardt 1989; Yin 2009). A single case study that explores the depth of a phenomenon in their natural setting is a powerful tool for *inductive theory generation* (Dyer & Wilkins 1991; Siggelkow 2007). Single case studies are often criticized for their lack of sample size or nonrepresentativeness. However, as Langley et al. (2013, 7, emphasis in the original) note in regard to longitudinal, process studies *"[i]t is a common misconception that longitudinal case studies represent "samples of one." However, it is important to note that the sample size for a process study is* ***not*** *the number of cases, but the number of* ***temporal observations****. Depending on how researchers structure their analysis, the number of temporal observations in a longitudinal study can be substantial."*

Entrepreneurial internationalization is a dynamic process. The entrepreneur faces a complex environment if exposed to international or even global markets due to increased competition, fast changing consumer behaviors and technological developments. The entrepreneur's current knowledge might rapidly become outdated due to the changes in the environment. This requires constant learning on behalf of the entrepreneur if the new venture wants to enter and maintain itself in these markets. Hence, industries that are global by nature and emerging provide an interesting context due to its dynamics and fast changing attributes in order to observe the entrepreneurial internationalization behavior of the new venture.

Such an industry is the global market for video games. It is not only a fast growing global industry but also an industry that increasingly builds on internet-based technologies to deliver its content. This is particularly useful for the small, resource-constrained new venture that is able to reach a global market efficiently, fast, and low-cost through an internet-enabled business model.

The global video game industry is a fast-moving billion dollar industry which grew from 66 billion US dollars in 2012 to 99,6 billion in 2016 and is projected to grow to 118,6 billion by 2019 (Newzoo, 2016). The video game industry is segmented into console games, handheld video games, PC games, and mobile games. Mobile games represent the fastest growing segment which grew from 12 billion US dollars in 2012 to 36,9 billion in 2016 and forecasted to 52,5 billion by 2019 (Newzoo, 2016). The mobile video game segment therefore represented over one third (37%) of the industry's revenues in 2016 and its share will increase to 45% by 2019.

The increasing access to mobile broadband, the rising penetration of smartphones and tablets, the appearance of new digital distribution formats such as the App Store in 2008, and the popularity of social media platforms like Facebook gave rise to the mobile video game market (ITU, 2011). Independent game developers now have the possibility to distribute their games cost effectively to a large global audience through online stores such as the App Store and Play Store. The fast growth of the industry and the online-distribution possibilities combined with the integration of social networking platforms opens up an array of new possibilities for the entrepreneur to participate in this market that traditionally has been occupied by large firms producing and distributing their games physically on CDs or DVDs through a costly distribution network in international retail.

The global mobile video game industry is characterized by an accelerated growth combined with fast-changing technological developments and ever-changing consumer trends. This context provide an interesting setting to research the phenomenon of entrepreneurial internationalization as grounded in the reciprocally influencing processes of learning and networking.

3.5 Data collection

Since I am interested in how the two behavioral processes of learning and networking unfold over time in the context of early and rapid internationalization within a new venture, I needed to identify a suitable data collection technique for collecting the information in real-time. My idea was to capture the unfolding of events on a weekly basis in order to obtain a *micro-perspective* on learning and networking and their interactions. Since I did not know in advance of how events unfolded I wanted to be sufficiently close to the process in order to 'catch reality in flight' (Pettigrew 1990).

I had the idea of weekly follow-up email communications with the entrepreneurs resembling a diary approach. *Diaries* as a self-reporting method are used in disciplines like medicine, psychology and psychotherapy but they are less

common in the fields of organization, management, strategy, and entrepreneurship. I did not find them to be applied yet in research on international entrepreneurship.

Alaszewski (2006, 1) defines a diary *"as a document created by an individual who has maintained a regular, personal and contemporaneous record."* Diaries vary in their form. Intimate journals tend to be directed to the diarist himself whereas memoires are intended for publication. Both formats include a record of events and activities and personal comments with reflections on those activities and often feelings. In contrast, a log is rather limited to entries of events and activities without personal comments. In strategy research Balogun, Huff, and Johnson (2003) recommend diaries in form of logs as a useful means in order to track events in real-time and to capture the intimate view from the perspective of the one who experiences these events. Similarly, Brundin (2007) considers diaries as a useful tool in order to follow processes in real-time.

In order to capture events that possibly impact the networking and learning activities of the entrepreneurs, I sent the following three questions each Monday.

Please take some minutes to review the activities of last week.

1) *What happened during the last week that you consider important for the development of your business?*
2) *Any other memorable or interesting aspects that occurred during the last week?*
3) *Do you feel that you learned something from it that might influence the way you conduct or develop further your business (new knowledge/insights)?*

Question 1 inquiries about particular events that the entrepreneur perceives as important in the moment for the development of the venture. Question 2 tries to capture other events that the entrepreneur not necessarily perceives as important at the moment but that possibly might become important in the future. The second question I found especially relevant for the real-time data collection since not all events might be perceived as important in the moment but could become important at a later stage. Hence, the first two questions aims at capturing activities of networking – for example who did they meet, how was the contact initiated, where did the meeting took place. Question 3 aimed at capturing the learning that occurred over the week as a result from the events. The email response to the logs often triggered a couple of replies in order to clarify the information provided in the log.

The technique I used resembles a combination of a log with a *memoire* since I did not only capture a record of activities and events but also allowed the entrepreneur to express his viewpoint on the particular events and feelings.

Besides the focal processes of my research, networking and learning, the weekly emails also captured other events that were not necessarily related to these focal processes. This was intentional, since it gave me a broader perspective of events that eventually lead to or contain instances related to networking. For example, receiving the invitation to participate in an industry event does not necessarily relate to networking but might lead to networking opportunities and activities once the event is attended. Since I am interested in event sequences, being invited to an event and by whom is an important antecedent for establishing that particular sequence.

The solicited logs yielded a final document of over 27.000 words or 113 pages as input for the qualitative data analysis. Table 4 provides an overview about the different sources I used for collecting the data.

Table 4 Observation period and data sources

<table>
<tr><th></th><th>Retrospectively</th><th>Real-time</th><th>Total</th></tr>
<tr><td>Observation period</td><td>14 years (1998-June 2011)</td><td>32 months (June 2011-January 2014)</td><td>15,67 years (July 2007-January 2014)</td></tr>
<tr><td colspan="4">Primary data</td></tr>
<tr><td>Weekly solicited logs including follow-up emails</td><td colspan="3">113 pages (27,291 words)</td></tr>
<tr><td>Interviews</td><td colspan="3">9,35 hours</td></tr>
<tr><td colspan="4">Secondary data</td></tr>
<tr><td>Social media updates (Tweets)</td><td colspan="3">11</td></tr>
<tr><td rowspan="4">Documents</td><td rowspan="4">50</td><td colspan="2">37 Press articles</td></tr>
<tr><td colspan="2">7 Company presentations</td></tr>
<tr><td colspan="2">2 Internal documents</td></tr>
<tr><td colspan="2">4 Workshop presentations</td></tr>
</table>

Capturing activities of networking seemed to work quite well with the weekly logs. Learning however is a process that often spans a longer time-frame than a week. Therefore, I introduced personal *periodic follow-up interviews* with the entrepreneurs.

Combining diaries with other research methods is recommended in order to sustain the commitment of the participants (Balogun et al. 2003), to clarify, expand, and reflect on the entries made and to provide the contextual information for the entries (Kenten 2010), or for a method of triangulating the information received (Plowman 2010).

In fact, the interviews were an important opportunity to inquire about the learning that has occurred in the longer term (i.e. over a couple of months). The personal interviews provided an opportunity to inquire further about the events that occurred since the last interview and that were captured through the logs. Capturing events on an ongoing basis was also useful in order to *reduce recall bias*. Based on the log information I had the chance to construct stories of how events unfolded in real-time. This allowed me, on the one hand, to confront the entrepreneur with these stories during the interview in order to check their accuracy and to see if something was missing and, on the other hand, to deliver the facts of how events unfolded in real-time in case the entrepreneur did not recall accurately earlier happenings. The minimization of memory or recall bias is a particular strength of the diary method (Alaszewski 2006).

The interviews also served to inquire further about particular Tweets or Facebook updates that were posted during the period by the entrepreneur.

Unlike the logs that were sent out each Monday to the entrepreneur, the interviews were scheduled once certain event sequences arrived at interesting points of convergence or divergence. For example, the launch of the firm's first game triggered a reflection about the cooperation with the publisher and the learning gained from it which became materialized in a revision of the firm's strategy (convergence of networking in form of alliance partner cooperation with the general learning so far). Around that time the firm also engaged in a variety of new networking activities (divergence). These particular moments often coincided with transitions from one period to the other that I detected at the later stage of data analysis through temporal bracketing.

Altogether, I conducted 561 minutes (9,35 hours) of interviews spread across 10 different sessions over a two and a half year period with either Camilo alone or both entrepreneurs together. Annex 3 displays the interview frequency and the particular circumstances that triggered the interview.

Before I started to gather data with the weekly logs, I needed to establish a baseline from where to begin the collection of the real-time data, that is, I needed to reconstruct the venture's history until the point where I entered the firm as a researcher.

Therefore, I solicited an *interview* with the two founding entrepreneurs Luis and Camilo. The day before the meeting took place I asked each one to think about particular events they perceived as important for the foundation and subsequent internationalization of the company. Their individual reflection about

the events that so far have shaped the development of the firm I considered important in order to gather the largest amount of possible events that otherwise might be suppressed during the dynamics of the group session (Delbecq et al. 1986).

As a starting point for the interview I first gathered the events identified by each entrepreneur on a white-board and we then began to order the events visually in a chronological order. *Visualizing the information* on the white-board made sure that we did not miss mayor events and helped to structure the flow of the events. Figure 4 shows the information that we captured. The interview lasted 56 minutes and allowed to restructure the firm history over a period of 14 years starting when the entrepreneurs first met during their undergraduate studies in 1998, over the foundation of the firm in 2008, to the pre-internationalization period during 2010, and the beginning of the early internationalization period when I entered in June 2011.

Figure 4 Reconstruction of critical events of firm history

The initial interview that reconstructed the firm's history provided a good starting point from where to follow the internationalization of the venture in real-time. It did not only establish a basis for my personal inquiry as a researcher but also prepared the entrepreneurs for their participation in the research process.

Camilo remarked (Log, June 2011):

> *It was interesting to talk for the first time about the complete history of C2 Estudio from its beginning until know during our meeting. It provided us with an interesting perspective related to the decisions and facts that influenced where we as a firm arrived where we are today.*

The interview provided the starting point for the subsequent solicited logs that I sent each Monday usually followed by a couple of replies within the same email in order to clarify some of the log entries. The subsequent f*ollow-up interviews* then served as an opportunity to inquire more profoundly about the learning, to review happenings and event sequences, and to clarify issues that occurred since the last interview.

Besides the interviews and the solicited log I also followed *social network updates* as they emerged, mainly through Tweets. Twitter was the only tool Camilo actively used. The Tweets provided interesting information in real-time regarding product and business development, event participations, contacts made, and press-related information. They were useful to triangulate the information from the logs and to capture additional information that otherwise might have been omitted by the entrepreneur in the logs. All in all, 11 Tweets have been included in the data analysis.

Other *secondary information* have also been used in order to complement and triangulate the information received through the interviews, logs, and Tweets. These documents concerned news and press articles as they appeared in the Internet (37 articles), internal firm documents and presentations (9 documents), and workshop presentations delivered by the entrepreneurs (4 documents). In order to monitor news published about the firm in the Internet I created a Google Alert. Altogether I made use of 50 documents during data collection and subsequent analysis.

The secondary information emerged in parallel to the unfolding of events. Therefore, they provided an interesting mean to capture different viewpoints on the same emerging events such as a product launch as perceived by the entrepreneurs and reported by the press. Internal firm documents such as strategic plans and memos provides complementary information at the same time as logs were written and interviews conducted. Consequently, primary and secondary information emerged in parallel and were used to complement each other.

The first log was solicited the 20th of June 2011 and the last log was solicited the 21st of January 2013. I decided to *end the data collection via the logs* in January 2013 triggered by the follow-up interview during that month. The follow-up interview focused on a review of the launch of the second game Nitro

Chimp and the experience with the activity. I realized that the entrepreneurs did not focus on establishing new relationships anymore but rather tried to consolidate the previously made contacts. While the networking activities slowed down, the learning activities were spurred to an all-time height. The learning also did not focus primarily on functional knowledge related to marketing and design but rather on critical reflection about past experience and future strategy. Up to this point C2 Game Studio went through *two cycles of game development and launch* which I considered to complete critical experiences in terms of learning and networking and their interactions. I decided to not follow-up anymore with the logs but rather be attentive to further developments through *occasional personal talks* with the entrepreneurs and if necessary to solicit additional follow-up interviews based on the occurrences since the last interview.

The interview in January 2013 was the beginning for me to *start exiting the field*. Nonetheless I stayed in touch with the two entrepreneurs via occasional informal talks and following their social media updates and Internet news about C2 Game Studio. During November 2013 Camilo mentioned the visit of Luis's former class mate Tommy to me and the impact it had on the future planning of the firm. This event spurred my interest and I asked for an interview with Camilo. The follow-up interview in December 2013 provided a good opportunity to recapitulate the happenings during 2013 since our last follow-up interview in January and to inquire about the particular event with Tommy. I considered the visit of Tommy to be critical for the development of the firm (so did Camilo and Luis) since it allowed both of them to *agree on a common strategic vision for the firm* – a business model both of them could agree on. This new vision also considered self-publishing of mobile video games which meant an important break from the previous cooperation with publishers. The visit of Tommy I considered a key event for learning and decided to include it into my narrative adding 2013 to my observation period.

The interview in January 2014 with both Luis and Camilo then marked the final ending of the observation period and also meant to *exit the field*. The exit I rather considered as smooth and can be considered of what Michailova et al. (2014) consider a *conventional exit type from fieldwork* compared to more disruptive exit types. As I previously mentioned the process of exit started in January 2013 when I discontinued the use of diaries. During 2013 I kept informal contact mainly to Camilo due to my curiosity of how things play out in the firm. The visit of Tommy triggered to re-enter the firm due to the significance I attributed to the event on the learning of the entrepreneurs. The final exit then occurred in January 2014 with a last follow-up interview with Luis and Camilo. Since then I keep occasional contact with Camilo and both agreed to be available for future studies.

3.6 Data management

While I collected the real-time data over a time span of 32 months from June 2011 until January 2014 I got confronted with an ever growing number of information from the weekly logs, the interviews, the social network updates, and the secondary information. I urgently needed to come up with a technique for data management in order to avoid what Pettigrew (1990) termed ‘death by data asphyxiation’.

Especially the weekly logs provided a variety of information that I somehow needed to organize in order to not lose track of the happenings. I also needed to structure chronologically and thematically the unfolding of events related and also unrelated to my two focal processes of networking and learning since it was also important for me to grasp the bigger picture of the context where the two processes are embedded such as developments at the industry level, product development, and business planning.

I therefore turned to a software for mind mapping (MindManager from Mindjet) which I perceived as a useful tool in order to visualize and structure the constantly incoming information. I already used the software for personal and work-related purposes and found it interesting to explore its usage for the purpose of managing my research data during this particular process of data collection. Process data are messy due to their fluidity and ever changing character (Langley 1999) and *visual mapping and data displays* are useful techniques to cope with process data (Langley, 1999; Miles et al. 2014).

The information that I received from the email logs I immediately began to enter as branches in the *visual map*. Sequences of events I first ordered chronologically, horizontally, adding one branch to the other but soon realized that the branches grew into such lengths that it became difficult to visualize. I therefore started to display sequences in chronological order, not horizontally, but vertically as sub-branches of a more general thematic branch. For instance, ‘Interaction with publisher’ became the general branch regarding the particular interaction-events displayed as sub-branches to the right, ordered chronologically from the top. Figure 5 provides an example of the structure of the visual map.

The information provided in the logs and the interviews served as input in order to create the sequence of interactions. Behind each branch I entered as a text entry the respective citation from the log or the interview. The logs were written in Spanish by Camilo and the interviews were conducted in Spanish but I decided to construct the map in English in order to facilitate communication and discussion of the ongoing data collection with my thesis supervisors, also knowing that the results of my dissertation research will be published in English.

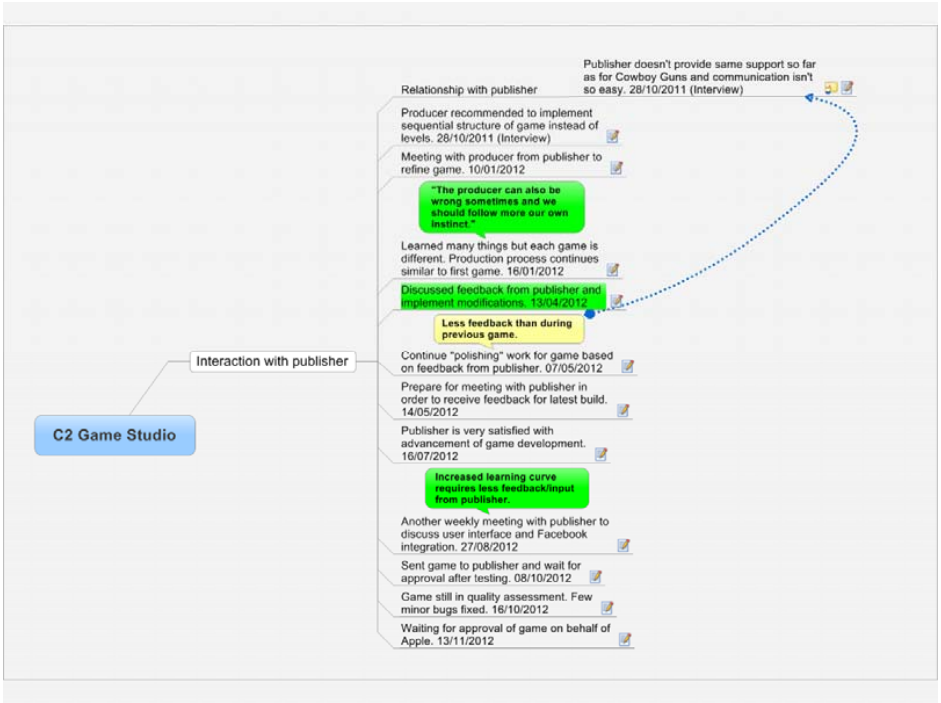

Figure 5 Example of visual map structure (excerpt from larger visual map)

Observations I included as callout topics above each branch. Topics related to learning I highlighted in green color and topics related to networking in blue. The participation in international industry events such as Unite, Game Connection, Casual Connect, and Game Developers Conference provided various opportunities for networking and learning. Annex 4 shows an excerpt from the larger visual map structure related to the networking and learning gained from participation in international industry events.

As the map grew I began to categorize the events, among others, in branches such as business development (international/national), event participation (international/national), business planning. Since over time the firm's activities began to focus solely on the international market, the development of the map provided visually proof of this fact. The sub-branches related to the main branch Business development/International grew rapidly in numbers while the sub-branches in Business development/National stagnated.

Visualizing and structuring the emerging real-time data from the logs, the interviews, the Tweets, and the documents was useful in order to avoid getting lost in the ever growing number of information and to *guide in an informed manner the ongoing data collection.* Although this particular visualization and structuring of the data did not end up to be my main tool for data analysis, it

served well for pre-analyzing the continuously emerging data at this stage of data collection in order to guide the interview sessions and to direct further data collection.

For example, understanding the learning gained from the first product launch was useful for me in order to formulate better and more targeted questions regarding the period of development and launch of the second game. Being able to contrast provided a sharper eye on what is happening in the present and what happened in the past.

While the learning from the development and launch of the first game occurred in close cooperation with the publisher, I increasingly observed how Camilo and Luis engaged in heightened activities of networking during the development of the second game which might indicate a search for knowledge elsewhere besides the ongoing cooperation with the publisher. Being aware of this fact helped me to be more attentive about the situation for further inquiry in the subsequent interviews. Likewise, being able to compare situations of networking and learning in different industry events made me become aware about the fact of the importance of the development of a networking ability on behalf of Camilo. Hence, knowing about the importance of the networking ability I could shift my focus on it during subsequent logs and interview sessions.

Documenting the information within the map also allowed to follow up and detect discontinuities at an early stage. For instance, in earlier logs and interviews Camilo referred to a visit and talks to industry experts from Los Angeles. Later, he did not mention them anymore. The entry in the map reminded me about that earlier contact and I could follow-up on it during an interview.

Since I also documented Tweets and Internet news in the map, their content often became subject to conversations during the interview. For example, a national entrepreneurship portal covered the visit of an internationally renowned video game consultant to Colombia talking about the local game development communities' great appetite for learning. This topic I subsequently discussed with Camilo in an interview using the information I documented about this news in the visual map.

The final map consisted of 318 branches with the main branches divided into different categories such as business development, event participation, and business planning. Business development was further divided into the different products the firm developed. Event participation includes sub-branches related to the different international and national venues that the entrepreneur attended. Business planning mainly includes the activities related to the firm's strategic plan.

All in all, the ongoing visualization and structuring of the data served two purposes. On the one hand, it allowed to become aware about instances of net-

working and learning and their interactions in order to sharpen focus of subsequent interviews (*the pre-analysis function*) and, on the other hand, of being constantly alert about possible discontinuities or simply to remind the entrepreneur about earlier discussed topics that did not re-appear in subsequent logs (*the reminder function*).

While the ongoing visualization and structuring of the data was important during the data collection period, I turned to different tools for the actual analysis of the data.

3.7 Data analysis

Process studies in the sense of the third meaning of process emphasize on the *temporal progression of activities* as elements of explanation and understanding. The researcher is interest in detecting patterns of event sequences or broader phases constituted by event sequences, the paths or cycles through phases, inflection points where different paths collide or diverge, or the different forms of progressions of event sequences (Langley et al. 2013).

Process research offers different strategies for the identification of patterns (see Chapter 3.3). The application, however, of these strategies for the analysis of process data does not follow a schema. It largely depends on the nature of the process data collected and the particular inquiry of the researcher of how the data are analyzed.

Before starting to analyze the data I had some pre-understanding about the different techniques used for the analysis of process data. Nevertheless, I did not outline a clear plan of the different steps for analysis and techniques used. The analysis was rather *driven by my curiosity* to gain insights into the event-sequences and patterns that make up processes of learning and networking and their interactions over time. Annex 5 provides an overview about the different steps of analysis, their purpose, the technique employed and the related tool I made use of. The table refers to a particular sequence of analysis. Nonetheless, the table I constructed retrospectively after the analysis was done since it was not clear to me from the beginning of how the analysis progresses.

In the following I provide a brief description of the process of analysis and the techniques used. In Chapter 5 on theory construction I will then provide in-depth information and examples of the findings derived from each step of analysis.

Step 1 relates to the visual mapping of the continuously incoming real-time data and provided an adequate technique in order to get a pre-understanding about the different networking and learning activities the entrepreneurs engaged and to direct the ongoing data collection (see Chapter 3.6 on data management).

This process already constitutes of what Miles et al. (2014) refer to as data condensation. Therefore, the different types of data I collected continuously got condensed into different categories such as business development, event participation, and business planning. I also established relationships between for instance outcomes of event participation and business development and event participation and business planning. During this process I already decided which data deserve closer attention for follow-up and analysis.

Although the visual mapping with the mind map software allowed me to gain a pre-understanding about the networking and learning dynamics of the entrepreneurs, I felt that I needed a more detailed understanding about the focal processes, especially at the intersection of networking and learning. For instance, I asked myself who were the important actors that contributed to the learning of the entrepreneurs? What networking activities do the entrepreneurs engage in more often? What are the predominant learning activities that happen during internationalization? When and how do these activities of networking and learning overlap? Hence, an important aspect of analysis was an understanding about the particular activities the entrepreneurs engaged and the subject/object related to these activities. Activities of learning (activity) lead to particular knowledge (object) in interaction with someone (subject) through activities of networking (activity).

Pettigrew (1987) provides an interesting framework for the analysis of organizational change emphasizing on its content, process, and context seeking to provide answers to the what, why, and how of change: *"[T]he **what** of change is encapsulated under the label content, much of the **why** of change is derived from an analysis of inner and outer context, and the **how** of change can be understood from an analysis of process."* (Pettigrew 1987, 658, emphasis in the original)

Step 2 consisted in the coding of the data following Pettigrew's meta-level analytical framework of process, content, and context. It seemed to me the appropriate step at this stage in order to get insights into the how, what, and why of learning and networking and their interactions. After consulting reviews regarding different software for the analysis of qualitative data I chose MAXQDA due to its superior function for the visualization of code relationships compared to other software. Based on my experience with visual mapping from the previous step I recognized the power of visualization of qualitative, process data and would not like to have missed it for coding.

My focal processes are learning and networking. The content of learning and networking relates to the particular subject or object the process is related to, like knowledge from learning, contacts from networking, or particular places where networking takes place. Context puts an emphasis on the environment where the processes are embedded – either within or outside the boundaries of

the firm and its network. Processes of learning and networking I coded as activities expressed as verbs, in form of a gerund. My intention was to stay as close as possible to the processes as they emerged from the data in an inductive manner. Therefore, reading through the logs and the interview transcripts I paid particular attention to the following aspects.

- The activities taking place and if they related to learning [PR-LRN] and/or networking [PR-NET].
- The knowledge area the learning activity relates to [CONT-KNOW].
- The contact or place the networking activity relates to [CONT-NET].
- If the learning and/or networking activity takes place within [CNTX-INN] our outside [CNTX-OUT] the boundary of the firm and its network.
- The chronological time when the activity took place [TIME].

PR-LRN = Processes of learning
PR-NET = Processes of networking
CONT-KNOW = Content of knowledge
CONT-NET = Content of networking
CNTX-INN = Inner context
CNTX-OUT = Outer context
TIME = Chronological time when activity takes place

Table 5 provides an example for the coding of the data. The quote relates to the already established relationship between the Publisher and C2 Game Studio. Therefore, the interaction happens between the *inner context* of the firm's network (CNTX-INN). The particular networking activity is an ongoing *interaction* (PR-NET) between the firm and its partner. The learning that relates to that particular interaction consists in *learning-by-doing* (PR-LRN) following the instructions of the publisher and by *observing* (PR-LRN) the publisher's marketing efforts. The content of the networking activity relates to the *publisher* (CONT-NET) and the knowledge that is gained through the learning relates to *video game marketing* (CONT-KNOW). The date *16th of August 2011* (TIME) relates to the particular day when Camilo responded to the log in an email.

Coding the data was useful in order to identify recurrent activities of networking and learning, with whom and where, and the context. The coding also helped to identify moments of interaction between my two focal processes through the *intersections functions* of MAXQDA (see Chapter 5.2 for an example of overlapping codes).

Table 5 Coding illustration

Complete quote	Code	Citation
Friday they sent us an update related to the social networking part of the software from the publisher and today we are working on small adjustments to that. Once they approve it, which should happen tomorrow, we will have to wait 30 days while they are making the marketing effort. [W]e try to stay ahead [of the marketing process] as much as we can in order to learn as much as we can. After that [the game] will be offered in the App Store. (Camilo, Log, 16 August 2011)	Content knowledge [CONT-KNOW]: Marketing	Friday they sent us an update related to the social networking part of the software from the publisher and today we are working on small adjustments to that.
	Process learning [PR-LRN]: Doing	Friday they sent us an update related to the social networking part of the software from the publisher and today we are working on small adjustments to that.
	Process learning [PR-LRN]: Observing	[W]e try to stay ahead [of this marketing process] as much as we can in order to learn as much as we can.
	Content networking [CONT-NET]: Publisher	Complete paragraph
	Process networking [PR-NET]: Interacting	Complete paragraph
	Inner context [CNTX-INN]: Relationship C2 Game Studio-The Publisher	Complete paragraph
	Time: 16/08/2011	Complete paragraph

The technique I applied for coding resembles of what Strauss and Corbin (1990) refer to as open coding, axial coding, and process coding. In a first step I coded in a free manner while reading the log and interview transcripts and subsequently I grouped similar codes together in an iterative manner. I therefore created code hierarchies. Annex 13 shows the list of main codes and codings.

The overlaps between codes and the code frequencies provided important insights into what type of knowledge resulted from learning-networking interactions, who was the contact involved in that process, how did learning and networking happen, where and when did the interaction took place, and how often the interactions took place with whom in which context. However, the analysis up to this point still did not allow me to gain insights into the temporal character of the two focal processes – how change unfolds over time.

Step 3. I therefore turned to the visual mapping function of MAXQDA, MAXMaps. MAXMaps allows to create a non-hierarchical structure of network relationships among codes. Constructing *network models of code interrelationships* provided an adequate tool in order to visualize changes over time (Langley 1999; Miles et al., 2014). Consequently, the network models helped me to visualize the temporal development related to the different codes (see Chapter 5.2 for an example of a network model of code interrelationships).

Step 4. After having detected the activities, content, context, and their temporal interrelationships over time I visualized the information in a matrix. The visualization was inspired by Miles et al.'s (2014) *event-listing matrix* as a method for ordering condensed data with the aim to determine event sequences and their interrelationships between different levels of analysis for further analysis. The event-listing matrix provides an adequate tool in order to visualize the chronological development of the incidents at different levels of analysis. I began to re-read the logs, the interview transcripts, and the documents in order to identify the chronological order of their developments. The process coding with the time label was especially useful during this step since it helped me to navigate easier through the documents and to identify the incidents and when they happened. The network models provided hints of important key events and the time of their happening. After detecting event sequences I became curious about possible phases these sequences belong to which led to the next step of analysis, the temporal bracketing of time periods.

Step 5. Within the event-listing matrix I began to look at how proximate events are thematically related and when they started and ended. This resembles of what Langley (1999) refer to as a temporal bracketing strategy for the sensemaking of process data. The time-bracketed periods inspired me for an additional analysis where I related the different codings to each time-bracketed period. Therefore I made use of the *Code Relations Browser* within MAXQDA which led me to the next step of analysis.

Step 6. The Code Relations Browser allowed me identify the particular codes and their frequencies as related to each time-bracketed period. I therefore was able to construct a *graph that visualizes the learning-networking interactions* over time and during each period (see Figure 9 in Chapter 5.2 on engagement with the data). Annex 14 shows the list of codes as related to the different periods of learning and networking interactions over time.

At this point I knew about the important actors, the activities, the events and their sequences and interrelations, and when they occurred over time. This was the right moment in order to write down the narrative about the phenomenon I observed which led me to the next step of analysis.

Step 7. As Miles et al. (2014) observe:

> *Narratives are indispensable if we are to understand a complex chronology in its full richness. The problem is that going straight to an extended narrative from written-up field notes runs an acute risk: You can tell a story that is partial, biased, or dead wrong- even though it may look vivid, coherent, and plausible to the reader. The event listing is a good way of guarding against false chronologies. It creates a matrix-based outline for your narrative.* (Miles et al. 2014, 196)

Hence, I wrote the *focused narrative* as outlined in Chapter 4. The focused narrative was an important tool for analysis. It helped me to understand the unfolding of learning and networking and their interaction in context and related to the different actors and places where they take place. Similar to the unfolding of a theater play (Saldaña 2003). It provided a focused description of what happened without the irrelevant information not related to learning and networking. The narrative was also an important opportunity to validate the unfolding of the processes with my two informants which contributes to the credibility of my findings (Lincoln & Guba 1985). In the narrative the reader also finds a detailed and 'thick' description of the unfolding of the case that contributes to the transferability of the findings to other cases and contexts and, hence, contributes to the trustworthiness of my study (see Chapter 3.8 on the quality of the study).

The first seven steps of analysis, mainly in form of coding, provided interesting insights into the characteristics of learning and networking of the two entrepreneurs and aspects of interactions of the two focal processes over time. The seven steps constituted of what I label 'engagement with data' within the process of conceptual leaping (see Chapter 5.1). It was a first step to 'exercise the data' towards the development of a more abstract theoretical framework for learning-networking interactions during entrepreneurial internationalization.

However, in order to understand sequences of events, their origin and direction, and how events at different levels interact, I needed a more holistic view of the data. Therefore, I engaged as a following step in an at-the-glance-review of the event-listing matrix.

Step 8. The *at-the-glance-review* of the event-listing matrix became important in order to capture more holistically the unfolding of different event sequences, to understand patterns in the data, and to detect events critical to the two focal processes. I printed the event-listing matrix from Excel which created a map distributed on 12 sheets of paper. The printed map I then stuck onto the wall of my office (see Annex 12 for an illustrative example of the event-listing matrix). I began to undertake an at-the-glance review of the data within the matrix and used colored stickers in order to highlight discontinuities, critical

events, and inflection points. I also drew lines between events in order to illustrate their connections (e.g., disappointment during meeting with publisher triggers increased networking activities during subsequent industry event in the U.S.; eroding relationship with industry expert from Los Angeles leads to relationship building to other industry experts like Nick and Alex).

Once I began to identify critical events and the interrelationships between events I looked for further explanations and went back to the interview transcripts, logs, and documents (secondary information). As a result I added more information hand-written to the matrix such as encounters with other people and industry trends – information that only became to make sense once I had a more holistic understanding about event sequences and their interrelationships. The event-listing matrix undoubtedly became the most important tool for analyzing my data.

I was nevertheless concerned that I could miss important patterns in my data because of my possibly narrow view on the data. I asked myself if I am able to holistically comprehend of what is going on in my data? Am I able to fully recognize the patterns? These concerns led to the final step of the analysis.

Step 8. I created a set of questions derived from the literature on process research based on the pattern recognition heuristics presented in Chapter 3.3. I then applied the set of questions for interpreting the event-listing matrix in a systematic manner. Annex 6 provides an overview of the questions and how they relate to the pattern recognition heuristics from the process literature.

Whereas the first seven steps of analysis were concerned with exercising the data for initial idea generation, steps eight and nine focused on the deliberation of ideas that allowed to abstract the empirical observations in order to construct a framework of learning and networking interactions during entrepreneurial internationalization. In this chapter I provided a description of the different steps involved for the analysis of my process data. In Chapter 5 on theory construction I will then retake the different steps and relate them to the process of theory construction depicted with examples.

3.8 Quality of the study

In this chapter I present the quality of my study. Criteria for evaluating qualitative work are contested due to the variety of methods used to collect and analyze qualitative data. Qualitative researchers are not able to refer to accepted statistical tests or known data sets. As Bansal and Corley (2012, 510) remark:

> *"It is critical, then, that qualitative researchers offer detailed accounts of their data sources and analysis. Communicating the*

> *journey (from initiating their project to submitting their manuscript) gives meaning to the accounts of the data and emergent theory as well as signaling the quality of the research exercise, the credibility of the researcher, and, ultimately, the trustworthiness of the data and the emergent theorizing."*

Communicating the journey adds transparency to the research process. The reader should get a sense of being in the field and be able to judge of how the researcher came to the findings and conclusions (Glaser & Strauss 1967). Credibility indicates the trustworthiness of the findings. Nevertheless, it represents only one of many possible plausible interpretations from the data (Corbin & Strauss 2008).

In order to judge the quality of my research I follow Lincoln and Guba (1985) for establishing trustworthiness in qualitative research. The different criteria and techniques the authors put forward seem to be widely used among the community of qualitative researchers in order to persuade the reader that the findings are worth paying attention to (e.g., Corbin & Strauss 2008; Corley & Gioia 2004; Gehman et al. 2013; Langley et al. 2013; Miles et al. 2014). Following Glaser and Strauss (1967) and Miles et al. (2014) I nonetheless add another criteria that relates to the applicability of the study's findings to the community of researchers and practitioners since I am also interested in the usefulness of my research for others to build on and for actionable advice for the one's practicing, supporting, and teaching international entrepreneurship. In the following I outline the criteria used in order for the reader to judge the quality of my study.

Credibility. Lincoln and Guba (1985) highlight three techniques that make it more likely that credible findings and interpretations will be produced. These relate to the prolonged engagement in the field, the persistent observation of the phenomenon interested in, and the triangulation of sources and methods. Other techniques include peer-debriefing, negative case analysis, referential adequacy, and member checking which I explain later on.

Being in the field for a prolonged period of time enables the researcher to learn the culture, to test for misinformation introduced, and for building trust. I spent almost 3 years with the participants (i.e. 32 months from June 2011 to January 2014) which provided a unique opportunity to establish trust between me and the entrepreneurs. The time I spent in the field also allowed to get more familiar with the context of the global mobile video game industry that I did not experience before entering the field. I began to follow industry news by subscribing to newsletters and social network updates that were also used by the entrepreneurs to keep pace with the latest news and developments about the industry. I also started playing the mobile video games myself that were released by my focal firm C2 Game Studio. Following the news like the entrepreneurs

did and playing the video games myself enabled a more profound immersion into the field. It helped me to comprehend better the culture of the industry. Despite of my prolonged engagement with the entrepreneurs, I did not feel of "going native" by overidentifying with the informants. My data collection method with the logs and periodic follow-up interviews allowed me to maintain a distance to the entrepreneurs which could have been different being daily on-site with the entrepreneurs.

A *persistent observation* requires the researcher to focus on those things that really count and to sort out the irrelevancies regarding the phenomenon interested in. It provides the depth to the prolonged engagement in the field (Lincoln & Guba 1985). The real-time, event-driven research design demands to be broad enough to capture the unfolding of events (because we never know if a particular event today might become important in the future) but also specific enough in order to focus on the two focal processes of learning and networking. The questions for the logs I sent to the entrepreneurs at the beginning of each week captured broadly the events that occurred during the prior week. The follow-up questions I sent as a response to the weekly logs received had the intention to sort-out the irrelevancies and to detect the instances of learning and networking I was interested in. The follow-up interviews then allowed to focus even more on the unfolding of particular event sequences related to learning and networking. Documenting and structuring the incoming information in real-time within the visual map allowed me to keep track of events and changes even if they did not seem to contribute to the phenomenon at their moment of emergence. Retrospectively, however, some seemingly unimportant events turned out to become important.

The *triangulation of sources and methods* is another technique in order to make data more believable and the findings more credible. I made use of different sources and methods in order to capture the unfolding of learning and networking interactions: Weekly logs sent via email, follow-up emails, periodic follow-up interviews, social media updates by the entrepreneurs, and secondary data like press articles, company presentations, workshop presentations, internal documents like presentations for the advisory board of the company. I therefore combined different data collection methods like qualitative diaries, interviews, and secondary data. The periodic follow-up interviews for instance were an important opportunity to compare the information shared during the interview with the information provided in the logs and follow-up emails. My main informant was Camilo. Luis participated in some of the follow-up interviews which provided another opportunity to gain his perspective on the events previously expressed by his partner Camilo. The secondary information also provided the opportunity to compare information previously shared by the entrepreneurs with

the document itself such as presentations for the advisory board of the company regarding the firm's different strategic options.

Peer debriefing provides an external check on the research process. It is an opportunity to expose oneself as a researcher to a disinterested peer in order for him or her to play the devil's advocate about the emerging research process (Lincoln & Guba 1985). Although I did not engage in planned debriefing sessions, I had several opportunities during my research journey to receive feedback and advice on the ongoing research. For instance, the presentation of my research at the ie-scholars doctoral tutorials in 2010 and 2012 or the Vaasa doctorial tutorial in 2011, and the research seminars at University of Turku School of Economics in 2010, 2013, 2016. They all provided useful opportunities to share my experience with the ongoing research regarding methods and emerging theoretical insights. And of course, the various meetings and email conversations I had with both my thesis supervisors and other researchers at the Turku School of Economics certainly influenced and shaped of how my thesis looks like today. I documented all feedback received in a separate folder in my computer consisting of visual maps, Word documents, and saved email conversations.

Lincoln and Guba (1985) further suggest the technique of *negative case analysis* in order to enhance the credibility of the research. Negative case analysis refers to a process of continuously revising the hypothesis until it accounts for all known cases without exception. Although it is impossible to reduce the number of exceptional cases to zero, it makes the hypothesis more credible. I compare the process of negative case analysis to the process of conceptual leaping and the various iterations it took in order to come up with the final version of the framework (see Chapter 5.1 on conceptual leaping). Each iteration involved comparing the emerging framework with the empirical insights mainly based on the code dynamics in the network models, the event-listing matrix, and the results of the questions for deliberation of ideas and making adjustments to the framework based on the empirical observations.

Another technique suggested by Lincoln and Guba (1985) related to the credibility of the research is *referential adequacy*. It consist of saving some of the raw data against which later analysis and interpretations (the critiques) could be tested for their adequacy. In my research I did not set aside data for later analysis, for instance, for the process of external review of my dissertation research. All data I obtained entered into the analysis. The data however are available upon request, these are, the weekly logs from the entrepreneurs, the interview recordings and transcripts, and the secondary information.

The final technique related to credibility is *member checking*. Lincoln and Guba (1985) consider member checks as the most important technique for es-

tablishing credibility. It consists of testing the interpretations, findings, and conclusions with the informants the data were originally obtained from. Member checking was a continuous process during my data collection. For each follow-up interview I summarized the unfolding of events as I perceived them since the last interview and based on the weekly log information I received. Therefore, the beginning of each interview was a unique opportunity to retrospectively verify the unfolding of event sequences with the entrepreneurs. The narrative that I constructed about the process of entrepreneurial internationalization within my focal firm I sent entirely to the two entrepreneurs in order for them to read and to provide feedback in a formally arranged meeting for that purpose. These member checks allowed me to check for the validity of my data, which means, if my interpretations are an adequate representation of the entrepreneurs own realities.

Besides credibility, a second criteria for establishing trustworthiness from qualitative data is the *transferability* of the findings (Lincoln & Guba 1985). The question here is if the findings are transferable to other contexts. Certainly, the findings relate to the particular context of where I collected the data and the time. Lincoln and Guba (1985) suggest however that it largely depends on the similarity to other contexts but that it is finally the reader who has to decide if a transfer to other contexts and times is plausible. Miles et al. (2014, 314, emphasis in the original) conclude *"that it's the write-up itself that matters in the end. How **persuasive** a case can the researcher make that the findings of N = 1 have meaning and resonance to other individuals, sites, and times?"*

The case narrative in Chapter 4 provides a thick description of the actors, context, processes, and the content in order for the reader to assess the potential transferability of the findings to other contexts. I suggest my findings to be transferable to contexts that are characterized by fast-changing developments in both technology and consumer trends. Being part of such a dynamic environment requires the entrepreneur to constantly learn in order for the firm to survive and thrive. Even if the entrepreneurs in my case where relatively new to the industry, the high velocity of changes render prior knowledge useless and makes a case for constant learning. However, more experienced entrepreneurs might be more skilled in networking and learning and therefore less dependent on others for their learning and the creation of networking and learning abilities. I discuss this aspect in Chapter 6.5 on avenues for future research.

The context of my particular case does not only apply to similar contexts other international new ventures are embedded in, the general processes of learning and networking and their interplay might also apply to other domains where entrepreneurs or managers face situations that require quick learning. I agree with Gioia et al. (2013, 24, emphasis in the original) in that *"[m]any con-*

*cepts and processes are similar, even structurally equivalent (Morgeson & Hofmann, 1999), across domains. Our stance here is a strong rejoinder to the old argument that it is not possible to generalize from small samples—perhaps especially samples of one, as some believe case studies to be. Is it possible to generalize from a case study? Of course it is—**if** the case generates concepts or principles with obvious relevance to some other domain."* The main arguments I put forward in the theoretical contributions (i.e. the title of Chapter 6.1.1 through to Chapter 6.1.5) can be read as propositions that are general enough for the reader in order to assess their transferability to other domains.

The purposeful sampling of the case also represents other international new ventures in similar conditions run by their founders, operating in knowledge-intensive, global industries characterized by continuous and rapidly changing technological and consumer trends. Such a setting makes transferability of the case also more likely to other cases. Similarly, many studies that look at the learning-networking nexus focus on the young, international new venture operating in knowledge-intensive industries often related to software (e.g., Bruneel et al. 2010; Coviello & Cox 2006; Loane & Bell 2006; Odorici & Presutti 2013; Schweizer 2013).

Although my case firm is embedded within a particular country context like Colombia as an emerging market, it rather is the context of the global mobile video game industry that I am interested in. Future research might consider the particular country context and its enabling or restraining impact on learning and networking.

All in all I consider my particular case firm as representative for other international new ventures operating in high-velocity environments. The detailed case narrative and the empirically derived 'propositions' are general enough to make transferability by the reader more likely and are able to enhance the trustworthiness of the study.

Lincoln and Guba (1985) add two more criteria for establishing trustworthiness in a qualitative study, dependability and confirmability. Both relate to an inquiry audit – dependability assesses the research *process* and confirmability the *product* in form of the data, findings, interpretations, and recommendations.

I suggest to satisfy the *dependability* criteria in my research by showing clearly how the research was conducted: Choosing the case firm, collecting the data, managing the vast amount of incoming real-time information, and analysing the data. I also show the link between the research question, the underlying philosophical perspective chosen, and how this relates to the methods used in order to collect and analyze my data. I also provide a clear account of how I reached the conceptual leap of getting from my process data to the process the-

ory (see Chapter 5.1). In short, I provide a detailed account of the research process in order for the reader to conduct an inquiry audit on the process of my research.

The *confirmability* criteria is closely related to the audit trail. The audit trail includes documenting the residue of records stemming from the research process. Within the thesis I provide detailed information on the raw data collected in form of direct quotations, excerpts from the visual mapping during data collection, the codes derived during analysis, examples of network models of codes, and excerpts from the event-listing matrix. All information like interview recordings, transcripts, logs, memos, and visual maps are available for consultation. I made use of the software for qualitative data analysis MAXQDA which also allowed to store the information regarding coding and the network models of codes. I believe the audit trail to be extensive enough in order for the reader to judge the trustworthiness of my study.

Glaser and Strauss (1967) and Miles et al. (2014) add *applicability* as another criteria in order to judge the quality of research. The applicability of my research I relate on the one hand to the usefulness of the findings in order for other researchers to build on in the future (see Chapter 6.5 on avenues for future research) and, on the other hand, to be of interest for the one's practicing, supporting, and teaching international entrepreneurship (see Chapter 6.2 on the practical implications). I believe my research to be of interest to all the different stakeholders mentioned. I will not introduce at this point the information presented later on in these two chapters. I better leave it to the reader to judge the applicability of my research after reading the two chapters.

4 THE PROCESS OF ENTREPRENEURIAL INTERNATIONALIZATION: THE CASE OF C2 GAME STUDIO

In this chapter I present C2 Game Studio's development history based on the information I subtracted from the event-listing matrix. The narrative unfolds sequentially according to the time-bracketed periods. Therefore it is important to keep in mind that the beginning and ending of some periods might overlap with other periods and some occur in parallel. Although the narrative is an intermediate output of the process of theory construction I put it here upfront in order for the reader to get familiar with the case and its context which I consider an important background for a more informed understanding of theory development from the empirical findings. Figure 6 displays the time-bracketed periods and key events as they relate to developments in the industry, the games developed by C2 Game Studio and the relationships they engaged in with publishers for these games, and the strategic plan.

4.1 Gaining professional competencies and international work experience

Camilo and Luis met each other in 1998 during the first semesters of their undergraduate studies in systems engineering at Universidad EAFIT in Medellin (Colombia). While Camilo continued the same studies, Luis left the country after five semesters and completed in 2005 a bachelor of science degree in real-time interactive simulation in the U.S. Following the completion of his undergraduate studies, Luis extended his stay in the U.S. until 2006 working as a programmer for the video game company Midway Games. Camilo spent two years working as a support engineer in the telecommunication industry in Taiwan.

The work experience abroad did not only allow gaining insights into work practices in different cultural settings, it also helped to sharpen their English communication skills. In the case of Luis he also gained technical skills regarding video game development during his studies and work experience abroad, as well as relevant industry insights and network contacts among his fellow students and co-workers. During that period, in 2005, Unity Technologies introduced the cross-platform game engine Unity for the development of video

games and simulations for PC, consoles, websites, and mobile devices. The introduction of Unity into the market spurred the emergence of independent game development making it easier to create games in the first place and for multiple platforms (Wikipedia 2017a). Although Luis did not acquire experience with Unity during that period, the game engine became the fundamental technology for C2 Game Studio in the subsequent period of setting up the business. Thus, the educational and professional experience of Luis with video games and the appearance of Unity in the market in 2005 constituted an important antecedence for the creation of C2 Game Studio.

4.2 Setting up the business

While Camilo was still working in Taiwan, Luis returned to Colombia in 2006 working for one year with interactive experiences and simulations in the company Wizard 3D. With the idea in mind to start up a video game enterprise, in July 2007, Luis evaluated different game engines for the development of video games and selected the software Unity:

> *I had the experience in Wizard. Wizard was a firm that developed its own motor [software development engine]. And there I realized something. […] [S]omething which often told me my boss at Midway. He said that the time is already over in which firms develop their own technology, their own [game development] motors, that in this moment in the industry the projects needed to focus on cost reduction, iterate fast, reduce development time. […] Unity was the first browser in history I think which allowed interactive 3D [display] in a [Internet] browser. […] And in this moment we were thinking Facebook was very strong. So we thought the future is the web, the future is Facebook. So, let's choose, align us with a technology that moves us into that direction. […] Unity still was a motor not tested in the market. We were early adopters. We started to work with Unity when version 1 of Unity not even existed.* (Luis, retrospective interview)

A license was bought as well as computers and Luis started to experiment with Unity in the house of his parents. Camilo returned in October to Colombia and Luis told him about his business idea.

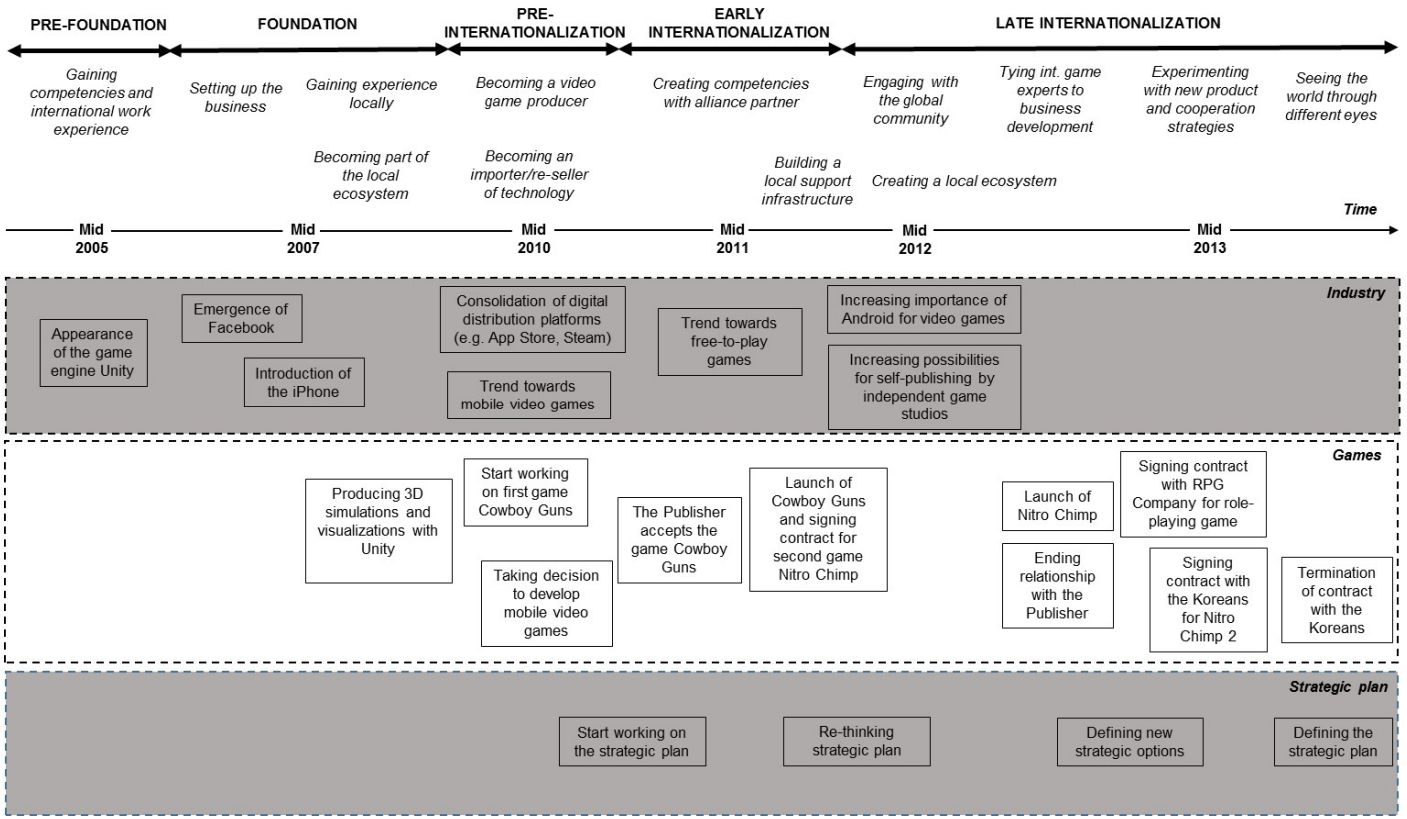

Figure 6 Development history of C2 Game Studio according to time-bracketed periods

Together they evaluated the idea and realized the cost and time difficulty for such a small firm of developing a video game for console. Without abandoning the idea of video game development, Camilo and Luis decided to explore in parallel alternative applications of Unity which they found in the production of simulations and visualizations:

> *So we started to evaluate what were the, the, the risks and costs and the possibilities of making, of making a video game. We saw that it was very expensive, and very big, and very difficult to produce a video game for console in this moment for a company so small. Then we started to think about other ideas of how we could make use of this type of technology. There we decided to start, that is to say, diversify in a way the offer. So we decided, we are not only making video games, but also simulations, visualizations, to a certain extent all these types of things that are produced with the same motor [Unity].* (Camilo, retrospective interview)

The exploration of an alternative product offer did not only mitigate the risk of working on one larger project only (i.e. the video game for console), it also provided an opportunity to familiarize and gain necessary technical expertise with Unity.

In order to start the activities, a third person joined the business as an in-house artist, Luis took over the role as the lead programmer, and Camilo was assigned the role as market developer. Soon after, the in-house artist left and Camilo got to know the local animation studio Sky Branding through a friend's recommendation. Luis and Camilo then decided to outsource the artwork to Sky Branding in order to focus on the design and development function only. Similar, they started to ally with Volta Estudio a local sound producer and friend of Camilo. C2 Game Studio eventually was registered in March 2008 at the local chamber of commerce.

For the selection of the appropriate game engine Luis could make use of his previous experience with video game development and simulations. Nevertheless, further practice was required in order to gain the knowledge and skills that allowed exploiting the functionalities of the game engine Unity. The creation of the alliances with Sky Branding and Volta Estudio permitted C2 Game Studio to focus on its intended core competence, the design and development of interactive 3D applications and video games, and was a result of Camilo's social network of friends. During that period, in 2007, Facebook emerged as a dominant social media and networking platform (Wikipedia 2017b) and the entre-

preneurs considered the future of gaming to move towards the Internet. Therefore, the adoption of Unity with its multi-platform capability including websites was an important step during the creation of C2 Game Studio.

4.3 Gaining experience locally with development technology

In November 2007, Camilo and Luis attended the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) in the U.S. with the aim to gather ideas about the different uses of game engines. With fresh ideas in mind Camilo and Luis were able to specify and broaden their product portfolio which they successfully offered locally to several renowned firms in different industries such as research, consulting, education, hospitality, utility, retail, food processing, energy, and media:

> *In 2007, in November we said: "Ok, we have to start gaining ideas about what we can do with this type of technology [Unity]". And, so, we went to a congress which is called I/ITSEC. From there we brought several ideas, and with that we visited SENA [a client] after we finished the first project for them, we went there and we showed them some of the ideas we had and a second project followed with SENA, now much bigger, from the ideas that resulted from I/ITSEC.* (Camilo, retrospective interview)

During that period C2 Game Studio was able to experiment with Unity through a learning-by-doing approach working on a variety of smaller projects in simulation and visualization for local clients. These projects generated vital cashflow in the short term. The projects were attracted through the personal networks of both entrepreneurs and their partner firms Sky Branding and Volta Estudios. The participation in I/ITSEC in the U.S. allowed capturing important trends in the industry which directly affected C2 Game Studio's product offerings.

4.4 Becoming part of the local ecosystem

Felipe, the director of Sky Branding, invited Camilo and Luis to a meeting with the different actors involved in the creative industry in Medellin at the local science park with the aim to evaluate the possibilities of creating a local industry association. The meeting was also attended by a local representative of the na-

tional, government-led export promotion agency Proexport who was particularly interested in evaluating the international business potential of the sector. This first gathering was the starting point for several succeeding meetings by the sector. Camilo and Luis participated as observers but did not sign any association agreement.

The association activities also attracted the attention of further business development organizations. This resulted in the participation of C2 Game Studio in a five month training course about business administration-related topics coordinated by the regional business development organization Proantioquia. Ruta N, the local science and innovation promotion agency, also started to get interested in the activities of the sector. Although video game development was still a minor activity compared to other activities of the sector such as audio-visual production and animation, Ruta N and Proexport became particularly interested in the video game activities due to its raising importance on a global scale:

> *[T]he thing is that once we started to attend all that meetings, thereon two key players in a way from, from the government started to get interested [in the sector and their activities]. […] The thing is that Proantioquia got interested. So they noticed us and from there on they can count on us because they know we are - although we are not affiliated [officially with the sector] - there they know that we are here working in Medellin and that we are in that area [of video game production]. That way Proantioquia invited us, began to invite us to their [business development] processes. […] From there on RutaN started to get connected [to the activities of the sector]. […] A year ago when they got involved they didn't know anything yet about this world [creative industry] but now they, to some extent, got more involved and more knowledgeable [about the sector], and they are trying in a way to support all the sector. […] [V]ideo gaming is a tiny thing [the market for video game production in Colombia]. But the good thing is that the video game industry in the world reaches a peak and so the government noticed that and they began to support it [the local video game production activities].* (Camilo, retrospective interview)

Further sectoral activities involved the presentation of C2 Game Studio in angel investor meetings which provided an important platform for networking and learning how to prepare and conduct a sales pitch.

From its inception, C2 Game Studio participated in the sector promotion activities. This let to networking opportunities with important business promotion

agencies such as Proexport and Ruta N. Learning opportunities arose by participating in training activities related to business development and sales pitches for angel investments. Not only the association activities of the local industry players caught the attention of business development agencies, it was also the exceptional growth of the global gaming industry which contributed to the increased interest in firms such as C2 Game Studio. During that period, in 2007, Apple introduced the iPhone. Although Luis and Camilo did not foresee a shift of video games towards mobile devices during that time, the introduction of the iPhone became an important milestone for the subsequent emergence of mobile video games (Wikipedia 2017c) – the type of game C2 Game Studio later adopted in order to enter the global market of video games.

4.5 Becoming an importer/re-seller of technology and know-how

During 2010 Camilo had the opportunity to sell several Unity licenses to a former client, the national agency for vocational training (SENA). After the deal was done, Camilo approached the firm Unity at the industry event Unite in Canada and secured for C2 Game Studio the sales representation of the software maker for Colombia. At the same event, Camilo negotiated the sales representation for Colombia for Design3, who offers online tutorials for video game development. Being a sales representative for these firms allowed C2 Game Studio to access the technology at a discount and to improve the image of the firm:

> *What it gave us [the partnership with Unity] was credibility with these type of companies, with Proexport, with Ruta N, because Unity already turned into an important player. So, to say, "we are, we are re-sellers here [in Colombia]." This helped us that they [Proexport and Ruta N] ascribed more importance to us and that they took more care about us.*

The connection with Unity was also an important opportunity for networking at industry events:

> *[W]hen we visited the Unite conferences - since we already knew several employees at Unity - they had their own contacts and they told us, "look, I present you to this person so that you show them your game. I bring you in touch with this other person." So, they [Unity] also helped us to make networking. In this moment this doesn't work anymore because Unity became very large and the*

> *people that we knew best within the company are not working there anymore.* (Camilo, retrospective interview)

During that period the sales representation helped C2 Game Studio to establish a trustful relationship with two players of the global gaming industry (i.e. Unity and Design3) and contributed to the positioning of the firm within the video game industry in Colombia.

4.6 Becoming a video game producer

In March 2010 Camilo participated in the Game Developers Conference (GDC) in the U.S. where he got to know C2 Game Studio´s first potential international client for a video game. C2 Game Studio participated in the game bidding procedure which was intermediated by Seismic Games, a US-based video game content creator and consultancy firm for video game producers. Although the bidding was not successful Seismic Games invited C2 Game Studio to further bidding procedures with clients based in the U.S. and Australia. None of these business offers were successful but C2 Game Studio acquired important knowledge about how to structure and estimate a video game development project based on the design of a potential international client. This provided a unique learning opportunity dealing with customers in the global video game industry compared to projects so far that were focused on simulation and visualization projects for clients in Colombia only:

> *What, what happened now with these contacts and these offerings? If you submit an offer for, for a simulation project here in Colombia is one thing, but, but the process of an offering for, for a game based on a pre-established design that we receive from them [a potential client from Australia] for the market in the U.S., …yes we learned a lot from this.* (Camilo, retrospective interview)

The participation in these bidding procedures for international clients also provided a motivation for C2 Game Studio to get involved in international projects:

> *So to say the fact that there are firms abroad interested working with us even if we still don't have any commercial product in the international market, this was also …, it motivated us. It motivated us. Something we must have done right in order for them to be interested in working with us.* (Luis, retrospective interview)

After the participation in several bidding procedures for video games internationally, the successful cooperation with Sky Branding and Volta Estudios for projects in the Colombian market, Camilo and Luis decided that it is time to start developing their first video game:

> *Thereupon we began to say: "No, now that we already learned a lot of things. Now we have in a way a partner, Sky Branding, so now we have more artists, now we can … maybe we can take a chance on a game." So we started to think about of making a game.* (Camilo, retrospective interview)

Changes in technology facilitated the (global) distribution of video games digitally through platforms such as Steam for PCs and the App Store for the iPhone. After some unsuccessful communication intends with Steam, Camilo and Luis nonetheless decided to go forward with the project of developing their first video game being confident of its sale's success through Steam if the quality was only good enough.

Camilo's visit to Unite in November 2010 resulted in a strategic change regarding the development of their first game. The major insight that Camilo took home from the event was the fact that the global video gaming industry shifted towards mobile games:

> *When I visited Unite in 2010 in November realizing how it was, that is to say, what were the speeches, who were the people, what did they ask - because there was a buyer-sellers meeting also for one day - what did the people ask, what they asked for, and so on. We saw that that the business, that is to say, the business moved towards mobile games.* (Camilo, retrospective interview)

Based on this insight the decision was taken to split the development of one larger game for PC into four smaller games tailored at the iOS operating system (iPhone, iPad) and for distribution through the App Store instead of Steam. The development of the first game for the mobile gaming market with the title Cowboy Guns began.

The increasing trend towards mobile video games triggered the decision to become active in this type of game segment. An important antecedent for mobile video games was the introduction of the iPhone in 2007 and the subsequent launch of the App Store in 2008. During 2008 Steam also became an open platform that allowed anyone to publish through Steam (Wikipedia 2017d). It was also towards the end of this period that especially Luis began to work on the

vision he had for C2 Game Studio called C2 Ideal which consisted in a description of the internal operations, the roles of the team members, and the role of innovation within the firm.

4.7 Creating competencies for the development and sales of globally competitive mobile video games in cooperation with alliance partner

The highly competitive market situation in digital distribution platforms such as the App Store required the cooperation with a specialized publisher for mobile video games. Once the development of Cowboy Guns reached a more mature state in March 2011 Camilo contacted a renowned UK-based mobile video game publisher[3] for independent studios (the Publisher):

> *So I began to evaluate, to assess, and I assessed, that is to say, talking to other developers in order to see how their experience was. I simply saw it through the eyes of a final user who says, "which is the best publisher for mobile games?" And obviously during that moment [I] decided this is the publisher who stands at best for quality, for credibility, and this is what we want for our games. We want to reflect professionalism, credibility, many other things in the industry. I said, "if I could choose anyone it would be this one".* (Camilo, follow-up interview)

The Publisher liked the game and saw a great potential in it. After the contract was signed in May 2011 the Publisher assigned the game to an internal producer in order to polish and prepare the game for sales through the App Store. On a weekly basis, Camilo and Luis received feedback from the producer regarding the latest version of the game which was incorporated into the next built and so forth. Receiving feedback on the game from an internationally experienced industry expert outside the firm proofed to be highly valuable for Camilo and Luis who eagerly absorbed all the knowledge from the producer:

> *[I]t is someone [the producer] who has, one can notice that he has valuable experience in the industry, he already has developed several games. Also from the point of view of a publisher to know what, what people like, what they are looking for, how to make more user-friendly the game. […] Things which someone who gets stuck within [game development] doesn´t see. So, an opinion from*

[3] The name of the publisher is kept confidential.

> *an outsider who knows a lot is very good. […] [The producer] sent us a file about 15 pages of feedback. So in that moment this file of 15 pages, for us it was absolutely the gold mine […]. Because it was not like seeing the game through the eyes of a player but seeing the game through the eyes of a producer. All this was very good for us.* (Camilo, follow-up interview)

After two months of interactions with the Publisher, Quality Assessment of the Publisher approved the game in August before it was launched a month later in the App Store. Based on the fruitful and insightful cooperation with the producer C2 Game Studio signed a second contract in August for the new game Nitro Chimp with the same Publisher. During the same month the design work began.

When Cowboy Guns was launched in September 2011, Camilo observed and documented the Publisher's marketing activities in order to be able to replicate a similar promotion strategy for future games:

> *After its approval [the game by quality assessment of the publisher], which should happen tomorrow - I hope so - we should wait 30 days while they [the publisher] make the marketing effort, where we will try to keep us informed as much as possible in order to learn sufficiently. After that it becomes visible in the App Store.* (Camilo, log)

During the same month, Camilo and Luis attended Unity's developer's conference Unite in San Francisco. The Publisher organized several meetings with video game review portals as part of the launch promotion activities. The trip did not only contribute to the game's international promotion, the personal encounter also helped to strengthen the relationship between C2 Game Studio and the Publisher.

The experienced lived throughout this period in cooperation with the Publisher and the launch of Cowboy Guns provided an important trigger for Camilo to rethink the firm's strategic plan:

> *And with all the things we learned throughout the development of the game [Cowboy Guns] there is the need for a revision. There we have it [the strategic plan] and it is good to also think about the future.* (Camilo, follow-up interview)

At this time Camilo did not agree anymore with what was written down by Luis a year ago envisioning the operation and development of the firm in the

document C2 Ideal. It was time for a revision based on the experience with the development and the launch of C2 Game Studio's first mobile video game. The free-to-play, freemium business model[4] also became mainstream during this period in 2011 which marked an important trend for mobile video games that especially Camilo felt to be of importance for the future development of the firm.

4.8 Becoming an industry pioneer locally

In parallel to the publisher's promotion activities targeted at the global, English-speaking market for mobile video games, Camilo promoted the game locally within Colombia mainly through news media such as radio, newspapers, and web-based social networks and portals. C2 Game Studio reached the highest sales in history among Colombian firms within the App Store during the launch period of Cowboy Guns. This contributed to C2 Game Studio becoming the most recognized mobile video game company in Colombia which also caught attention of government-sponsored business development organizations such as Proexport and Ruta N:

> *In Colombia we did a free press campaign which had much more impact on the people: TV, radio, newspaper, Internet, portals, social networks. It helped us to become the top of mind in games in Colombia. […] MinTIC [the Colombian Ministry for Information Technology and Communications] let us know that we are the Colombian firm that sold most in the App Store. The people from Proexport invited us to their [export] missions.* (Camilo, follow-up interview)

This period happened during September 2011, the same month when Cowboy Guns was launched in the App Store. The period therefore appears at the end of the period of creating competencies for the development and sales of mobile video games. Due to space restrictions I was not able to display

[4] Free-to-play refers to video games which gives players access to a large part of their content without paying. The most common free-to-play game is based on the freemium software model. For freemium games, users are granted access to a fully functional game, but must pay microtransactions to access additional content. Free-to-play can be contrasted with pay-to-play, in which payment is required before using a service for the first time (Wikipedia 2017e).

4.9 Building a local support infrastructure

A month after the launch of Cowboy Guns Camilo participated in the national digital content summit Colombia 3.0[5]. The summit served as an important networking event. He met the manager for services export from Proexport who invited C2 Game Studio to an export mission to the industry event Game Connection in the U.S.:

> *He [the services export manager of Proexport] approached me and showed me the game [Cowboy Guns] on his iPhone. This is really good! He told me, "let's go to San Francisco! I will take you there". Well, it's really good to receive this kind of recognition.* (Camilo, follow-up interview)

Besides, Camilo got to know the CEO's of two leading video game development companies from Colombia, Alejandro from Brainz and Eivar from Efecto Studios from Bogota. Talking to both studios was an interesting opportunity to compare their work culture and processes with C2 Game Studio and served as an important occasion to raise the issue of mutual support in order to improve the video game development industry in Colombia:

> *It was very good to see how they work [Brainz and Efecto Studios] and to start making local alliances which can help us in the future to improve how we make things here [in Colombia]*. (Camilo, log)

Inspired by the networking activities of the video game sector in Bogota, Camilo became interested in opening a chapter of the International Game Developers Association (IGDA) for Medellin with the support of Brainz and Efecto Studios who earlier opened a chapter in Bogota.

During November Camilo made use of C2 Game Studio's sales representations for Unity and Design3 and coordinated a training session for local game development firms sponsored by Ruta N. The event did not only strengthen the relationship with Ruta N, it also contributed to C2 Game Studio's image as pioneer in the emerging gaming industry in the country:

> *In general, the fact that we invited the expert from Design3 contributed to our image in the city as industry pioneers in the country.* (Camilo, log)

[5] Colombia 3.0 is a non-profit initiative of the Colombian Ministry of Information Technology and Communications.

During the same period, in December, Camilo and Luis received the visit of a video game design expert[6] from Los Angeles. RutaN invited him to Medellin for a seminar. He provided feedback and advice regarding the design and mechanics on the current game in development Nitro Chimp. Following his advice Nitro Chimp was then converted from a design based on levels into an endless-runner game:

> *Why don't you turn it into an endless runner? [the expert commented]. Ok, that's fine. This implied a drastic change and required learning on how to create procedurally generated worlds which is very difficult and that took us a lot of time.* (Camilo, follow-up interview)

Gaining the recognition and support of public business promotion organizations (Proexport, Ruta N) and becoming friends with the CEOs' of the leading private sector firms from the gaming industry in Colombia was an essential characteristic of the period. The previous launch of Cowboy Guns provided an important antecedent for this development. The development of the new game Nitro Chimp experienced a major shift in design during this period influenced by the advice of an international video game expert.

4.10 Creating a local ecosystem for video game entrepreneurship

In March 2012 Camilo participated in the export mission to Game Connection[7] in San Francisco with other four Colombian game studios sponsored by Proexport. Countries like Chile, Argentina, and Costa Rica also promoted their emerging game industries with export missions and country specific booths. Observing the presence and promotion activities of other countries' games industries made Camilo becoming aware about the importance of a functioning ecosystem for video game entrepreneurship in Colombia:

> *We [the two participating game studios from Medellin] became aware that we are not competing against the other firms from Bogota. We all represent Colombia. We need a business environment, a healthy environment for video games in Colombia in order*

[6] The name is kept anonymous.
[7] Game Connection features buyer-seller meetings, exhibitors, conferences, workshops, and master classes for professionals in the games industry.

> *for all of us to flourish. If there are only the five of us we won't achieve anything.* (Camilo, follow-up interview)

Camilo returned from San Francisco with the desire of putting together an IGDA Meet & Greet event in order to provide a platform for networking for firms and institutions involved in the video game industry in Medellin:

> *I am trying to put together an event in this moment from IGDA, like a Meet & Greet, in a bar or restaurant. Inviting everyone who is working for himself but we are not talking to each other. So to say, telling them truthfully things I experienced at the congress [Game Connection]. We have to work as one country, everyone for his company but supporting each other. We are not competitors. If you make a very good game and if I make a very good game more people will be interested in Colombia. It's better than fighting!* (Camilo, follow-up)

The event took place in April with over 80 participants and was repeated in September. For the organization of the second Meet & Greet Camilo teamed up with Juan Carlos from Gara Entertainment who also participated in the export mission to Game Connection earlier. Due to its success Camilo and Juan Carlos decided to organize it every second month. For the event they also gained the support of Ruta N. Camilo's increasing involvement in IGDA activities let to his appointment to the board of directors of IGDA Colombia in October.

While Meet & Greet provided a unique opportunity for networking among the industry's firms and institutions, it lacked content. Therefore, Camilo took the initiative during October to coordinate a digital content forum together with universities, Gara Entertainment, and Ruta N:

> *So I think we can start doing these things [create the ecosystem] - we are with the Meet & Greet which is for networking, and this part [digital content forum] which is a little bit more academic - create the ecosystem.* (Camilo, follow-up interview)

He also led the organization of a workshop for November about video game entrepreneurship by IGDA with the support of Ruta N and the participation of Alejandro from Brainz. This workshop was especially helpful to reconfirm the strong relationship Camilo developed with Ruta N and Proexport:

> *Last week was very interesting because we had the opportunity to deliver the workshop about video game entrepreneurship from*

> *IGDA and Ruta N. […] I think it was quite productive for the participants. Ruta N and Proexport were very happy with the event and we hope that they will continue their support for this kind of activity.* (Camilo, log)

During the observed period Camilo did not only take the initiative to lead the organization of events for networking and knowledge exchange, he and his partner Luis got also more and more involved sharing their own experiences and accumulated knowledge with the development and sales of mobile video games in these events: For the first Meet & Greet Camilo shared his experience at Game Connection with the participants; Luis provided insights into his experience with game design during the digital content forum and the workshop about video game entrepreneurship; Camilo had the opportunity to share C2 Game Studio's business development strategy during a services export seminar in October invited by Proexport and to contribute his experience with sales pitches and business development in the context of the global gaming industry to IGDA's video game workshop.

4.11 Engaging with the global community of mobile video game development

Camilo arrived at Game Connection in March 2012 with 27 meetings scheduled in his calendar. Proexport who sponsored the export mission facilitated the location for the buyer-seller meetings. Camilo's priority were the top, well-known publishers in the industry:

> *I sent out many invitations [through an online meeting application]. I got most of the appointments that I have given priority number one, number two I got many. What I thought was, I didn't care if it is not the exact, perfect match. Even if nothing comes out of the meeting I am polishing my pitch. I am improving my presentation; I am preparing myself for other, more important things. At the same time I get to know more people, so it doesn't matter.* (Camilo, follow-up interview)

The meetings with the publishers were also an important learning opportunity to gain insights into the particular requirements of the leading publishers and industry trends (e.g., increasing importance of Android operation systems for video games, game analytics). Since it was Camilo's first visit to a trade fair with buyer-seller meetings he took advantage of his relationship with Brainz

and Efecto Studios in order to get feedback on how to best sell the firm's offers. He also observed the behavior of Alejandro and Eivar and how they engaged in conversations with potential buyers:

> *I talked to the other firms from Colombia, the two good, very good ones, and they have more experience than us, in Bogota [Brainz, Efecto Studios]. The two have much more experience. They are already twelve years working in this. I saw how they were engaging. They already went several times to Game Connection, it was my first time. I have never visited a buyer-sellers meeting. It was worth making the financial effort instead of going simply to a congress.* (Camilo, follow-up interview)

Jon Kimmich, an experienced industry insider and consultant for mobile and game studios, was present during one of Camilo's meetings with a potential client. Although there was no direct contact between Camilo and Jon during this particular meeting (Jon acted as a consultant to the firm that Camilo met with), the event became important for a re-encounter with Jon in October 2012 during Colombia 3.0.

The participation in Game Connection did not only provide a platform for networking with potential clients and industry experts it also provided an opportunity for Camilo to verify the content of C2 Game Studio´s strategic plan:

> *Having in mind our strategic planning over there [at Game Connection], talking to everyone and already having it written down [the strategic plan], it was also useful for me. I had everything in my head but I didn't have it organized. It helped me a lot having it [the strategic plan written down] and to sit down again reading it. Whatever, the idea is not to touch this document but try to start maintaining it based on everything that I will learn. I have to sit down now after my return reading it again in order to see what happens.* (Camilo, follow-up interview)

Game analytics that focuses on the analysis of game user behavior was a central discussion topic at Game Connection which Camilo included a month earlier in a revised version of the plan. Similarly, the size of C2 Game Studio in number of employees compared relatively small to other independent game studios - a fact that Camilo re-confirmed at Game Connection.

The alliance with the publisher provided proof of C2 Game Studio's qualities as development studio in the international context. The legitimacy gained

through this cooperation was especially helpful for the negotiations with potential clients at Game Connection:

> *[I]n order to show [to potential clients] that we have made projects that we finished, that we made them with [that particular publisher] who is the gourmet publisher of mobile [games]. This is a very strong recommendation that the two games are [published] with [the particular publisher].* (Camilo, follow-up interview)

The increasing experience of C2 Game Studio with the development of mobile video games and the engagement of the firm in the global market for mobile video games led Luis and Camilo to propose to the managing board of C2 Game Studio to hire an external advisor for the firm. The role of the advisor should consist in support for strategic decision making in business development, for providing access to relevant network contacts, and to give advice regarding a faster and more efficient production process:

> *I think it all started when we realized the necessity of, initially to produce the games in a more efficiently faster way, and better games. Because we realized when Camilo visited the conferences that the industry for mobile [games] is moving excessively fast, it changes so fast. And we were still working very manually. So, […] I tried to remember my previous experience in the industry in Midway. Somehow trying to remember the processes which were used in Midway, the technologies which were used in Midway and how they were different from what we had in C2. Obviously there was a gap, there was a knowledge gap. […] [W]e didn't know which tools we needed in order for the production process to be less manual and more automatic, stronger.* (Luis, retrospective interview)

Consequently, Luis contacted a former class mate from the university in the U.S., Stephen, who worked as executive producer[8] for a major U.S.-based game franchise in order to propose him the role as adviser to C2 Game studio:

> *[Stephen] studied with me in the university [in the U.S.] and in that moment he worked in the studio that developed Call of Duty*[9]

[8] The original name is being kept anonymous.
[9] Call of Duty is a successful first-person and third-person shooter video game franchise (Wikipedia 2017g).

> *[video game]. So, he had experience with large projects, with ambitious projects, big projects.* (Luis, retrospective interview)

C2 Game Studio received financial support from Proexport and the Colombian Ministry for Information Technology and Communications (MinTIC) to participate in an export mission to Casual Connect[10] in San Francisco, July 2012. Camilo took advantage to engage in conversations with as many people as possible in order to get feedback on the current games Cowboy Guns and Nitro Chimp and on drafts of future games. Compared to other conferences he attended earlier, Camilo was more self-confident this time regarding his networking activities:

> *Personally I think I changed my behavior of how to approach people and present them my company much easier. As if I felt more comfortable about my firm. […] In Game Connection I only networked with the people I had a meeting with and that was it, and here [at Casual Connect] it was with everyone, with everyone I had a chance to, and I felt much more comfortable. Thus, I think, [participating in Casual Connect] it was like a turning point for my personal growth.* (Camilo, follow-up interview)

In Casual Connect Camilo had the chance to participate in a lunch with Efecto Estudios together with game consultant Alex Mandryka:

> *There is a person who we would like to have very much as a mentor but he is consultant and charges money. […] He's an eminence! He has designed extremely important games, and he met with the people from Efecto and they invited me. He gave us about half an hour. He talked to us and told us about games and explained us and everything but he charges money per hour, like hundreds of dollars. So, no we don't have the money to hire him as a consultant. But Eivar from Efecto talked to him and to Proexport and they will invite him for a speech to Colombia 3.0 in October.* (Camilo, follow-up interview)

Camilo simply observed the conversation between Efecto Estudios and Alex Mandryka and kept Alex's business card.

In April 2012, before Casual Connect, the relationship with the video game design expert from Los Angeles who occasionally provided feedback and expert

[10] Casual Connect is an annual event for the casual game industry which provides networking events, lectures, buyer-seller meetings, and exhibition booths (http://usa.casualconnect.org).

advice on the design work of Nitro Chimp was suddenly disrupted due to a personal dispute between Camilo and the person who brought the expert to Medellin earlier.

During the period Camilo participated twice in networking events of the gaming industry in the U.S. In conversation with potential publishers and industry experts he not only received feedback on current and future games but also gained insights on industry trends. The positive image for C2 Game Studio of publishing through the Publisher and the encouraging feedback he received for both games from the international gaming community made him become more comfortable and self-confident presenting C2 Game Studio internationally which facilitated further networking activities. Engaging in conversations and observing the behavior of others became an important learning strategy. As the relationship with the expert from Los Angeles was brought to an end other important contacts were made: Jon Kimmich and Alex Mandryka as chance meetings, and the former class mate Stephen as a deliberate action to seek advice on the firm's strategic business and product development. During that period the global mobile video game industry also observed an increase in importance of games for mobile devices based on the Android operating system (App Annie Index 2012) and increasing opportunities for self-publishing by independent game studies (Wikipedia 2017f). Although Camilo and Luis did not consider self-publishing at this point, it became and alternative increasingly considered during subsequent periods since it allowed to create higher revenue and the positioning of their proper brand name in the market.

4.12 Tying international game experts to product and business development

Jon Kimmich and Alex Mandryka were invited to Colombia 3.0 as guest-speakers by MinTIC. Jon still remembered Camilo from Game Connection which made it easier to establish the initial contact. Since Luis´s former class mate Stephen could not take on the role as external advisor for C2 Game Studio, Camilo had the idea to offer this role to Jon:

> *I will try to improve the relationship with Jon Kimmich because I am interested in that he takes on the role of [Stephen] […]. We talked about this briefly in Bogota [during Colombia 3.0] but it is a matter of time to get to know each other to see if it is viable.* (Camilo, log)

Camilo also took advantage of Alex's presence and met several times with him during the conference in order to receive feedback on Cowboy Guns and Nitro Chimp, and game design in general. The intense conversations with Alex at Colombia 3.0 helped to establish a closer relationship with him:

> *With Alex Mandryka I talked a lot and I think that we started a very good relationship. […] I had several very, very interesting conversations with him and I think he will come in November [to Medellin] thanks to Ruta N for a one-week workshop. Let's hope that they [Ruta N] will approve it.* (Camilo, log)

The feedback and advice from Jon and Alex motivated Camilo to suggest to the managing board of C2 Game Studio a change of strategy to its business development in order to focus on a particular community of gamers and game design strategy.

Several meetings took place via Skype during November and December between Jon, Camilo and Luis with the aim to establish a closer relationship and to define Jon's role as external advisor. Having Jon on board would allow the firm to establish a direct link to the global gaming industry and pull C2 Game Studio out of its isolation from the happenings of the international market:

> *All firms that want to achieve something in video-gaming at this time have their offices in San Francisco or are from San Francisco. This is how it works! […] We are disconnected. […] Here we are alone, alone, alone. […] That he [Jon] truly helps us to mature, that he helps us to grow, that he helps us to learn how they are thinking [the video-game companies established in San Francisco]. I think this would be of great benefit for the firm [C2 Game Studio].* (Camilo, follow-up interview)

The continuing conversation with Jon and the feedback and the advice he offered became an important input to re-think C2 Game Studio's development plans for 2013:

> *[U]ntil now what he [Jon] did was scheduling meetings more or less every 20 days where he gives us advice, where we tell him what happened, what we think, let's say. We had a very good meeting where we told him about the plans we have for this year. He gave us feedback and thanks to that we probably think in another way of how to approach this year and what we are doing this year*

> *is, is thanks to the feedback he gave us.* (Camilo, follow-up interview)

Ruta N invited Alex for a workshop about game design in December. Camilo took advantage of his visit and arranged several meetings with Luis and Alex in C2 Game Studio´s office. Camilo benefited from his close relationship with Ruta N who paid for Alex's visit and individual firm consultancy services. Receiving Alex's input on game design and feedback on C2 Game Studio's current design strategy was particularly important to Camilo:

> *Alex Mandryka we consider him like a mentor for game design. […] Let's say he analyzed how we really work. […] He questioned many things, he made us think a lot […] I think his visit really was very, very, very, very constructive for us […]. I think Alex what he is doing is destroying what you have, destroying the game, and subsequently build on it. He really destroyed us which was very good.* (Camilo, follow-up interview)

In January 2013 the design work for the new game began based on the feedback and advice provided by Alex.

This period also saw the launch of Nitro Chimp in December. Compared to the cooperation with the Publisher for Cowboy Guns the cooperation for Nitro Chimp did not fulfil C2 Studio's expectations. It was rather considered disturbing and preventing from other learning opportunities:

> *In general, we weren't satisfied with anything with [the publisher´s] process for the second game. For the first one, yes! For the second one, no! We already were saying, we took the decision with [that publisher] never again. […] From now on working together with a publisher like that like we did it I sincerely think is losing the opportunity to learn more […].* (Camilo, follow-up interview)

The rather unsuccessful cooperation with the Publisher for Nitro Chimp was largely substituted through the interaction with leading video game experts and consultants:

> *I think this is a process, each game doubles knowledge. It might be that with Cowboy Guns we learned a lot from [the publisher] but with Nitro Chimp we learned a lot from other people, not from [the publisher], from many other people. And this I think is a*

> *learning lesson. We did learn to learn that we shouldn't work with [that publisher] anymore. This is already a lesson by itself […].* (Camilo, follow-up interview)

During the period Camilo engaged in conversation with two leading international game experts, Jon and Alex, and successively built a relationship with both of them through a process of constant interaction soliciting their feedback and advice. On the one hand, Jon provided valuable input for C2 Game Studio's business development, and, on the other hand, Alex delivered important input for the game design process. The feedback and advice largely impacted the business development plan of the company and the activities for 2013. The cooperation with the Publisher was finally brought to an end.

4.13 Experimenting with new product and cooperation strategies

After the production of Nitro Chimp – an endless-runner game for mobile devices digitally distributed through the App Store – Luis started to work on a new type of game, a role-playing video game (RPG). In contrast to Nitro Chimp the new game should be distributed through the online platform Steam and the PlayStation Network. Hence, C2 Game Studio joined Sony's Incubation Program with the intention to accelerate the development on the PlayStation platform.

In contrast to the cooperation with the previous publisher which solely focused on the publication process, the new game should already be co-produced with a strategic partner in order to lower the risk associated with the game development. Thus, Camilo contacted in February 2013 a renowned game development and publishing company for role-playing games (RPG company[11]) headquartered in the U.S. in order to offer the co-production for the new game:

> *And I started to engage in a conversation with him [the contact person at RPG company] more or less one month prior to Game Connection and I told him, "Ok. We have an idea. This is the game." And the guy became very interested. He saw our previous games, and told us, "Do you know what? I like it. I have, I have, had a project … another firm quitted. Maybe have a look at it. Do you want to work on that?" So we told him, "Maybe this one but combined with our concept [idea]." […] So what we accomplished with [RPG company] is that he promised to design and to create all the art-work for the game. The art-work includes the*

[11] The name of the company is being kept anonymous.

> *assets, the animations, the music too, and hiring the play-writer for the game. […]* (Camilo, retrospective interview)

Before Camilo departed to Game Connection in San Francisco the contract with RPG company was signed. The trip which took place in March 2013 was partly funded by Proexport. Camilo prepared several concept ideas in order to identify additional co-production opportunities for new games during buyer-seller meetings at Game Connection:

> *How about if I am going [to Game Connection] with these other concept idea presentations in order to see what we can find? Maybe if we can find funding then we will grow the team and develop another game simultaneously [in addition to the ongoing development of the role-playing game].* (Camilo, retrospective interview)

At Game Connection Camilo established contact with the publishing director for North America of an important mobile game publisher headquartered in South Korea (the Koreans[12]). He was interested in the concept of a sequel of Nitro Chimp, Nitro Chimp 2. The cooperation should include the co-funding of the game development and promised to be an important learning opportunity regarding game monetization:

> *What happened was that they [the Koreans] told us, […] "We will send you these documents of how to monetize or the best monetization practices of [the Koreans]." The good thing is that these Koreans in Korea invented the free-to-play [business] model. So we said, "Here we will learn a lot from them."* (Camilo, retrospective interview)

The week after Camilo returned from Game Connection the publishing director for North America presented Camilo to the vice-president for North America of the Koreans in order to close the contract:

> *[He] [the publishing director] presented me to the VP [Vice President of the Koreans] for North America. […] [He] too [similar to the publishing director] is super American, with a very good English. So the communication went very well. We started to negotiate and signed the contract within 15 days.* (Camilo, retrospective interview)

[12] The name of the company is being kept anonymous.

Once the contract was signed in May 2013 the intention was to hire additional staff in order to work simultaneously on the two new games. C2 Game Studio could either follow the usual strategy and hire unexperienced interns or make use of the money to hire an experienced new team member for the Nitro Chimp 2 project. The latter option was adopted and Alberto, a friend of Luis, was hired. Alberto was an experienced IT project manager. His task focused on the optimization of the game development process from a programmer's perspective, especially to make the process faster, more efficient, and agile:

> *He helped us a lot with this, this part of the code, the [software] architecture, and the programming. Of how to program better and how to structure the architecture of the project. And he also helped us with the management of the project because he has also been a project manager in, in large projects […] I think no other [video game development] studio here in Colombia has [right now] such a robust [software] architecture as the one designed by Alberto.* (Camilo, retrospective interview)

Hence, with the help of Alberto C2 Game Studio was working in parallel on the two new games.

In October 2013 the publishing director of the Koreans told Camilo about his resignation from the company. So did, a few weeks later, the vice-president for North America of the Koreans:

> *"See you soon, I am leaving, …" [the publishing director told Camilo]. So I told myself, "How bad. Because he was the one I had the meetings with every week. We talked about the project [Nitro Chimp 2]." And he was like our champion within that company. The one who defended us … The one who defended our interests. […] And the two people who I knew and to who I talked to and with who I negotiated were leaving [the company].* (Camilo, retrospective interview)

With the resignation of the two people, new contact persons were assigned to C2 Game Studio. After a few weeks of communication loss the Koreans sent a file by the end of November with the instructions of the production process in order to adapt the current version of the game to the requirements of the Koreans:

> *They [the Koreans] sent us a file with all the information, that is …, it seems very crazy to me. [They sent us] the complete production process from [the Koreans] , all monetization [instructions], all we needed to do, all the design, all the icons, that is, like a lot of knowledge from [the Koreans]*. (Camilo, retrospective interview)

15 minutes later after having received the file the newly assigned publishing director called and cancelled the project. He told Camilo (retrospective interview): *"Look, I just talked to our new VP [Vice President] to show him the built [latest version of the game]. And when I touched the topic of Nitro Chimp he told me, 'I talked yesterday to our CEO in Korea and we will suspend 16 projects […] and Nitro Chimp is one of them.' Ciao. Thank you."*

The cooperation with the Koreans by then proofed to be an important learning lesson regarding game monetization which was incorporated in the latest version of the ongoing development of Nitro Chimp 2:

> *[What] most caught our attention were the monetization strategies. Before, when we talked about monetization we simply were thinking about how to make some dollars with each user and that's it. [What] we realized with the methods from [the Koreans] was that they attacked the issue of monetization from different angles. They focused on monetization, focused on retention, focused on conversion. And they had different features for each objective. We never looked at it like this. […] So we learned about game monetization at a deeper level [with the Koreans]*. (Camilo, retrospective interview)

The different features of game monetization proposed by the Koreans were discussed several times with Jon in order to explore with him its applicability and integration into Nitro Chimp 2. Jon further provided legal advice during this period regarding the contracts with RPG company and the Koreans.

By the end of the period the role-playing game continued in development. The game first needed to reach a certain level of development until RPG company delivers the art-work for the game.

During the period C2 Game Studio experimented with a different video game genre, an alternative business model for its new game tailored to different devices and platforms, and distinct cooperation strategies: The development of the role-playing video game contrasts the endless-runner type of genre (i.e. Nitro Chimp) developed previously; the free-to-play (i.e. freemium) characteristic of the previous games Cowboy Guns and Nitro Chimp was replaced for a pay-to-

play business model for the role-playing video game; the focus on the development of video games for mobile devices was extended to the development of games for home computers (i.e. PC, Mac), and even consoles (i.e. Sony's PlayStation); and the cooperation strategies did not focus solely on the publication process but included joint production and funding. The cooperation with the RPG company made the recruitment of a new, experienced team member possible, and the Koreans provided valuable knowledge regarding the improvement of the profitability of the freemium business model of Nitro Chimp 2. Jon, the external advisor, provided legal assistance regarding the contracts and helped to assimilate the monetization features offered by the Koreans.

4.14 Seeing the world through different eyes

A former class mate of Luis from the university in the U.S., Tommy[13], visited C2 Game Studio during November. Tommy has an ample work experience in different executive positions in leading video game development and publishing firms on a global level. His industry experience, especially as a producer, motivated Luis to contact him:

> *I have many colleagues with who I studied, but Stephen and Tommy are the ones, the ones who most have worked in different firms and who are producers. […] [The production side] is one of the things which I consider we need to improve in order to be more efficient – making better products. That's why I contacted them.* (Luis, retrospective interview)

Tommy visited C2 Game Studio for three days and offered sessions regarding firm strategy which covered areas such as game design and development, monetization and microtransactions, business models, cooperation strategies, and human resource management. The intensive and honest coverage of the different topics were like a mind-opener:

> *[Tommy] gave us a lot of information which exploded our mind. […] [He] opened our mind for many things.* (Camilo, retrospective interview)

Sharing honestly and openly his experiences and insights was highly appreciated by Camilo and Luis:

[13] The original name is being kept anonymous.

> *I think one of the most important things with, with, with him [Tommy] is that he is the only one, almost the only expert in the industry with whom we had the opportunity to talk informally, directly. We are seeing him more like a peer in contrast to someone ethereous and untouchable, full of wisdom.* (Luis, retrospective interview)

The communication style with Tommy triggered to rethink the relationship C2 Game Studio developed earlier with other industry experts such as Jon and Alex:

> *[Through] that [the visit of Tommy] we became aware that the other people [industry experts] who visited us simply gave us a little bit [of information] but they don't share. […] They don't share all the information. This person [Tommy] arrived super frankly and super generous.* (Camilo, retrospective interview)

> *Many of the experts that visited us, including Alex who helped us a lot, since they are [professional] consultants who charge a lot of money, they really don't tell you everything, they are ambiguous. [Tommy] really is more the type of, "What do you need?" As if he were a member of our team, he sits down and works with you. So I think that this, this was very, very, very important for us.* (Luis, retrospective interview)

The open and honest communication style with Tommy was attributed to the long-standing friendship between Luis and Tommy dating back to their undergraduate studies in the U.S.:

> *This helped a lot having a friendship, having a previous friendship [before Tommy's visit], because he, he, he, his attitude is, "I want to help my friends. I want my friends to prosper."* (Luis, retrospective interview)

Tommy's professional focus is on the free-to-play, freemium business model of video games. So far Luis was rather averse to this particular business model:

> *For me the free-to-play and this, and, and, this, and this business model, has always been fraught with conflict because I saw it as the cancer that destroys the industry I love. […] When I started, when I started making games, […] my mentality was to change*

> *the world, that the games should be art-work, to make the most immersive game in history. And, and, and, and with the mobile devices it turned into something like, "Let's make something cheap, let's make it fast and squeeze money out of the user."* (Luis, retrospective interview)

Tommy's visit was important in that Luis changed his attitude towards the free-to-play business model which marked a trend in the global video game industry:

> *[I] understand or let's say accept that this is the direction where the industry moves. The company [C2 Game Studio] needs to move into that direction, but being faithful and following the firm's objectives.* (Luis, retrospective interview)

Although C2 Game Studio was already applying the free-to-play business model to its games, the visit of Tommy was an important event that helped the firm to define its identity within the global game market. During the three-day sessions with Tommy, Luis and Camilo were re-thinking the firm's strategic direction and identified a strategy of how to position the company in the global game industry:

> *[During Tommy's visit] we gained something that we were searching for a long time which was a, a, a plan, something more specific and, and a direction. […].* (Luis, retrospective interview)

> *I think that we finally found the, the strategy was the most important thing. This was, was an important issue that we carried around for a long time without being able to define well.* (Camilo, retrospective interview)

Consequently C2 Game Studio found its identity in the production of free-to-play, adventure-games for mobile devices. The free-to-play model also changed the publishing strategy.

Since the game is offered for free the firm needs to acquire users over time who are willing to spend money on microtransactions within the game. A publisher however mainly focuses on the marketing aspect during the initial launch but not on the process of buying users over time. Hence, an important decision was taken to avoid publishing in cooperation with a third-party and focus on self-publishing.

Based on the disappointing cooperation with the publisher regarding the launch of Nitro Chimp, Luis and Camilo also questioned the usefulness of such cooperation. Tommy's opinion and advice helped to take the decision to self-publish:

> *[W]e were asking this a lot, where he [Tommy] would see the role of the publisher […] We were trying to validate our, our feelings, our experience […] how we were thinking about it after the experience with two games.* (Luis, retrospective interview)

> *[W]hat [Tommy] told us, "Don't get into this. If this is your strategy [free-to-play] cut off the publishers. Don't cooperate with publishers. You have to do this directly, self-publish."* (Camilo, retrospective interview)

Self-publishing as a consequence of the free-to-play business model can also be attributed to the development of the industry since 2012:

> *[T]he time where the publisher was very important was at the beginning of the App Store. Now, the market progressed. The small one has the same, almost the same probabilities [of success]. […] The most successful [games] these days in the App Store are self-published.* (Luis, retrospective interview)

Since the cooperation with the Koreans was ended Nitro Chimp 2 will be self-published. The shift to the new strategy however collides with the existing cooperation with RPG company. RPG company does not focus on the free-to-play model which makes a future cooperation uncertain:

> *[T]he visit of [Tommy] also made us question a lot the, the value of [RPG company] as publisher, taking into consideration our new focus, the new focus of our firm. […] A publisher that doesn't make free-to-play games probably is not prepared for the investments and the way of how to provide support for free-to-play games. […] [W]e know that certainly the, the most important factor if we make the game free-to-play will lie in our, in our hands.* (Luis, retrospective interview)

The period was marked by one major event, the visit of Tommy. The peer-to-peer communication with Tommy was an eye-opener regarding the firm's past and current activities. The three-day session provided a unique opportunity

to reflect on the firm's current focus and to identify its future course in order to create its identity in the global game market.

The above narrative provides a focused description of the learning and networking accomplished during the analyzed time period of almost 16 years from 1998 until January 2014 when I exited the firm. It also provides a description of the industry context in which the activities of the entrepreneurs are embedded and that influence the strategy pursued for game and business development. As mentioned in the introduction to this chapter, the narrative is an intermediate output of the process of theory construction. I decided to place it before the chapter of theory development in order for the reader to get familiar with the story and its context as an important background information for a more informed understanding of theory development from the empirical findings. In the next chapter I describe the process of theory development which made it possible to create the story displayed in this chapter.

5 DEVELOPING A FRAMEWORK OF LEARNING-NETWORKING INTERACTIONS

This chapter focuses on the process of theory development. The structure of the chapter follows the process of conceptual leaping, that is, how I accomplished the leap from the empirical data to the abstract theoretical ideas (Klag & Langley 2013). I first introduce the process of conceptual leaping followed by the different phases of engagement with data, deliberation of ideas, connecting the emerging ideas to literature, and the creation of the framework of learning-networking interactions. I then walk the reader through the framework using power and proof quotes for illustration purpose (Pratt 2009) and finalize the chapter with a synthesis of the findings and the framework characteristics.

5.1 Conceptual leaping: From process data to process theory

My dissertation research tries to make a contribution to a better understanding about the interplay between networking and learning during the process of entrepreneurial internationalization. On the one hand, I intend to make a contribution to extant theories in international entrepreneurship (*the theoretical contribution*) and, on the other hand, I provide a suggestion of how to conduct qualitative process research in the context of entrepreneurial internationalization (*the methodological contribution*).

The data I collected retrospectively and in real-time through a prolonged engagement in the field provide the raw material for analysis. The analysis of the data, however, is not an end in itself. It is the starting point for the creation of abstract theoretical ideas that show relevance beyond the context they were initially developed. *Realizing the leap from empirical data to abstract theoretical ideas* is a process often mysterious or opaque to the reader (Klag & Langley 2013). Therefore, my intention with this chapter is to unveil to the reader of how I accomplished the process of conceptual leaping, that is, how I moved along from the analysis of process data to the generation of process theory.

I first outline the general process of conceptual leaping that I applied before discussing each step more in-depth underpinned by examples. Thereby I hope I am able to provide enough transparency to the process of theory construction in order to be audited by the reader. Providing a detailed description of the process

therefore contributes to the objectivity and confirmability, and, hence, trustworthiness of my research (Lincoln & Guba 1985; Miles et al. 2014).

Different steps were involved in the process of theory creation. Figure 7 illustrates the step-wise but also iterative process starting with the engagement with the data, the generation of variety in the findings, over the comparison with literature, to the creation of the theory.

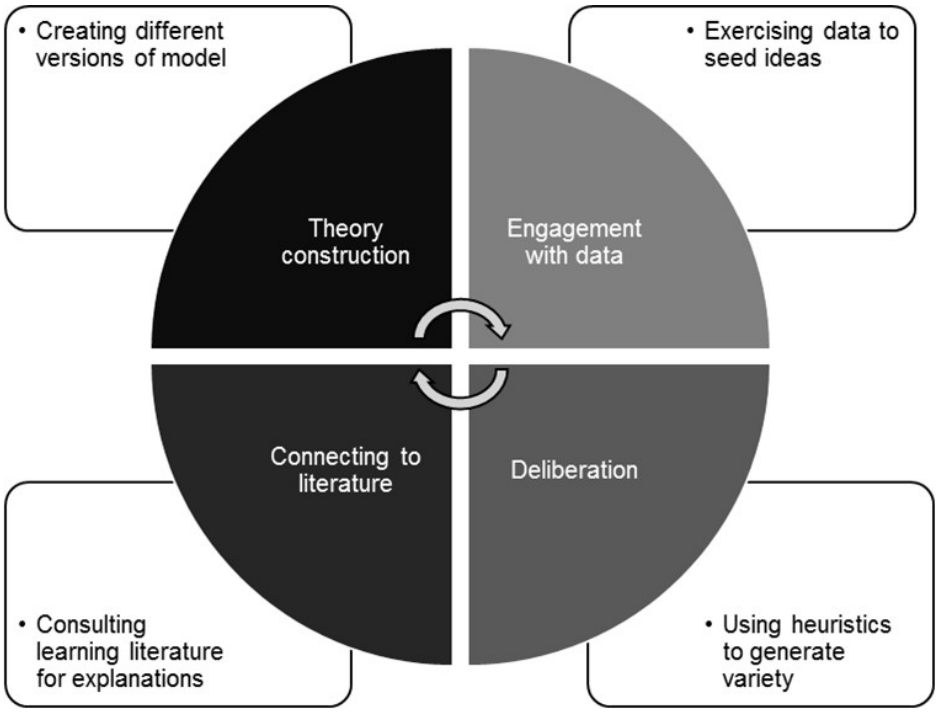

Figure 7 Process of conceptual leaping

In order to derive abstract ideas from my empirical observations I first engaged with the data in form of coding. The *coding* of the data provided insights into the what, who, how, where, when, and how often of my process data. That means, through coding I was able to identify what type of knowledge resulted from learning-networking interactions, who was the contact involved in that process, how did learning and networking happen, where and when did the interaction took place, and how often the interactions took place with whom in which context. Through the subsequent creation of *network models* I became a better feeling for the dynamics of my data since it allowed me to visualize the coded data and their relationships over time. The coded data and the network models led to the construction of the *event-listing matrix* with the *time-bracketed periods*. The event-listing matrix became the most important tool for analysis. It served as a matrix-based outline for the *narrative* and as the base from

where to explore in-depth the events and processes related to networking-learning interactions.

This initial *engagement with the data* seeded ideas regarding the predominant elements of learning-networking interactions, that is, it helped to identify key players, the type of knowledge created, and the type of learning and networking that took place within its context. At this stage I was also able to relate the codes to the time-bracketed periods which allowed me to construct graphically the learning and the networking and their interrelationships throughout the observed time period from 1998 until 2014. This gave me an initial understanding about the process character of learning and networking in each stage, their interrelationship, and how they played out over the course of the different developmental stages.

Although the initial engagement with the data, mainly through coding, revealed interesting insights into the learning and networking and their interactions, it was not until I began to analyze the data more holistically based on the event-listing matrix and the *learning-networking interaction graph* to understand patterns in the data, to detect events critical to my two focal processes, and to start connecting the elements that emerged through coding and that eventually led to the design of the conceptual framework.

In order to loosen-up thinking and to stimulate variety among the findings of my analysis I engaged in an *at-the-glance-review* (Miles et al. 2014) of the event-listing matrix and used colored stickers to highlight critical events, inflection points, and patterns I observed. At this point I was concerned that I could miss important patterns in my data because of my possibly narrow view on the data. Am I able to holistically comprehend of what is going on in my data? Am I able to fully recognize the patterns? Therefore I turned again to the literature on process research and constructed the *set of questions* that I made use of to engage more systematically with the data in the event-listing matrix. Approaching the event-listing matrix with both the at-the-glance-review and the set of questions stimulated the generation of a variety of findings.

In a next step I started *comparing my insights with learning literature* in order to sharpen my observations and to build early versions of the conceptual framework. Once I completed a version, I went back to the data in order to see if the framework fits my empirical observations. Therefore, I particularly looked again at the code dynamics in the network models, the event-listing matrix, and the results of the questions for deliberation of ideas. I contrasted the results from the analysis with the particular version of the model in order to construct and revise the connections between the elements.

For example, earlier versions of the framework did not include connections between the interaction of others and the awareness about lack of experience/knowledge (Awareness creating). I added the connection later once I

looked again of how the entrepreneur became aware about key trends in the market. This required going back to the code network-model I constructed earlier related to the code 'Current key trends' as part of the knowledge code structure [CONT-KNOW]. Similarly, an earlier version of the framework did not include a link between the interaction with others and reflecting (Informational/Sensemaking). I added the link after I revisited the network model related to the code of 'Reflecting' from the code hierarchy related to the process of learning [PR-LRN]. This process of drafting the framework, going back to the data, consulting learning literature, and refining the framework took *several iterations*.

Engaging with the data through coding, network models of codes, the event-listing matrix, the learning-networking interaction graph, all this contributed to familiarize with the data and to develop initial ideas about learning-networking interactions during the process of entrepreneurial internationalization. The subsequent application of the set of questions put an emphasis on the process character of my data and provided different perspectives on how the processes played out over time in order to identify connections between the different elements of my emerging learning-networking framework. Consulting learning literature provided additional ideas of how my inductively derived themes might connect. These insights led to the draft of an early version of my framework. The cycle of conceptual leaping was eventually repeated by going back to the data, consulting additional literature and refining the framework. Several iterations took place until I arrived at the final version of the framework.

All in all, the *conceptual leap* was achieved through various iterating steps between actively engaging with the data through coding, stepping back and trying to comprehend the data more holistically based on their visualization with the event-listing matrix, the comparison of findings with learning literature, and the draft and refinement of the conceptual framework.

Klag and Langley (2013) stress the *dialectic tensions* in the process of theorizing in qualitative research. Engagement of data also requires the *detachment* from them in order to stimulate ideas, that is, distancing oneself from the problem by for instance taking a walk, a break, or sleeping. Using heuristics to generate variety in the findings is opposed to serendipity to identify novelty in the data. I am not sure of how the detachment from the data and moments of serendipity contributed to achieving the conceptual leap. Nevertheless I would highlight the fact that daily breaks at noon for jogging exercises and yoga were quite useful in order to distance myself from the theorizing process for a moment in order to gain fresh ideas.

The authors also highlight the tension between *self-expression* of the researcher and the *social connections* that might contribute to the theorizing. It is clear to me that my personal background and view towards the phenomenon I

researched influenced the way of how I analyze and interpret the data. Therefore, my intention is to be as transparent as possible about the research procedure and to provide thick descriptions related to the empirical data in order for the reader to judge my own theorizing. I am convinced that the frequent discussions with my thesis supervisor also shaped of how I perceived and interpreted the data, so too, the discussions I had with my wife as an outsider to the topic researched.

Klag and Langley (2013) further emphasize the tension between *knowing and not knowing* about the researched topic. That is, being an expert or novice regarding the researched topic. As previously mentioned, before I entered the field I had a pre-understanding about the important role of learning and networking during the process of entrepreneurial internationalization. However, it was not until I completed data collection and initially engaged in the analysis of the data that I conducted a systematic literature review in order to compare my findings with extant literature.

The initial pre-understanding about the role of learning and networking was important in order to focus data collection but it was also important not knowing too much in order to avoid confirmation bias. Due to the inductive nature of my research it was important to me to collect and start analyzing data without detailed pre-conceptions about learning and networking interactions during entrepreneurial internationalization. Here I also tried to follow advice that others provided (especially Eriikka Paavilainen-Mäntymäki and Udo Zander) such as listening close to what the data try to tell me during data collection and analysis and avoid being biased with a too detailed pre-understanding about extant conceptualizations of learning and networking in international entrepreneurship. Being naïve about the data during collection and initial analysis I consider to be helpful in order to being open as possible to emerging findings.

Although it is difficult to judge of how my theorizing would have looked like without moments of detachment, serendipity, and not knowing, I feel that they contributed to what my conceptual framework finally looks like.

5.2 Engagement with data

The coding of the data delivered interesting insights into the what, who, how, where, when, and how often of my process data. I learned for instance that the entrepreneurs mainly engaged with industry experts who were consultants or friends involved in the video game industry (89 codings assigned to the code ‘industry expert’), followed by the interaction with business support organizations (84 codings), and publishers (74 codings). A coding was assigned to a particular code in case the entrepreneur referred to that particular type of contact

in the log, or during the follow-up emails or interviews. Although this type of analysis quantifies the data, they should not be interpreted as such. It can be misleading to assume the more codings assigned the more important the contact. For instance, the interaction with the entrepreneurs' friend Tommy only counted 5 codings despite its importance for the development of the firm. Few codings appear because during the interaction with Tommy I did not apply anymore the weekly solicited logs and relied solely on follow-up interviews. The event with Tommy also happened at the end of my data collection period. Most probably if I would have continued to collect data, the contact Tommy would have come up more often during conversations. Therefore, the frequency of codings always needs to be interpreted with caution and to be complemented with the event-listing matrix who made it possible to detect events and contacts critical for the learning-networking interactions. Nevertheless, the coding provided an initial understanding about what possibly are important contacts, simply because the entrepreneurs repeated mentioning them.

Industry events provided the context where most interactions with others took place. The code 'industry event' registered 113 codings. The events that were most frequently mentioned by the entrepreneurs were Casual Connect (USA), Game Connection (USA), Game Developers Conference (USA), Colombia 3.0 (Colombia), Unite (USA).

The knowledge the entrepreneurs gained I consolidated under three mayor codes. They relate to product development (64 codings), marketing (59 codings), and business development and cooperation strategies (50 codings). There was also knowledge related to legal aspects of the business and financing but they were hardly mentioned by the entrepreneurs with 2 codings and 3 codings, respectively.

The interview and log data I coded received 92 codes regarding time and 143 codings. In some cases more than one coding was assigned to a particular time code. This means that the same date was assigned more than once to the same or different events. This used to happen when the entrepreneur responded twice to the same event. For example, Camilo sent log information via email the 24th of October 2011. The same day I replied with a follow-up question and received answer the same day. In such situation the time code '24/10/2011' was registered twice. In another situation the entrepreneurs related to the same event in different interviews or different events used to happen during the same time. In these situations more than one coding appeared for the same time code.

The code 'time' is related to a particular date (for instance, 1 August 2011) in the case of the logs or to a particular month and year (e.g., February 2013) or year only (e.g., 1998) in the case of interviews. Log data were usually more precise regarding the date as they were sent as an email that registered the date the information was received. However, the event the entrepreneur referred to

in his log usually dates back a week due to the nature of the log where I asked to review the happenings of last week. In case the entrepreneur did not respond on time the weekly log, I sent out a reminder. In this case, the events can also date back two or more weeks prior to the date registered as a code. Interviews reviewed the happenings over several months. Therefore I only registered the month the entrepreneur indicated the event to happen and not the precise date as it was often difficult for the entrepreneur to recall the exact date. In case of the retrospective interview which covered a time period of 14 years (1998 – June 2011) the entrepreneur often referred to a particular year when an event happened due to the difficulty to remember more precise dates. However, important for analysis was the chronological sequence of the unfolding of events and not the precise date. At a later stage of analysis when I constructed the event-listing matrix I only referred to the month and year which showed to be sufficiently detailed in order to derive meaningful conclusions.

How did activities of learning and networking look like? These activities I captured with codes related to the process of learning and the process of networking. For instance, the interaction with international game experts was the networking activity most frequently mentioned by the entrepreneurs (55 codings assigned to the code 'Interacting with international game experts'). This mainly includes conversations in order to solicit feedback and advice.

The participation in industry events was the second most frequent networking activity with 34 codings. The process code 'Participating in industry events' differs from the code 'Industry event'. While participating in events refers to the activity as such, the code 'Industry event' relates to the general context of where the activity took place. The code 'Industry event' registered 113 codings compared to 34 codings for participating in the event. There are less codings for the activity as such as I only related to that code the activities I was able to observe in real-time. For example, establishing new contacts and meeting with someone at an industry event I related to the code of participating. Most codings related to the activity of participation I subtracted from the logs since they expressed the unfolding of events as they occurred in real-time. At a later point in time, when the entrepreneurs related to particular industry events I mainly made use of the code 'Industry event' and not the activity of participation as such.

Interacting with the publisher was the third most networking activity mentioned by the entrepreneurs (28 codings). These included all interactions I was able to observe as they unfolded in real-time. These included activities like conversations via Skype with the publisher, waiting for feedback, the preparation of online meetings, discussions, receiving feedback from the publisher.

Being contacted by someone constitutes another networking activity often referred to by the entrepreneurs (26 codings). This includes receiving invitations to participate in industry events, receiving business offers from potential clients,

receiving invitations as a speaker. Another networking activity that was often referred to during the logs and interviews relates to the activity of making new contacts (20 codings). The code 'Making new contacts' mainly relates to activities such as getting to know someone or meeting with someone for the first time. This mainly happened in the context of industry events as the intersection with other codes revealed. The active search for feedback and advise was another networking activity frequently brought forward during interviews and within the logs (13 codings) as well as the engagement with potential publishers (13 codings). Engaging with potential publishers included activities such as approaching and engaging in conversations with them in the context of industry events, approaching them deliberately via email and engaging in conversations via Skype, or meeting with them in pre-organized buyer-seller meetings at trade fairs.

Receiving feedback and advice was the learning activity most frequently referred to by the entrepreneurs (52 codings). This happened from various sources but was mainly limited to interactions with industry experts who acted as consultants, friends, and the publishers.

Reflecting about past experiences was another learning activity frequently mentioned by the entrepreneurs (49 codings). This includes moments of self-reflection and reflections jointly undertaken with others. For example, the entrepreneurs reflected about their experience with the cooperation with the consultants Alex and Jon together with Luis's friend Tommy who is an experienced industry insider. This generated doubts about the usefulness of the cooperation with consultants. The accumulated experience with the development and launch of two prior games led to rethink the cooperation strategy with the publisher for the third game. The process to rethink the new cooperation strategy was jointly accomplished with the consultants Alex and Jon. Comparing the firm's current strategy with new trends in game and business development at the Game Developers Conference in the U.S. led to rethink the firm's strategic plan among the entrepreneurs. The ad-hoc interaction with experts at industry events and the interaction with friends also stimulated the generation of new insights into game design and development, game marketing strategies, cooperation strategies, and business development.

Learning-by-doing that I captured through the code of 'Doing' constituted the learning activity mentioned in the third place with a frequency of 36 codings. Learning-by-doing was related, among others, to activities like applying the development motor Unity to projects with clients in order to get familiar with the technology, playing their own game in order to detect features for improvement, directly applying the advice received from the publisher, going through the experience of launching a game into the market, and analyzing game analytics and user behavior as a more self-directed learning activity.

The accumulation of experience constituted another learning activity (18 codings). This mainly related to the experience of the development and launch of prior games as a combination of learning-by-doing, working alongside the publisher, and the feedback and advice received through interacting with industry experts. Observing what others were doing also contributed to the learning of the entrepreneurs. The code 'Observing' registered 14 codings that for instance relate to observing the launch of the games on behalf of the publishers and observing how others acted during pitches and buyer-seller meetings.

Working alongside the publishers, hiring new personal, and interacting with friends and consultants meant to learn from their experience. 13 activities were related to the code 'Learning from experience of others'.

Reading and listening to an event speaker were other learning activities conducted by the entrepreneurs (12 codings each). This included reading reviews about C2 Game Studio's games in the Internet, books, online articles and tutorials, general industry news in the Internet, and documents provided by the publishers. In the case of listening to an event speaker this implied the participation in speeches, workshops, and seminars offered at industry events.

Discussing (11 codings) was another learning activity often referred to by the entrepreneurs. Discussing involved a more prolonged interaction with the publisher, friend, or consultant in order to thoroughly talk things through. Discussing is often related to reflection, gaining new insights, and receiving feedback and advice.

Comparing of how other game studios work and comparing the user behavior of own games with the games of others related to the code 'Comparing with others' (10 codings).

The coding of the data delivered first ideas regarding the characteristics of the learning and networking of my two focal entrepreneurs. It helped to answer the following questions: Who are the actors involved in the learning and networking? Where does learning and networking takes place? What is learned? How is learning accomplished? How is networking accomplished? When do activities of networking and learning happen? Annex 7 illustrates parts of the results of data analysis through coding. The results presented mainly relate to the second-order codes or themes detected through the coding exercise according to the frequency they were mentioned by the entrepreneurs within the logs and the interviews. Annex 13 provides a more detailed listing of the code category, the code, and number of codings.

Coding the data was useful in order to identify recurrent activities of networking and learning, with whom and where, and the context. The coding also helped to create an index for the data collected which was useful for subsequent stages of data analysis in order to easily access and browse through the data. However, the coding was also useful in order to identify the interaction between

my two focal processes of learning and networking which is central to my research inquiry.

For instance, the *intersections function* of MAXQDA allows to identify overlaps between the coded segments. For instance the networking activity [PR-NET] of 'Interacting with international game experts' shows overlaps, among others, with the following codes:

- PR-LRN: Reflecting, Rethinking, Learning about how to learn better
- PR-NET: Receiving visit
- CONT-KNOW: Cooperation strategies, Gaining new insights
- CONT-NET: Tommy, Jon, Alex

Establishing the overlap between these codes showed that the interaction with international game experts like Tommy, Jon, and Alex triggered moments of reflection in order to rethink especially cooperation strategies with other partners and to gain new insights. This happened during visits of these experts to C2 Game Studio's office. The visits as such also constituted moments of higher-order learning where the entrepreneurs reflected about their own learning strategies. Annex 8 provides additional examples of overlapping codes and their interpretation of the relationships.

The coding and the intersection of codes provided some initial ideas of the different relationships between the coded elements of context, process, and content. However, the analysis up to this point did not allow to understand the dynamics of the code relationships over time. Therefore, I made use of the *code visualization function* of MAXQDA. The MAXMaps function of the software allows to graphically visualize the codes, their subcodes, and overlapping codes. I therefore began to visually analyze further the elements that caught my attention through coding such as, among others, the individual contacts of network of consultants, friends, and partners, industry events where many of the networking took place, knowledge as related to current key trends[14], and reflecting as a process of learning.

Figure 8 provides an example of the visual representation of code interrelationships of the code 'Interacting with Alex'. Alex as an industry expert and consulting seemed to be central to the networking and learning of the entrepreneurs. As the coding revealed, he was frequently mentioned within the logs and follow-up interviews. Therefore it was important to me to obtain a holistic understanding of how the relationship with Alex developed over time. The code 'Interacting with Alex' is central to Figure 8. Around that code I arranged the subcodes of 'Interacting with Alex' (the thick arrows). The sub-codes are then

[14] The code 'Current key trends' I visually analyzed once I began to draft the first versions of my framework as part of the iterative process of theory construction.

related to overlapping codes regarding time, other processes, and knowledge and networking outcomes. For instance, on the 13th of August 2012 Camilo reported that he responded to a meeting invitation by Effecto Studios at the industry event Casual Connect in the U.S. and got to know the "game design eminence" Alex. The following 16th of October Camilo reported that he tries to get an appointment with Alex for the industry event Colombia 3.0 that happened in Bogota. At Colombia 3.0 Camilo engages in conversations with Alex and receives feedback for the games Nitro Chimp and Cowboy Guns. He learns about how to create a creative vision for game design which contributes to knowledge about game design and development. Camilo communicated this event to me the 30th of October. The 5th of December Camilo reported his participation in a workshop by Alex in Medellin. The same week he also invited him to C2 Game Studio's office where he receives feedback on the games which he considered a harsh critique but nevertheless a very interesting week. The learning from that visits related to game design and development. The 17th of December Camilo reports another meeting with Alex where he learned about game design and market validation. The follow-up interview on the 23rd of January 2013 also reveals that Camilo and Luis are interested in creating a more permanent relationship with Alex and that they took full advantage of Alex's presence while in Medellin. Alex visit to Medellin was made possible by RutaN.

This particular network model revealed that the interaction with the industry expert and consultant Alex was characterized by different relationship manifestations over time. It started as a networking activity at an international industry event, the deepening engagement with Alex at a national industry event, the creation of the relationships by inviting Alex to the firm's office, and by meeting regularly, mostly online via Skype. It is a process of relationship building that comes along with the reception of feedback and critique and leads to knowledge related to game design and development.

The network models made it possible to gain a more holistic understanding about code interrelationships, also related to the temporal development. Having detected major themes within my data through coding and being able of identifying temporal event sequences through the network models, I began to draft the event-listing matrix. Visualizing all important event sequences and understanding their interrelationships to other events in a holistic manner became the goal. Therefore I started constructing the event-listing matrix within an Excel sheet as outlined in Chapter 3.7 on data analysis.

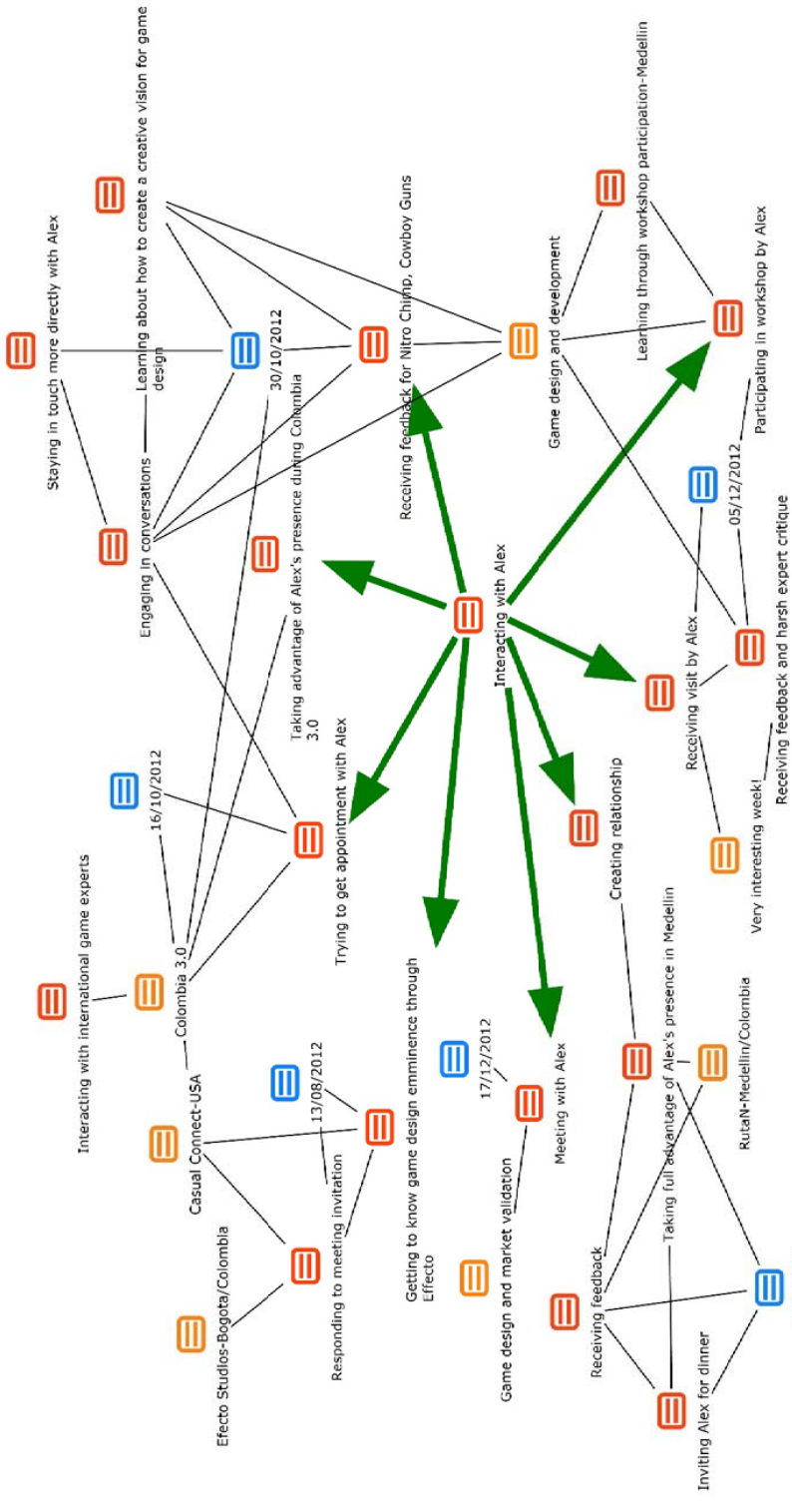

Figure 8 Example of network model of codes

The event-listing matrix grew organically as I shifted through codings, network models, and the original log and interview transcripts. I arranged the matrix vertically according to the item at different levels of analysis following a macro-level to micro-level approach. Altogether, I analyzed events according to 22 items. Trends and events at the industry and sectorial level and interactions with business support organizations and industry associations I associated with the macro level. Interactions with particular individuals such as consultants, friends, and the contacts within the publishers I rather associated with the micro-level, as well as the different manifestations of firm activities like the products and the strategic plan. Annex 9 provides an overview about the subjects and objects registered vertically in the first column of the event-listing matrix.

The events associated with each item I entered into the matrix according to the months/year or year when they occurred. The Excel file grew into a map with 22 rows and 65 columns. Altogether I registered 103 incidents within the matrix at this point of analysis. Annex 10 provides examples of event sequences as they relate to some of the 22 items.

After I entered the events associated chronologically with each of the 22 items, I looked at how proximate events are thematically related and when they started and ended. Again, this resembles of what Langley (1999) refer to as a temporal bracketing strategy for the sensemaking of process data. Altogether I identified 14 periods. These periods partly overlap. Annex 11 lists the time-bracketed periods, the title that characterizes each period, and the events that demark the beginning and end of the period.

It is always a particular event associated with the start of the period. But it is not always a particular event that demark the end of a period. The end of some periods is rather marked by the beginning of the subsequent period than associated to a particular event ending the period. For example, the period of 'Becoming a video game producer' starts with C2 Game Studio's participation in biddings for the development of video games for international clients. The period ends with the beginning of the subsequent period when C2 Game Studio contacts the Publisher for the first time. This event does not only end the period, it is also the beginning of the period associated with the creation of competencies for the development and sales of globally competitive mobile video games in cooperation with the alliance partner.

The beginning and end of other periods are clearly associated to particular events. For instance, the period 'Setting up the business' begins with Luis's decision to start a video game company and it ends once the firm is officially registered in the local chamber of commerce. The period characterized by tying international game experts to product and business development starts with meeting the industry experts and consultants Alex and Jon at Colombia 3.0 and it ends with the celebration of the contract between C2 Game Studio and Jon.

The time-bracketed periods I further grouped into different phases according to the development stage of the firm as an international video game development venture. Figure 9 shows the phases as they relate to the different time-bracketed periods. The phases I derived analytically based on the activities of each period and their meaning for business development including the internationalization of C2 Game Studio.

The *pre-foundation phase* is mainly characterized by activities performed prior to the decision by Luis of establishing a company. Therefore the phase is mainly associated with the period of gaining professional competencies and international work experience. The *foundation phase* mainly relates to the activities that prepares the firm for becoming a video game developer. This includes the activities of setting up the business, to gain experience locally with the video game development software Unity, and the firm's engagement in the local ecosystem of the creative industry. The *pre-internationalization phase* includes the activities of becoming a video game developer including the decision to start working on the first video game, the decision to shift towards mobile video games, and contacting the Publisher for the sales of the first game Cowboy Guns through the AppStore. Becoming an importer and re-seller of Unity and Design3's educational offers also characterizes this phase. The subsequent alliance with the Publisher in order to prepare and sell the game through the AppStore corresponds to the *phase of early internationalization*. This phase represents the first entry into the global market of mobile video games. The following periods represent the post-entry internationalization which I label *later internationalization*.

The event-listing matrix, including the time-bracketed periods, now served as a detailed outline for the write-up of the narrative which I included in its final version in Chapter 4. The first version of the narrative I sent to Camilo and Luis in order for them to read and to talk through in an interview. I used the information obtained in the interview to add some more details to the final version of the narrative which was also checked for accuracy by the two entrepreneurs.

Based on the recommendations of the entrepreneurs I disguised the name of the publishers, the real name of friends, and the name of one industry expert. The review of the narrative by the entrepreneurs provided additional information regarding the entrepreneurs' decision to adopt Unity as the development motor for their games, the entrepreneurs' motivation to participate in their first projects with international clients, and the reasons behind the decision to hire an external advisor for C2 Game Studio.

Important intermediate outputs of this first step of conceptual leaping were the event-listing matrix, the narrative of firm development, and a graph that illustrates the learning-networking interactions over time. It was important for me to understand how the two focal processes of learning and networking play-out

within and across the different periods and phases. The code relations browser of MAXQDA allowed to relate the codes of learning and networking to the time of their happening and, hence, to the different periods and phases. I filtered the codes of learning and networking as they related to each period and annotated my observations.

The graph that is shown in Figure 9 depicts these interactions as they unfold during the different time-bracketed periods and phases. The upper part of the figure displays the different time-bracketed periods as they relate to the developmental progression with regard to learning and networking of the entrepreneurs. I do not relate within the figure to periods such as becoming part of the local ecosystem, building a local support infrastructure, and creating a local ecosystem for video game entrepreneurship. These periods I attribute a support function, mainly for networking, but they do not directly express the developmental progression of learning and networking of the entrepreneurs. The lower part refers to the relationship between networking and learning during each period regarding its interaction and intensity. For instance, during the period of setting up the business, learning and networking are separated, while both processes start to interact during the period of becoming a video game producer. The intensity of learning and networking also varies among the periods. For instance, during the period of becoming a video game producer the intensity of networking is higher than learning as expressed by the variety of networking and learning activities during this period (measured through the variation of codes in Annex 14). During the period of engaging with the global community, the variety of networking activities is superior to activities of learning.

In the following I explain my observations based on the code relationships during each period. Annex 14 provides the detailed listing of the codes as they relate to each period.

During *pre-foundation* the focal processes are separated. Gaining professional competencies through studying and working dominate the learning activities of the future entrepreneurs. Important friendships are made between the entrepreneurs and to other people which lay the seeds for the future venture to be created. Learning dominates the phase with limited networking activities related to the future venture. During the *foundation phase*, the focal processes remain separated. Important knowledge is acquired regarding the business development of the new venture and product development. The search for potential clients and the involvement in local business networks mainly dominate the early networking activities. Learning-by-doing in order to gain experience with the development technology Unity dominates the learning activities. Therefore, learning is more pronounced during the period of gaining experience locally with development technology and activities of networking dominate during the

startup period of the venture. The participation in industry events is passive by rather listening to event speakers during the foundation phase.

At *pre-internationalization* the two focal processes start to interact for the first time. The coding indicates a surge in learning activities. Therefore, learning dominates over activities of networking. The entrepreneurs start getting involved in the global network of the video game industry through ad-hoc networking at industry events and by approaching potential clients and the Publisher. The activity of rethinking indicates first moments of reflection by observations made at industry events and in interactions with ad-hoc contacts. The participation in industry events is still passive but learning occurs by observing the behavior of others.

Learning still dominates during *early internationalization*. The level of networking activities decreases since C2 Game Studio is more focused on working with one particular partner, the Publisher. The entrepreneurs actively learn from the experience of the Publisher by following its advice and by observing its actions. Learning basically occurs alongside the one partner in a contractual relationship. The accumulated experience with video game development so far and the cooperation with the Publisher triggers moments of self-reflection and leads to the creation of knowledge in a variety of areas such as business development and cooperation strategies, marketing, and product development.

The first period of the *post-entry phase* is characterized by a surge in networking activities. The entrepreneurs actively engage with the global community of the mobile video game industry and do not try to limit learning from just one partner but from many different contacts. The interaction with others is not only limited to obtain knowledge and experience but also searched for to aid decision-making and to provide emotional support. It is the quest for a mentor-style relationship that characterizes this period.

The subsequent period of tying international game experts to product and business development reverses the learning and networking of the previous period. Now learning becomes the dominant activity based on the relationships built during the previous period. The focus is less on making new relationships but on consolidating existing ones. Learning that stimulates reflection and thinking becomes essential during this period. This includes receiving constructive feedback in form of critique towards the firm's product and business processes.

The activities of learning and networking become synchronized in the following two periods. That means, that activities of networking and learning interact in a balance. The cooperation with other publishers reinforces learning from their experience and through observing their behavior. Equally, the eye-opening encounter with Tommy keeps learning and networking synchronized

to that particular instance. The interaction with Tommy constitute an ideal situation for the entrepreneurs. They not only receive feedback and advice that aid decision-making but also get emotional support and stimulation for reflection.

Overall, while the processes of learning and networking stay separated during pre-foundation and foundation, they start to interact during pre-internationalization, and finally harmonize at the later stage of the post-entry phase. The first international market entry is characterized by learning from mainly one particular partner, while the subsequent post-entry periods are largely concerned with relationship building first and subsequent harvesting the learning from these relationships before the two processes synchronize.

The first engagement with the data, mainly in form of coding, provided interesting insights into the characteristics of learning and networking of the two entrepreneurs and aspects of interactions of the two focal processes over time. However, in order to understand sequences of events, their origin and direction, and how events at different levels interact, I needed a more holistic view at the data. Therefore, I engaged in an at-the-glance-review of the event-listing matrix which I describe in the following section.

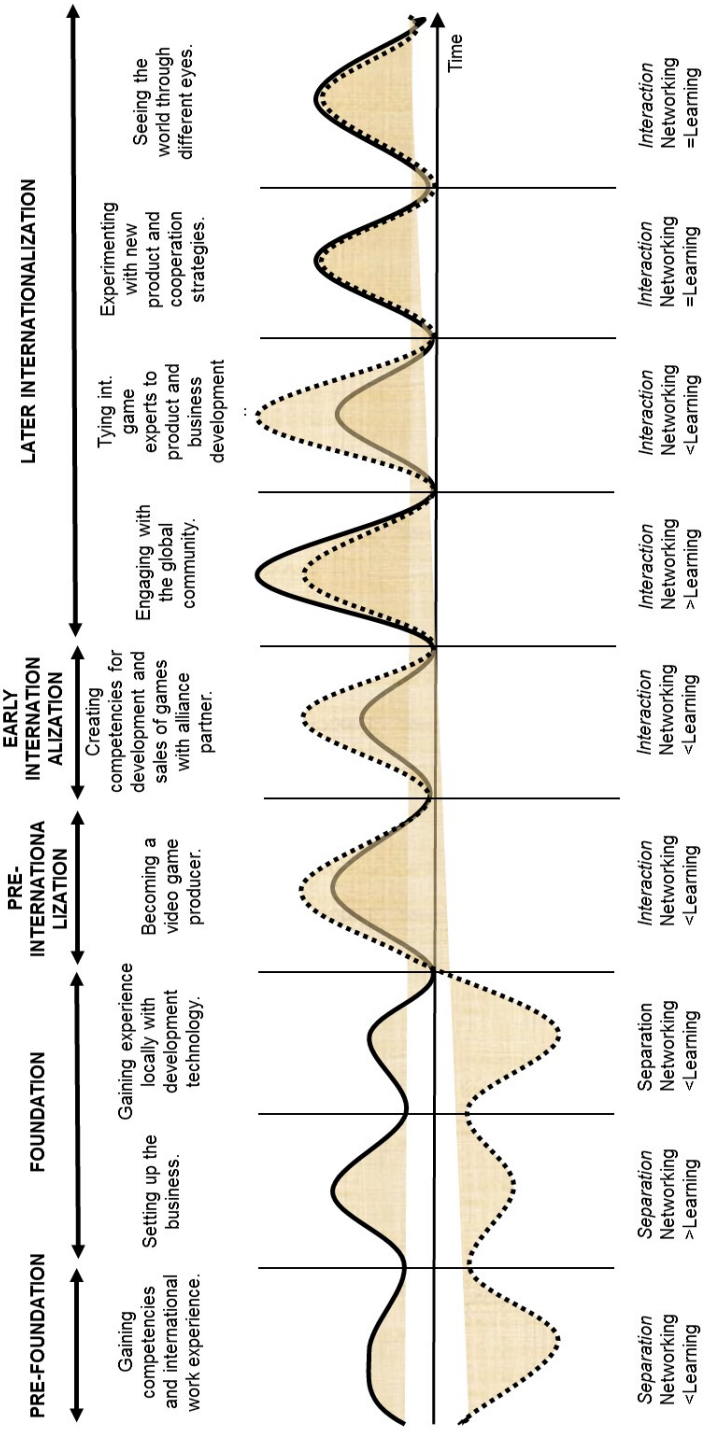

Figure 9 Learning and networking interactions over time

5.3 Deliberation

Looking more holistically at the unfolding of events as they appeared in the event-listing matrix was important in order to identify the sequence of events, their origin, their direction, and how they interrelate across different levels. It was important to me to capture as fully as possible the unfolding of different event sequences, to understand patterns in the data, and to detect events critical to the two focal processes of learning and networking. As outlined in Chapter 3.7 on data analysis I created a set of questions derived from the literature on process research that I used for conducting the at-the-glance review of the event-listing matrix in a systematic manner. Annex 6 provides an overview of the questions and how they relate to the pattern recognition heuristics from the process literature. For an easier comprehension of the findings and navigation through the subsequent pages, Table 6 provides an overview of the different questions and the main findings related to each question which I explain in more detail in the following.

The first question asks *how can time-bracketed phases be distinguished related to the focal processes.* As the graph on the learning-networking interactions reveals, there is a dynamic interplay between the two focal processes along the unfolding of the different developmental phases. The interplay is characterized by a complete separation of the two processes during the first three phases, the varying interactions starting at pre-internationalization with the dominance of mainly learning over networking, and the final synchronized interaction between both processes. Once the firm enters its pre-internationalization phase learning and networking become inseparately although at varying degrees. This interrelationship shows that learning and networking go in hand with each other once the firm takes action to enter the global industry of video games. It also reveals that activities of learning dominate over activities of networking even beyond first international market entry. This indicates that learning drives activities of networking.

What shifts can be observed during transition from one phase to the other? The transitions between the developmental phases come along with changes to the strategic plan of the firm. These changes indicate a shift in thinking of the entrepreneurs, the envisioning of new goals based on accomplished experiences that makes the entrepreneurs more confident to pursue different goals, or satisfaction or unsatisfaction with the current situation.

Table 6 Set of questions for the at-the-glance-review

Question	Finding
How can time-bracketed phases be distinguished related to the focal processes?	Dynamic interplay between learning and networking along the unfolding of different development periods mainly driven by learning.
What shifts can be observed during transition from one phase to the other?	The transition between the development periods are manifested in changes to the firm's strategic plan.
What contextual conditions are at play? How do they shape focal processes?	Trends in the industry emerge excessively fast which requires the entrepreneurs to learn quickly and to make sense of the fast changes linked to their firm. Interacting with others seems to accelerate the learning of the entrepreneurs.
What increases or emerges through time?	• Knowledge on cooperation strategies and marketing. • Learning from feedback and advice of others. • Reflections on past experiences with individual others (as opposed to doing it alone). • Diversity of network. • Re-activation of professional friendships from pre-founding period. • Seeking strong relationships with individuals as mentors. • Tension between founders on the most suitable business model.
What decreases or ceases through time?	• Some relationships cease. • Overreliance on advice of others.
What remains constant or consistent through time?	• Changes in the technological environment. • Desire to stay ahead of latest technological developments. • Participation in international/national industry events. • Search for the most suitable business model. • Changes to the strategic plan. • Working on products. • Moments of reflection.
What is cumulative through time?	• Experience • Knowledge • Learning ability (incl. critical reflection ability) • Networking ability • Number of network contacts.
What is idiosyncratic through time?	Questioning of what seem to be successful ongoing relationships.
What is missing through time?	Strong, trustful, longterm-oriented relationships.

Question	Finding
What type of progressions are at play within and across phases?	• Multiple parallel progressions. • Conjunctive multiple parallel progressions. • Convergent and divergent progressions.
What is the throughline of my study?	• Learning drives networking and not vice-versa. • Networking enhances learning.

Another aspect I inquired related to the question *what contextual conditions are at play. How do they shape focal processes?* During the founding period of C2 Game Studio, the distribution format of video games was challenging, since it required the physical distribution of video games through brick-and-mortar retail structures. This changed during the pre-internationalization period when it became possible to distribute video games through Internet platforms like Steam. During that period mobile video games emerged and popular digital distribution formats like the App Store. Distributing through the App Store, however, required the cooperation with a publisher. Hence, these changes in the technological environment of the industry triggered networking activities with a publisher which also led to learning alongside the partner. Particularly at the beginning of late internationalization (the period of engaging with the global community) the entrepreneurs felt that trends in the industry emerge excessively fast which required them to catch-up and learn quickly and also to make sense of what is going on and how to deal with these fast changes internally. At this point different types of knowledge and learning were sought in cooperation with different contacts: Ad-hoc contacts at mainly industry events created awareness about industry trends; consultants like Alex and Jon provided information regarding product development and marketing and business development and cooperation strategies, respectively; and friend Mike helped to make sense out of all the experiences lived. These observations let me suggest that the development of C2 Game Studio is embedded in the context of a fast-moving industry in terms of its growth and technological changes. This requires the entrepreneurs to follow suit their competitors. However, catching-up fast with the latest trends and making use of them does not seem to be possible for the entrepreneurs by themselves. Therefore, learning gets intertwined with networking in order to accelerate learning.

What increases or emerges through time? Once C2 Game Studio enters the global market of mobile video games in cooperation with the Publisher during early internationalization, knowledge on cooperation strategies and marketing becomes increasingly important to acquire. Before, knowledge on product and business development dominates the learning of the entrepreneurs but remain relevant during all other periods. This insight reveals the changing knowledge

needs over the developmental periods. Until pre-internationalization the learning strategy focused on learning-by-doing with limited interaction with others, while learning from feedback and advice of others became increasingly important from early internationalization onwards. This shows the varying nature of learning along the internationalization of the firm and the increasing inclusion of others in that process of learning. Especially reflecting about past experiences becomes an activity increasingly accomplished with others, mainly ad-hoc contacts and friends. The diversity of learning comes along with an increasing diversity in the network composition. While learning during early internationalization was mainly accomplished alongside the Publisher, industry experts in form of consultants, ad-hoc contacts, and friends are steadily included in the process of learning of the entrepreneurs. Professional friendships that date back to the pre-founding period are increasingly re-activated during later internationalization as the learning strategies diversify. The re-activation of friendships happens as the entrepreneurs seek strong relationships in form of mentors. That means, going away from relationships with partners like the Publisher and interacting with particular individuals in order to learn from their experience, tap into their networks, and get them involved into decision making. All in all, learning becomes more diversified over the development periods whereby the network does not only participate in the creation of specific types of knowledge but increasingly engages in the process of sensemaking, particularly through friends and ad-hoc contacts. This indicates the differing role of the network in the process of learning.

The accumulating experiences under the influence of changing trends in the industry lead to different strategic options for the firm manifested in changes to the strategic plan. This also created different opinions among the entrepreneurs about the most suitable business model to follow. A tension emerged between the entrepreneurs about the business model which was only resolved with the visit of Tommy at the end of the observed development periods.

The same as I could observe activities that increase or emerge over time, I was able to detect activities that decrease or cease along the periods of development. *What decreases or ceases through time?* Some relationships (e.g., the Publisher, Diego A., Luis G., Alex M.) cease but trigger the increase of other networking and learning activities. The eroding relationship with the Publisher for instance triggers an increase in networking activities at mainly subsequent industry events in order to substitute and enhance the learning so far with the Publisher. The break-up with Luis G. leads to the relationship with the consultant Jon K. The eroding of both relationships with the Publisher and Luis G. can be considered key-events since they triggered a subsequent diversification of learning and networking.

The same as a decrease in activities triggers an increase in others, an increase in some activities triggers a decrease in others. For example, the increase in experience and knowledge of the entrepreneurs leads to becoming more selective with whom to interact in order to create new knowledge. This insight on behalf of the entrepreneurs for instance led to the break-up of the relationship with the Publisher. Despite the fact that the entrepreneurs increasingly interacted with others in order to rely on the feedback and advice, I could also observe a decrease on the reliance on the advice of others with the entrepreneurs increasing their experience and ability to critical reflect on past experiences. This led to the insight on behalf of the entrepreneurs to also listen more to themselves. This indicates that the increasing learning of the entrepreneurs accompanied by an increase in the ability to reflect critically directs other activities of learning and networking being it the ending of relationship and the beginning of others or a change in the learning strategy itself towards more self-accomplished learning-by-doing. An increasing ability of critical reflection might have also caused a more synchronized way between learning and networking at later internationalization because the entrepreneurs become more selective with whom to interact and are more confident about their knowledge needs and from whom that knowledge can be gained.

Despite the changing nature of learning and networking over the development periods there are also elements that seem to remain unchanged over time. *What remains constant or consistent through time?* Certainly, changes in the technological environment are constant. These constant changes come along with the desire on behalf of the entrepreneurs to continuously stay ahead of the latest technological trends of the industry. This resembles a view where the entrepreneurs constantly try to synchronize changes in the industry environment with the firm's internal development.

The periodic participation in industry events at both the national and international level serves as an important platform for creating awareness about industry trends. This pattern stays consistent over the observed period and is underpinned by changes in the learning and networking of the entrepreneurs.

Similar to the constant changes in the environment are changes in the strategic plan of C2 Game Studio. However, changes in the strategic plan are both influenced by changing trends in the environment and accumulated experience and knowledge. In this sense, constant moments of reflection where the entrepreneurs try to make sense of recent and past happenings in order to project the future happen prior to changes in the strategic plan. The strategic orientation of the firm also determines the type or genre of video game it develops. Working on video games is another activity that remains constant over time.

What is cumulative through time? Factors that most express the developmental progressions over time are the accumulated experiences and knowledge of

the entrepreneurs that come along with an improvement in the entrepreneurs abilities to learn, critically reflect, and network.

Becoming more knowledgeable about how to learn and to critically reflect about past learning determines the entrepreneurs' ability to learn. This ability comes along with the entrepreneurs being more critical with regard to whom to network with in order to achieve the desired learning results. Becoming more skillful in relationship-building with other individuals determines the entrepreneurs' networking ability which is also cumulative over time. The number of network contacts is equally cumulative but distinct from the number of ongoing relationships due to the existence of inactive relationships.

Cumulative learning and networking abilities lead to a different qualitative character of events over time. The participation in industry events for example has a different character depending on the current learning and networking abilities of the entrepreneur. Earlier event participations by Camilo were characterized by a passive attitude with regard to networking. He rather acted as a bystander due to lack of networking abilities. This changed during his participation at Game Connection in March 2012 and the subsequent Casual Connect in July 2012 (corresponds to the phase of engaging with the global community of mobile video game development) where he actively engaged in ad-hoc networking activities. Similar, interactions with consultants or friends have different meanings depending on the current learning ability. For instance, the initial interactions with the consultant Alex M. led to an instant, unreflected adoption of his advice while later consultant advice was critically reflected upon before putting in action.

Saldaña (2003) recommends to look for patterns in the data that seem to be inconsistent, multidirectional, and unpredictable which relates to idiosyncrasies within the data. *What is idiosyncratic through time?* During data collection I was surprised by the fact of how the entrepreneurs started to question ongoing relationships which in the first place were appreciated as very useful. These concerned for instance the relationship with the Publisher and the consultants Alex M. and Jon K. For the moment, the questioning of these relationships seemed to be unpredictable and inconsistent of what the entrepreneurs earlier wanted to achieve through them. However, taking into consideration the complete observed development periods these idiosyncrasies seemed to be part of the above mentioned pattern of retrospective sensemaking. Therefore, they might look as idiosyncratic behaviors at a certain point in time but actually form part of a larger pattern of periodic sensemaking activities of the entrepreneurs.

What is missing through time? Interestingly, there was no single relationship continuously present in an active manner that coincided with the total length of the observed development period. Only the relationship with friend Tommy who began at pre-foundation and got re-activated during the last observed phase

of seeing the world through different eyes spans the total time period. But also here, the relationship was activated during pre-foundation, turned into a dormant contact in the meantime, and got re-activated years later in an active manner in that the entrepreneurs invited their friend to their company. Therefore, a strong, trustful, longterm-oriented relationship was missing. It rather seems that the network is purposefully managed in order to achieve the desired learning of the moment. Relationships are formed based on the anticipated learning and ended if they do not fulfil the expectations.

Besides the linear progression of event sequences, Van de Ven (1992) suggests to be sensitive about other types of progressions. I therefore looked at multiple parallel progressions, conjunctive progressions, and the divergence and convergence of progressions in my data. Van de Ven (1992) also emphasizes cumulative and recurrent progressions but they rather reflect the already above mentioned questions on what is cumulative and what remains constant or consistent over time.

So, *what type of progressions are at play within and across phases?* The general development periods follow a *linear sequence of phases*. This is due to the fact that they are cumulative in their character and represent ongoing learning based on accumulating experience and the creation of knowledge. There exists a clear difference of what was known before, during, and after the entrepreneurs went through each period.

Embedded within that general stream of learning are *multiple elements that progress in parallel*. They relate to the above mentioned activities that remain constant over time and form a pattern such as the periodic participation in industry events, the continuous search for the most suitable business model reflected in the ongoing changes to the firm's strategic plan, the moments of retrospective sensemaking, and the continuous development of new games. These activities are continuously ongoing and in parallel but they also influence each other, that is, they are *conjunctive* by nature. For instance, ongoing changes in the industry effect the strategic options of the firm. The new strategic options become subject to reflection and might impact the type or genre of video game developed at the end.

The general processes of learning and networking also started out as two parallel progressions and *converged* or started to interact at pre-internationalization. During early internationalization these two processes mainly collided at one single partner – the Publisher. Once the relationship with the publisher began to erode, learning and networking began to *diverge* with networking first becoming more diverse (Engaging with the global community) before a variety of learning could be gained from these newly created contacts (Tying interna-

tional game experts to product and business development). Later the two processes of learning and networking seem to *converge* again at a few single, selected partners and friends.

Being sensitive about the different type of progressions in my data was important for theory creation. Knowing about the linear progression of learning, the dynamics of convergence and divergence of my focal processes, and the conjunctive nature of the recurrent multiple parallel progressions in my data, the framework I intended to build should reflect these insights as fully as possible.

The set of questions I applied to the event-listing matrix and the learning-networking interaction graph gave me a holistic understanding about the dynamics in my data. In sum, what characterizes my observations or as Saldaña (2003) suggests, what is the *through-line of my study*? I suggest the through-line to consist of two aspects:

- *Learning drives networking and not vice-versa*. The pressure to identify a business model that the company allows to compete in the global market of video games requires quick learning. Rapid learning becomes even more important in the fast changing industry of mobile video games. Therefore, learning becomes a predominant task with networking as the enabler for doing so quickly.
- *Networking enhances learning*. Interacting with others takes on different forms and supports learning differently. Undoubtedly, retrospective sensemaking in form of critical reflection about past experiences and future options is critical for the creation of new knowledge and informs strategy making. This activity of sensemaking seems to be most efficiently achieved in interaction with others.

The analysis of my data so far revealed different insights into the relationship between learning and networking during entrepreneurial internationalization. My ambition consisted in constructing a framework that best explains of what I was able to empirically observe. Therefore, the analysis provided good ideas for abstracting the empirical observations in order to construct a framework of learning and networking interactions during entrepreneurial internationalization.

I began to select of what might become possible elements of an emerging framework. The coding already revealed themes common to the learning and networking of the entrepreneurs such as interacting with others, engaging in relationships, receiving feedback and advice, reflecting, doing, accumulating experience, observing, knowledge. The code network models also indicated that

engaging with others comes prior to interacting with these contacts. For instance, before engaging in discussions with ad-hoc contacts at industry events in order to solicit their feedback on game prototypes, they needed to be approached. Approaching new contacts or engaging them took on different forms such as a spontaneous ad-hoc initiation at the event, a prior scheduled meeting with the contact, or being introduced to that particular contact by someone else. Furthermore, the at-the-glance review indicated that changes to the strategic plan is a result of the developmental progression of the entrepreneurs in terms of their learning supported by networking under the influence of trends in the environment. This insight is important insofar that strategy making can be considered the result of new knowledge created and the starting point for a new cycle of learning. Once the entrepreneurs agree on the changes to the strategic plan, the question arises of what needs to be learned in order to accomplish the new plan.

The different roles of the network in order to enhance learning also became evident as a result of the at-the-glance review. Creating awareness about new trends, providing information, and assisting in the process of reflection are all support functions that enhance the learning of the entrepreneurs. Experience, knowledge, learning and networking abilities are cumulative over time and important manifestations of the learning-networking interactions. Hence, they should be reflected in the framework. Equally, the type of progressions I identified bear information I considered important for my framework. There seems to exist a linear sequence of learning by doing through the accumulation of experience and knowledge that emerges out of these experiences. Other activities happen in parallel and influence the rather linear process of learning. These are networking activities at industry events, becoming aware about trends, and the sensemaking with others.

With these insights in mind I began to build the first drafts of a framework that is able to explain holistically of what I empirically observed. I put the themes on Post-it notes and began to arrange them on a sheet of paper taking into consideration the relationships I observed through the code network models and the at-the-glance review. In order to make sense of the possible relationships between the elements I constantly compared the emerging constellations with the event sequences from the event-listing matrix and the learning-networking interaction graph. I later switched to PowerPoint in order to graphically depict different versions of the framework. Using PowerPoint made communication easier with my supervisor than using photos of the paper versions.

5.4 Connecting to learning literature and constructing theory

The at-the-glance review already revealed that it is learning that drives networking and that networking enhances learning. I became curious of how the literature defines learning on the level of the individual. I especially looked into the fields of *adult learning and management learning* in order to understand how learning is conceptualized since I was not able to find answers in literature on international entrepreneurship that rather investigates learning at the firm-level.

It was at this stage when I came over Kolb's (1984, 38) definition of experiential learning defined as *"[…] the process whereby knowledge is created through the transformation of experience."* This definition helped me to connect the experience of the entrepreneur to the knowledge outcome through the process of (self) reflection. Thereby, the process of reflection relates to the process of transforming experience into knowledge. Similar to my own empirical observations, Kolb's definition of (experiential) learning emphasizes on the process of learning as opposed to the (knowledge) outcome and considers knowledge to be continuously created and recreated.

Kolb (1984) puts forward a cycle of experiential learning involving 1) concrete experience, 2) reflection, 3) abstract conceptualization, and 4) active experimentation (see Figure 10). They represent different learning modes. The creation of new knowledge is achieved through confrontation among those four modes of learning. Learning therefore is a dialectical process based on tension and conflict. According to Kolb (1984, 30) effective learning comprises four different kinds of abilities:

> *[C]oncrete experience abilities (CE), reflective observation abilities (RO), abstract conceptualization abilities (AC), and active experimentation (AE) abilities. That is, they [the learners] must be able to involve themselves fully, openly, and without bias in new experiences (CE). They must be able to reflect on and observe their experiences from many perspectives (RO). They must be able to create concepts that integrate their observations into logically sound theories (AC), and they must be able to use these theories to make decisions and solve problems (AE). Yet this ideal is difficult to achieve. How can one act and reflect at the same time? How can one be concrete and immediate and still be theoretical? Learning requires abilities that are polar opposites, and the learner, as a result, must continually choose which set of learning abilities he or she will bring to bear in any specific learning situation. More specifically, there are two primary dimensions to the*

learning process. The first dimension represents the concrete experiencing of events at one end and abstract conceptualization at the other. The other dimension has active experimentation at one extreme and reflective observation at the other. Thus, in the process of learning, one moves in varying degrees from actor to observer, and from specific involvement to general analytic detachment.

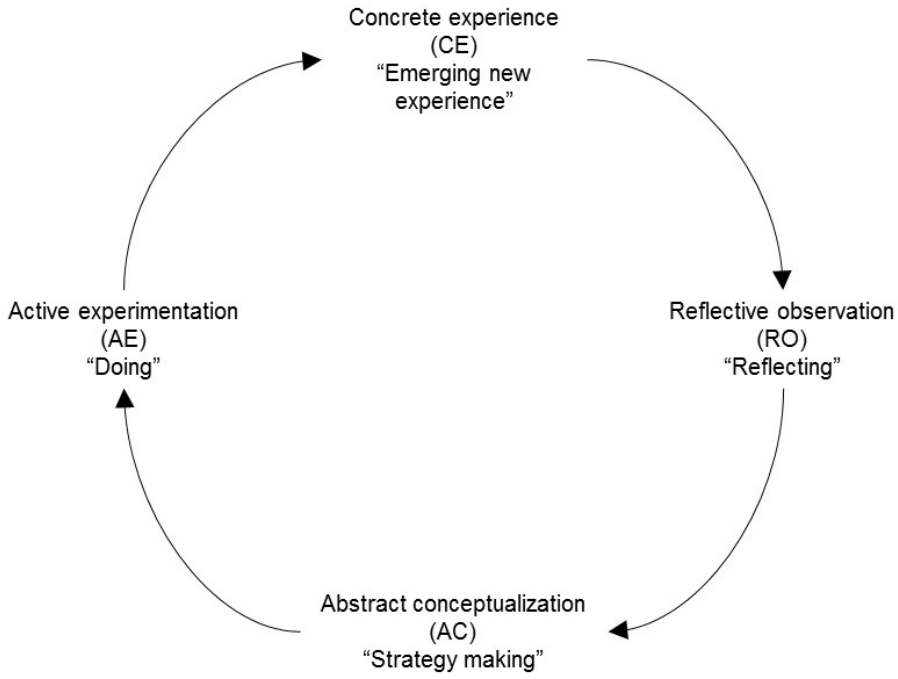

Figure 10 Kolb's model of experiential learning (adapted from Kolb 1984)

More recent research on experiential learning suggests that *social interactions enhance experiential learning* through their positive relationships on critical reflection (Matsuo 2015). Matsuo (2015) tries to identify the factors that enhance experiential learning. The author bases his arguments on insights of earlier research that claims that experiential learning in the workplace is essential for developing managers, especially in the context of cross-cultural training for expatriate managers. He puts forward a framework for facilitating experiential learning and claims to compensate therefore for the shortcomings of Kolb´s (1984) cycle of experiential learning which fails to consider learning goals, social relationships, and critical reflection.

Interesting for my own framework are the following insights from Matsuo's (2015) model: Matsuo (2015) argues that *critical reflection affects positively the*

quality of reflection and abstract conceptualization. In order for the manager to learn he or she needs to construct meaning from the experience through a process of reflection. Kolb however does not refer to the type of reflection used. Matsuo (2015) therefore distinguishes between reflection used to merely examine the meaning of the experience and *critical reflection* that critiques the assumptions on which beliefs are built on. Critical reflection then is able to enhance reflection through the identification of new ways of being and acting. Off note, the literature on adult learning and organizational learning distinguishes between different levels of learning such as lower and higher learning (Fiol & Lyles 1985), single and double-loop learning (Argyris & Schön 1978), adaptive and generative learning (Senge 1990), and instrumental and transformative learning (Mezirow 1991) which I present and discuss in Chapter 6.1.3 on learning abilities.

Interesting is Matsuo's (2015) assumption that the developmental network positively affects critical reflection. The *developmental network* thereby refers to a mentor or person that has an active interest in advancing the mentee's career. Especially the task of seeking feedback from the mentor stimulates critical reflection. This assumption is based on earlier research by Spreitzer, McCall, and Mahoney (1998) on the ability to learn from experience. The authors detected the openness of the manager for criticism as a predictor for success in the international context. These insights provided support and confirmed my own assumptions that the interaction with others impacts positively critical reflection.

Furthermore, through the literature I also identified the term 'wisdom' that I chose to add to the framework. The coding of the data showed that in some cases the interaction with others led to something more than just knowledge but I was not able to find a suitable term for that kind of output of reflection. Especially discussing and talking things through with friends and ad-hoc contacts showed to have a direct impact on the process of reflection. The opinion of experienced others provided information useful for judging better the own experience or to gain a deeper understanding about the lived experience in order to create a particular kind of understanding as outcome of reflection that I was unable to name properly.

The term wisdom can be understood *"as the ability to best use knowledge for establishing and achieving desired goals and learning about wisdom as the process of discerning judgments and action based on knowledge."* (Bierly et al. 2000, 601). Judging better the lived experience directly contributes to strategy making. Hence, the interaction with experienced others contributes to reflection in order to create wisdom based on the experiential knowledge previously gained. Subsequently, wisdom is used to define, change, or adapt the firm's business strategy.

Figure 11 shows the conceptual framework as it emerged from the analysis of the data and informed by literature on adult and management learning. I chose the metaphor of a wheel. The outer circle represents the process of experiential learning starting with the awareness about a lack of experience or knowledge. In order to close the knowledge gap, the entrepreneur engages in learning-by-doing which eventually leads to emerging new experience. Through (self) reflection the experience is finally transformed into new knowledge or wisdom. Subsequently, the newly created knowledge or wisdom directs further of what needs to be learned and starts a new cycle of experiential learning. The activity of interacting with others represents the center of the wheel and follows the engagement with others. The center connects to the outer wheel in form of spokes that represent the different functions of networking. Connecting the center through spokes that directly impact distinct elements of the experiential learning process highlights the enhancing role of networking on learning.

Comparing my framework to Kolb´s cycle, it shows the following similarities (see Figure 10). The theme of 'doing' corresponds to the mode of active experimentation (AE) within the cycle. Based on the awareness about the lack of experience and knowledge, the entrepreneurs engage in doing and practicing of what needs to be learned. The theme of 'emerging new experience' mirrors the concrete experience (CE). It is the tangible, felt quality of the immediate experience that results from doing and practicing of what needs to be learned that allows the entrepreneurs to grasp what they are doing. 'Reflecting' is similar to reflective observation (RO). The simple perception of experience is not sufficient for learning, the entrepreneurs need to do something with it. The transformation of the experience is achieved through reflection by the entrepreneurs. Abstract conceptualization (AC) I understand as the process of strategy making where the entrepreneurs create new concepts (i.e. different versions of strategic plans) based on their reflection about previous experiences. In contrast to Kolb, my cycle does not continue with the active experimentation of new conceptualizations but uses the awareness about lack of experience/knowledge as a new starting point for either active experimentation (doing) or engagement with others. My framework therefore resembles a process of experiential learning as put forward by Kolb (1984) applied to a setting of entrepreneurial internationalization.

All in all, adult and management learning literature helped to sharpen and reconfirm some of the elements and relationships of my emerging model. This particular literature helped me to make sense of my own theorizing. In the following chapter I guide the reader through the framework supported by quotes directly taken from the diaries or interview transcripts.

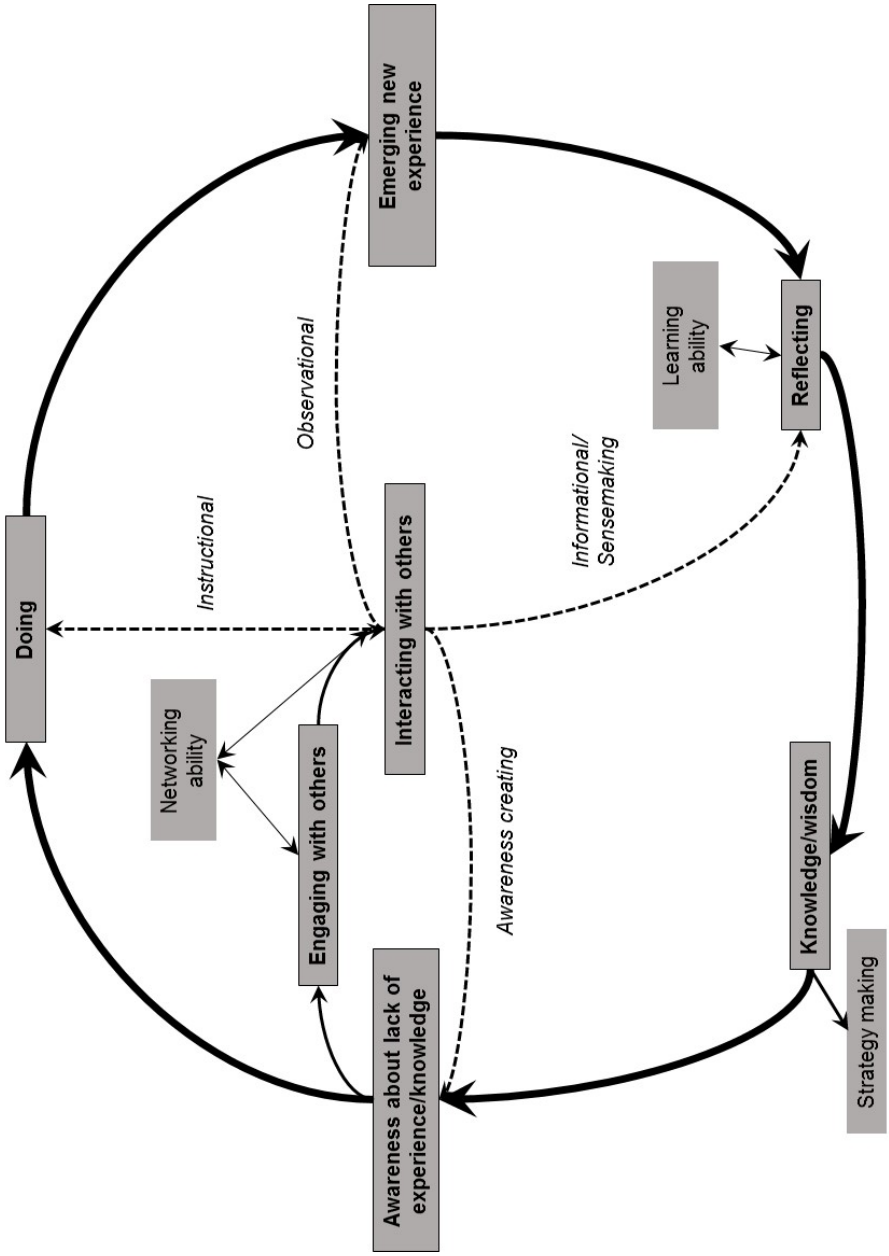

Figure 11 Framework of learning-networking interactions during entrepreneurial internationalization

5.5 Explaining the framework of learning-networking interactions.

5.5.1 Becoming aware about the lack of experience or knowledge

The cycle of learning-networking interactions start with the entrepreneur becoming aware about a lack of experience or knowledge (Awareness about lack of experience/knowledge). For instance, Camilo became aware about the growing trend of mobile video games during his visit to the industry event Unite in November 2010 in Canada. He explained:

> *When I attended Unite in November 2010 I saw […] how where the speeches, how were the people, what did they ask [during the buyer-sellers meeting], what did they want […] We saw that the business is moving towards mobile [video] games. […] On my return I met with the partners [of C2 Game Studio] and told them […] if we take the money of that game […] and divide it in four smaller games, and don't sell them through Steam but sell them through the AppStore […] we lower the risk because of one game there will be four. […] And we gain experience with mobile games, with the development of mobile games which more and more people are asking for […].*
> (Retrospective interview, Camilo/Luis, 14 June 2011)

The discussions with potential clients (Interacting with others) triggered the awareness about this growing trend of mobile video games (Awareness creating). Therefore, Camilo and Luis decided *"to change the strategy for this year. From one, more risky, larger game, to some smaller, less risky games focused on [mobile phones] instead of PC."* (Retrospective interview, Camilo/Luis, 14 June 2011). Hence, the development work of mobile video games began (Doing) which eventually led to the experience and knowledge about how to develop these type of games through a learning-by-doing approach.

Table 7 provides additional quotes in order to illustrate of how the awareness of the entrepreneurs emerged about a lack of experience or knowledge in a particular area. This awareness mainly stems from the interaction of the entrepreneur with others.

Table 7 Quotes that illustrate the awareness about lack of experience or knowledge

Description	Exemplary quote
Awareness about lack of knowledge of how to develop mobile video games for Android.	*Other important things I learned [while talking to potential publishers at Game Connection, USA]? Trends, yes. […] We don't do that in the moment. We need to aim at Android. Android is already a reality. There is a lot of interest in Android. So, already for Nitro [the second game Nitro Chimp] we will focus on developing a version for Android.* (Follow-up interview 3, Camilo, 28 March 2012)
Awareness about lack of knowledge regarding mobile video game analytics.	*Other important things I learned [while talking to potential publishers at Game Connection, USA]? Trends, yes. […]. We need to integrate [game] analytics into the games. Cowboy Guns we simply offered and the only thing we have in form of feedback [from the users] is how many copies we sold. We need to integrate things and we are already looking how to do that.* (Follow-up interview 3, Camilo, 28 March 2012)
Awareness about lack of knowledge regarding game monetization.	*So I pulled out the laptop and showed them the game ideas we have. They started to give feedback. They told me, "this one no", because of this, that, and that. "This one yes", because of this, that, and that. "This one perhaps but it is too long, too difficult. How about if you do it like this? You need to think more about [game] monetization!" All told me that we need to think more about [game] monetization.* (Follow-up interview 4, Camilo, 13 August 2012)

Once the entrepreneurs gained the awareness about a lack of experience or knowledge, they began to acquire the experience through a learning-by-doing approach.

5.5.2 Doing

The learning-by-doing included for instance learning about the development motor for video games (Unity), how to present quotations for the development

of video games, how to develop a video game or a mobile video game in particular, and how to integrate analytics into an existing and new game. As Camilo commented regarding the learning-by-doing by participating in international biddings for video games:

> *[T]hey asked for other quotations [Seismic Games]. […] Through them, through Seismic, we were also offered another quotation from Australia. […] We learned a lot from it [from participating in these bidding procedures for international clients].*
> (Retrospective interview, Camilo/Luis, 14 June 2011)

Table 8 provides further examples of the learning-by-doing of the entrepreneurs.

Table 8 Quotes that illustrate the learning-by-doing of the entrepreneurs

Description	**Exemplary quote**
Getting familiar with the development motor Unity.	*So the idea was that Luis managed the technical part, that we looked for another person as the artist […], and that I managed the commercial part. […] We developed three demos. I took the demos and started looking for clients.* *(Retrospective interview, Camilo/Luis, 14 June 2011)*
Working on the development of the first mobile video game.	*So we decided in that moment to change the strategy for this year. From one, more risky, larger game, to some smaller, less risky games focused on [mobile phones] instead of PC.* *(Retrospective interview, Camilo/Luis, 14 June 2011)*
Integrating analytics and metrics into a new version of Cowboy Guns and the new game Nitro Chimp.	*And we hope that when we offer the [new] games, because we will offer [Nitro Chimp] along with a new version of Cowboy Guns, which will be Freemium, Free-to-Play, and all these things. There, there we already will have integrated analytics and metrics.* *(Follow-up interview 4, Camilo, 13 August 2012)*

While Camilo and Luis acquired the knowledge of how to develop a video game through a learning-by-doing approach, for the subsequent launch and sales of the game through the App Store they were lacking the required experience and knowledge.

5.5.3 Engaging with others

In order to acquire the experience and knowledge of how to launch and sell a video game through the App Store, the entrepreneurs were seeking the cooperation with the UK-based publisher (Engaging with others). *"So I [emailed] them and told them, "Well, we have this game in this stage of development, look!""* (Retrospective interview, Camilo/Luis, 14 June 2011). Camilo and Luis deliberately choose to contact the Publisher due to its outstanding image and credibility in the global market of mobile video games.

An intentionally planned initiation of a contact is one form of how the entrepreneurs engage in new relationships. Other forms consist of spontaneous, ad-hoc initiation, being introduced to someone, actively building relationships, ending relationships, continuing relationships, reactivating them, or inviting someone. Table 9 provides examples of how the entrepreneurs engaged with their contacts.

It is important to remark that the decision to continue or to end a relationship is greatly influenced by the learning outcome in form of new knowledge or wisdom created. For instance, the cooperation with the Publisher was perceived as successful for the launch of the first game Cowboy Guns, while the cooperation with the same Publisher was perceived as unsuccessful for the second game Nitro Chimp.

Shortly before the launch of Cowboy Guns in the App Store, Camilo stated in a weekly log, *"[w]e also signed the contract, so that the second game that we already began to develop continues with the same publisher."* (Log, Camilo, 8 August 2011). The situation changed completely after the launch of Nitro Chimp. *"From here onwards continuing to work with a publisher like that, as we did, I really think is losing opportunities to learn more […]"* (Follow-up interview 6, Camilo, 23 January 2013). While the cooperation for Cowboy Guns created a wealth of knowledge regarding the marketing of a mobile video game through the App Store, the knowledge outcome for the Nitro Chimp cooperation was rather disappointing.

Table 9 Quotes that illustrate different forms of engaging with others

Description	Exemplary quote
Planned initiation of contact with potential publishers and investors for mobile video games.	*Game Connection is only buyer seller meet. It is not business speed dating but it is half an hour for each [meeting]. A month prior you have access to a software and you schedule the meetings. There are buyers and there are sellers and they come together. […] I had 27 meetings.* (Follow-up interview 3, Camilo, 28 March 2012)

Description	Exemplary quote
Planned initiation of contact with consultant.	*I am trying to get an appointment with Alex M., a game designer I know from Casual Connect and who will be talking at Colombia 3.0. I am waiting for an answer from MinTIC [Ministry of Telecommunications of Colombia].* (Log, Camilo, 16 October 2012)
Ad-hoc initiation of new contacts.	*Then I realized during the meetings that the people who didn't have offices, well they had boots, they told me "let's meet at Starbucks. We will meet at the entrance." So I saw that this was the meeting point. So what I began to do was that I went there when I didn't have a meeting in order to look out the people who waited for their meeting to arrive. So they had some free time and I catched them. I catched many of them!* (Follow-up interview 4, Camilo, 13 August 2012)
Being introduced to someone	*There is a person who we would love to have as a mentor but he is a consultant and charges [money for his services]. […] He is an eminence. He designed extremely important games. And he met with the people from Efecto [another Colombian video game studio], and they [Efecto] invited me. He [the consultant] gave us half an hour [to talk about video games].* (Follow-up interview 4, Camilo, 13 August 2012)
Relationship building	*I will try to improve the relationship with Jon K. [consultant] because I am interested in that he takes over the role of [Stephen] – the friend of Luis who we wanted to have on our board of advisors. This we talked about a little bit in Bogota [at Colombia 3.0] but it takes time to get to know each other in order to see if it is viable.* (Log, Camilo, 31 October 2012)
Relationship building	*Well, each company had one day with him [the video game consultant Alex M.]. What we tried to do was that we went the first day to [his] speeches [at the video game design seminar]. Then, a whole day – I choose the first day for us – we received the feedback [from him]. Afterwards, on [the same] Friday we went out for dinner with him. So, we received even more feedback. And the following week we went out again for dinner with him. So we got more feedback.* (Follow-up interview 6, Camilo, 23 January 2013)
Ending relationship	*They [the Publisher] doesn't take charge of many things the Publisher is supposed to do. We really haven't been happy with that. Generally, we weren't satisfied with anything during this process with the Publisher for the second game. For the first one, yes! For the second one, no! We already said, we took the decision with the Publisher never again.* (Follow-up interview 6, Camilo, 23 January 2013)

Description	Exemplary quote
Re-activating relationship	*I [Luis] have many colleagues with whom I studied, but [Stephen] and [Tommy] they are the ones who most moved around in different [video game] companies , and they are producers. […] That's why I contacted them again.* (Follow-up interview 8, Camilo/Luis, 23 January 2014)
Inviting someone	*End of November […] or so, Luis with one of his friends [Tommy] from the university […] I think he is the most experienced of all friends of Luis from the university, he told him: "Come to Colombia. Come to Colombia. Come to Colombia. Come to Colombia. Be in Medellin. Help us a little bit. Get to know the company. […]* (Follow-up 7, Camilo, 10 December 2013)

Engaging with others does not come by itself, it needs to be practiced. The entrepreneurs require a networking ability to do so.

5.5.4 Creating a networking ability

The ongoing practice of engaging with others creates a networking ability. The networking ability is useful and also necessary in order to engage with others, especially with ad-hoc contacts at industry events, as Camilo explained in one of the follow-up interviews:

> *[I] think I personally experienced a change, like a change of attitude of how to approach people and to show them my company much easier [at Casual Connect]. Like if I felt more secure about my company. […] At Game Connection [the networking] was with the ones I had the [planned] meeting with and that's it. Here [at Casual Connect] I [networked] with everyone, with everyone I had a chance to do so, and I felt more easygoing. Well, I think this was like a [personal] growth.*
> (Follow-up interview 4, Camilo, 13 August 2012)

Networking both relates to the activities of engaging with others and interacting with others. Hence, the practice of interacting with others also contributes to the creation of the networking ability. The ability to interact with others is best described by Camilo's comment about his participation at the industry event Game Connection in March 2012:

> *What I was thinking was that it doesn't matter if it is not the exact perfect match [pre-scheduled buyer seller meets at Game Connection]. Even if nothing comes out of the meeting I am polishing my pitch. I am improving my presentation. I am preparing myself for other more important things. […] Because each time the conversations went better, the pitch got better, more polished, knowing how to manage better the time. Because during the first [meetings], the half an hour was gone and I was still talking about the first game. So I got better each time and the third day I got much better, and that day was [the meeting] with Rovio [an important video game developer and publisher from Finland]. So this was perfect in order to prepare me for that [the previous pitches before meeting Rovio].*
> (Follow-up interview 3, Camilo, 28 March 2012)

Engaging with others is required in order to interact with others.

5.5.5 Interacting with others

Once the Publisher accepted the game, C2 Game Studio got an internal producer assigned in order to prepare the game for its launch in the App Store. In one of the diaries, Camilo remarked, *"[w]e continue with the development of the game. [We have] weekly meetings with the producer assigned to us by the Publisher."* (Log, Camilo, 18 July 2011). The interaction with the Publisher was therefore characterized by weekly meetings. These meetings mainly consisted of discussions around the latest built of the game with the producer providing feedback. Meeting on a weekly basis, discussing, receiving feedback and advice all constitute different but related forms of interaction with others. Table 10 provides additional quotes related to the interaction with others.

The interaction with the Publisher in general impacted the experiential learning of the entrepreneurs differently. As the framework in Figure 11 shows, besides the role of awareness creation, the impact on experiential learning can be instructional, observational, informational, or in the form of sensemaking.

Table 10 Quotes that illustrate different forms of interacting with others

Description	Exemplary quote
Discussing	*Today I also had a meeting with the Publisher. We discussed the feedback that he gave us regarding the game and we will make some adjustments [to the game based on the producer's feedback].* (Log, Camilo, 13 April 2012)
Being engaged in conversations	*I talked a lot with Alex M. and I think we entered into a very good relationship. […] I had several very, very interesting conversations with him […].* (Log, Camilo, 30 October 2012)
Receiving feedback and advice	*Well, we took five [new video game] ideas [to Casual Connect] and I was looking at the face of the people, their opinion, what they tell us, "change this", "that doesn't work". Very good doing this I think with the industry experts over there [at Casual Connect].* (Follow-up interview 4, Camilo, 13 August 2012)

In the following I provide different examples of how networking enhances the experiential learning of the entrepreneur.

5.5.6 Instructional character of interacting with others

The weekly interaction with the Publisher's producer directly impacted the further design and development of the game Cowboy Guns in its final stage before the launch in the App Store. The producer provided instructions of how to prepare the game for the App Store. As Camilo expressed in the log: "*They [the Publisher] sent us a pretty complete checklist and we realized all the mistakes we made. This will be helpful for the next game.*" (Log, Camilo, 8 August 2011). Generally, the producer directly impacted the "doing" of working on the mobile video game (Doing) by providing instructions (Instructional). The instructions were useful in order to accelerate the publishing process in the App Store compared to if the entrepreneurs would have done this by themselves. The expertise of the Publisher greatly benefited the entrepreneurs. Table 11 provides additional examples of the instructional character of networking.

Table 11 Quotes that illustrate the instructional character of networking

Description	Exemplary quote
Receiving and implementing instructions from the Publisher's producer.	*Today we had another meeting with him [the Publisher's producer]. What we normally do is […] that we create the built of the game for him to run it over there - he can use it on his iPhone – Friday's normally. And we meet with him on Monday or Tuesday for him to play the game over the weekend. […] And he tells us exactly what he thinks about the changes we did last week […]. He evaluates [the game]. In the recommendations he says: "I consider we should do these changes. What do you think?" So we say: "We can do this, we can do that. What do you say?" […] Today we had a meeting with him and he gave us two tasks. We [work on the tasks] this week […].* (Follow-up 1, Camilo, 26 July 2011)
Receiving instructions of how to apply monetization features into the game.	*So, they told us [the Koreans]: "Well, if you want, if you work with us, you need to start applying all these monetization tactics."* (Follow-up interview 8, Camilo/Luis, 23 January 2014)

Receiving instructions is one role of how the interaction with others is able to enhance the experiential learning of the entrepreneurs. Another role is observing the behavior and actions of others which I explain in the following section.

5.5.7 Observational character of interacting with others

It was not only the instructions received by the producer that contributed to the learning of the entrepreneurs, it was also the chance to directly observe the launch and promotion activities for Cowboy Guns on behalf of the Publisher that enhanced the learning (Observational). Camilo expressed this as followed:

> *Friday they sent us an update regarding the social [network] part of the software of the publishers and today we are working on some small adjustments. After they approve it [the last version of the game], that should be tomorrow I hope, we will have to wait 30 days while they are doing the marketing efforts. We try to be aware of [the marketing process] as much as possible in order to learn sufficiently.* (Log, Camilo, 16 August 2011)

Retrospectively, Camilo and Luis considered it very valuable for their own learning to observe the marketing activities of the Publisher that directly impacted the experience base of the entrepreneurs (Emerging new experience) without conducting these activities by themselves:

> *I think this was a very valuable experience that we acquired with the Publisher. Simply observing the [different] steps, observe their marketing [activities], see how a company, a larger corporation, international, promotes […].*
> (Follow-up interview 8, Camilo/Luis, 23 January 2014)

Hence, observing the activities of the Publisher provided a short-cut to new experiences for the entrepreneurs. Table 12 provides another example of how networking is able to directly contribute to the emerging experience of the entrepreneurs.

Table 12 Quote that illustrates the observational character of networking

Description	Exemplary quote
Observing how others behave in their interaction with others.	*I also learned a lot. I talked to the other [video game] companies from Colombia, the two that are good, very good. They have more experience than us, from Bogota [Brainz and Efecto]. Both have much more experience. They already work 12 years in this. I observed how they behaved and acted [at Game Connection].They already participated several times at Game Connection, it was my first time. I have never participated in a buyer sellers meet. It was worth it to make the financial effort than simply to go to a conference.* (Follow-up interview 3, Camilo, 28 March 2012)

Thus, it is not only the doing of the entrepreneurs that leads to new experiences but also the observing of what others are doing.

5.5.8 Emerging new experience

Gaining experience based on what the entrepreneurs are doing is an element both empirically and theoretically derived of my model. It is inspired by Kolb's (1984) definition on experiential learning whereby knowledge is created

through the transformation of experience. The accumulation of experience of the entrepreneurs I basically observed through my prolonged engagement in the field. This especially relates to the accumulation of experience regarding the design, development, and commercialization of mobile video games during the observation period.

There are no particular quotes that represent the emerging new experience as a direct result of each learning-by-doing activity of the entrepreneurs. Nevertheless, the following quote by Camilo illustrates the accumulation of experience by passing through several iterations of the framework, including doing, emerging new experience, reflecting, and interacting with others:

> *The part of launching Nitro Chimp, I think we also learned a lot. […] At last we have analytics, because Cowboy Guns wasn't offered with analytics. So, we also learned a lot, and thanks to Nitro Chimp we did have the encounter with [Alex M.] and we had the encounter with [Jon K.], and we absorbed a lot, a lot from both. And I think that all this […], the same as the learning from the first day of Cowboy Guns until Nitro Chimp, all this will be reflected in the third game.*
> (Follow-up interview 6, Camilo, 23 January 2013)

New experience emerges through the doing of the entrepreneurs or observing others and is followed by the activity of reflecting on the experience.

5.5.9 Reflecting

Reflecting about past experiences is achieved within the team of entrepreneurs and also enhanced by others as I will discuss below (Informational/Sensemaking role of networking). For instance, the experience of cooperating with the Publisher for the second game Nitro Chimp triggered a reflection among Luis and Camilo questioning the usefulness of such cooperation:

> *We learned to learn that we should not work with the Publisher [anymore]. This is already a learning [lesson] itself and to really understand what is the mentality of the Publisher. It always hurt us. We said that the Publisher is not interested in our well-being. The Publisher is interested in its own well-being with its strategy, its business model. And we simply understood that we were a small screw within the business model of the Publisher. Now we don't want this anymore. Well, I think everything has been a*

> *learning and this really generated a lot of knowledge and a lot of experience during the second game.*
> (Follow-up interview 6, Camilo, 23 January 2013)

As I will describe below, the outcome of that reflection did not lead to a particular type of knowledge but rather relates to an insight that I choose to term wisdom. Wisdom relates to the judgment of an experience and has the ability to inform further strategy making. Table 13 provides examples of the reflecting of the entrepreneurs.

Table 13 Quotes that illustrate the activity of reflecting

Description	**Exemplary quote**
Reflecting about the past cooperation experience with the Publisher.	*[…] Well, we were talking about this today [Camilo and Luis] that we would have liked to have [the Publishers advice] from the beginning of the game […] What we were talking with him [the Publisher's producer] is that we are evaluating the possibility to develop the next game together with them [the Publisher].* (Follow-up interview 1, Camilo, 26 July 2011)
Reflecting about how to accomplish strategy making.	*I tell you that last week we met [Camilo, Luis, and the other board members] and one of the ideas we had was to get in touch with one of Luis's fellows from the university who, in this moment, is the director of development of the franchise Call of Duty. The proposal that we made him was that he became an external advisor and supports us with his opinion related to the [strategic] direction of the firm.* (Log, 25 June 2012)
Reflecting about the accumulated experience so far with the game development process and the cooperation with the Publisher.	*This is one of the biggest disadvantages of publishing with a publisher and not publishing ourselves. This is one of the things that we are questioning, and talking to Jon K. […] and talking to Alex M. What we saw is that for the first games it is advisable to [publish them with a publisher]. Obviously [there should be something] like a spill-over of technology on behalf of the Publisher […] But then, perhaps, watching out for other opportunities that we can directly offer with the knowledge and abilities that we have […] Well, this is what we are thinking now for the new game.* (Follow-up interview 6, Camilo, 23 January 2013)

Reflecting can also be enhanced through the interaction with others. On the one hand, it is information transmitted by talking to others and, on the other hand, sensemaking that happens while discussing or talking things through with others.

5.5.10 Informational character of interacting with others

The interaction with others allows valuable information to be transmitted. This information serves as "food for thought" and directly impacts the activity of reflecting as part of the experiential learning of the entrepreneur. The interaction for example with another publisher of mobile video games at an industry event provided important information of how to rethink the design of future games:

> *Well, it was very important to understand the perspective of what it is that Rovio [the publisher] is looking for in its games. We were thinking a lot about this for the design of our pitch. They [Rovio] say "we not only want to make the game because of the game. We think about how will be the toys that come out of the game as characters." So, when we designed the characters of the new game, the proposal, we were considering this. We were thinking a lot of how to sell the toys, how to market them. That was an important learning lesson the conversation with Rovio.*
> (Follow-up interview 3, Camilo, 28 March 2012)

Table 14 provides additional examples of the informational character of networking on reflecting.

Table 14 Quotes that illustrate the informational character of networking

Description	**Exemplary quote**
Receiving expert advice from the Publisher.	*From the viewpoint of a publisher, he [the publisher] knows perhaps what people want, what they are looking for, how to make the game [user] friendlier. […] This you probably don't see when you are working on things. So, an expert opinion from someone who knows a lot is very good.* (Follow-up 1, Camilo, 26 July 2011)
Receiving interesting expert opinion.	*He [Jon K.] gave us some feedback and thanks to this we probably think differently of how to structure [the activities] this year. And this is how we do it this year. It is thanks to the feedback he gave us.* (Follow-up interview 6, Camilo, 23 January 2013)

As the framework in Figure 11 illustrates, the activity of reflecting is both influenced by the own emerging experience and by the information provided by others, if it exists. In this case the information transmitted from the interaction with others informs the activity of reflecting. Therefore, the (expert) information provided by others enhances reflection based on the entrepreneurs' previous experience and, thus, is able to accelerate the creation of new knowledge.

Besides the informational role of the interaction with others, sensemaking is another role for the activity of reflecting.

5.5.11 Sensemaking character of interacting with others

Engaging in conversations and discussing things through, especially with friends as industry experts, helps to give meaning to experience and to direct further decision making. It is able to reframe past experiences. Being able to judge past experiences under sensemaking with experienced friends leads to the generation of wisdom and informs further strategy making.

Talking things through with Tommy helped to make sense of the break with the Publisher and confirmed the strategic option of self-publishing. As Luis commented on the visit of their friend and industry expert Tommy:

> *We tried to validate [with Tommy] the, the, our feelings, our experience, like our, like how we were thinking about this [the option to self-publish future games] after two, about the experience with two games. And in fact, in the, in the moment the biggest hits – not when the App Store started – the biggest hits nowadays in the App Store are self-published.*
> (Follow-up interview 8, Camilo/Luis, 23 January 2014)

The visit of Tommy provided an opportunity to give meaning to the experience acquired by Camilo and Luis regarding the development of two mobile video games. Judging and reframing past experience also helped to identify a strategy both entrepreneurs felt comfortable with. Especially Luis did feel uncomfortable so far with the emerging trend of the free-to-play business model. The visit of Tommy helped to reshape his perspective as Luis commented in one of the follow-up interviews:

> *For me the free-to-play [business model] […] has always been a conflict […]. I considered it like a cancer that is [destroying] the industry I love [video game industry]. […] [Now] I understand, or better accept, if this is the way the industry goes, the company*

> *[C2 Game Studio] needs to move into that direction but maintaining the values of the firm and maintaining the objectives of the firm.*
> (Follow-up interview 8, Camilo/Luis, 23 January 2014)

Table 15 provides further examples of the sensemaking activities with friend Tommy.

Table 15 Quotes that illustrate the sensemaking character of networking

Description	**Exemplary quote**
Interacting with friend Tommy in order to make sense of past experience and future direction.	*So, he came [Tommy] and we had three days of sessions about the strategy of the firm. About from where to where we are going, about what we really want, about what we do, about how to organize our operations, about how to organize the team. A lot of things. He gave us so much information. That exploded our mind.* (Follow-up interview 7, Camilo, 10 December 2013)
Sensemaking with friend Tommy regarding the experience lived with the consultants.	*[Through] that [the visit of Tommy] we became aware that the other people [industry experts] who visited us simply gave us a little bit [of information] but they don't share. […] They don't share all the information. This person [Tommy] arrived super frankly and super generous.[…] Many of the experts that visited us, including Alex who helped us a lot, since they are [professional] consultants who charge a lot of money, they really don't tell you everything, they are ambiguous. [Tommy] really is more the type of, "What do you need? As if he were a member of our team, he sits down and works with you. So I think that this, this was very, very, very important for us.* (Follow-up interview 8, Camilo/Luis, 23 January 2014)

Reflecting can be enhanced through the informational and sensemaking role of the interaction with others. These interactions themselves are able to sharpen the learning ability of the entrepreneurs.

5.5.12 Creating a learning ability

As the at-the-glance review showed, the accumulation of experience and reflecting are cumulative. Increasing reflection about past experiences also sharpens the ability to learn, and especially to reflect more critically. Luis provided an interesting point in this regard in one of the follow-up interviews:

> *[A] mistake that I made was listening, listening too much, and not listening to myself. So, I got confused about everything, from all the information that I received, and that was very confusing to me.* (Follow-up interview 8, Camilo/Luis, 23 January 2014)

Camilo also expressed this earlier:

> *What we learned from the interaction with the producer is that no one has the final word. And sometimes the producer is also wrong. We should trust more our own instinct.* (Log, Camilo, 16 January 2012)

The ability to reflect more critically about their own learning, let the entrepreneurs to become more critical regarding the feedback and advice they received from others and more selective with whom to interact in the future. Table 16 provides additional examples of the learning ability gained over time.

Table 16 Quotes that illustrate the creation of a learning ability

Description	Exemplary quote
Rethinking co-operation with consultant Alex M.	*I think it was useful [the cooperation with Alex] in order to realize that we didn't know anything. For that it was useful and that is very important. We were lost. […] Let's say it opened our mind, it opened our mind and it made us humble to know that we still have much to learn […].* (Follow-up interview 8, Camilo/Luis, 23 January 2014)
Becoming more critical regarding the interaction with consultants.	*[Through] that [the visit of Tommy] we became aware that the other people [industry experts] who visited us simply gave us a little bit [of information] but they don't share. […] They don't share all the information. This person [Tommy] arrived super frankly and super generous.[…] Many of the experts that visited us, including Alex who helped us a lot, since they are [professional] consultants who charge a lot of money, they really don't tell you everything, they are ambiguous. [Tommy] really is more the type of, "What do you need? As if he were a member of our team, he sits down and works with you.* (Follow-up interview 8, Camilo/Luis, 23 January 2014)

The ability to learn or to reflect critically is important for the creation of wisdom and the subsequent strategy making which I describe in the following sections.

5.5.13 Creating knowledge

Reflecting on past experience and enhanced by the interaction with others leads to the creation of new knowledge and sometimes wisdom. Knowledge relates to different areas that I aggregated through coding into different themes. Table 17 provides examples of different knowledge created.

Table 17 Quotes that illustrate the creation of new knowledge

Description	**Exemplary quote**
Knowledge about the design and development of mobile video games.	*[We] learned much from the meetings with the [Publisher's] producer related to the design and development of videogames.* (Log, Camilo, 18 July 2011)
Knowledge about the quality standards for mobile video games of the App Store.	*This week we learned a lot about how to prepare the game for its submission to Apple [App Store]. Many things were missing that we totally forgot to correct.* (Log, Camilo, 8 August 2011)
Knowledge about global video game promotion and sales.	*I think we learned more about how to promote and sell a game at the global level [through the launch of the first game Cowboy Guns in the App Store] […] Let's see how it goes with the second [game].* (Log, Camilo, 23 January 2012)
Knowledge about cooperation strategies with video game publishers.	*Well, we were talking about this today [Camilo and Luis] that we would have liked to have [the Publishers advice] from the beginning of the game […] If we ourselves are the producers and the same publishers, well, we are going to publish the best game we are able to by ourselves. But if we do this, and after we finished it, start a process with the publishers and they assign us a producer who will start asking for more, then, it is like ending the process and afterwards start the process again. So, it takes double the time. What we were talking with him [the Publisher's producer] is that we are evaluating the possibility to develop the next game together with them [the Publisher].* (Follow-up interview 1, Camilo, 26 July 2011)

Description	Exemplary quote
Knowledge about how to design, develop, and publish a mobile video game that is sold through the App Store to a global audience.	*We learned a lot, a lot [through working with the Publisher for the first game Cowboy Guns]. We learned a lot. Nevertheless, publishing one game isn't that much of experience but adds to the learning. We know that we have a weakness and that is the marketing part for this type of niche [mobile video games]. That's why these types of games [mobile video games] require a publisher in order to land a hit. That's why we engaged in this alliance [with the Publisher].* (Follow-up interview 1, Camilo, 26 July 2011)

Knowledge is created that relates to different areas of the doing of the entrepreneurs: Design and development of mobile video games; marketing of mobile video games; business development and cooperation strategies; venture financing; legal aspects of cooperation; and even knowledge about different learning strategies. But it is not only knowledge that is created as a result of reflection. Especially critical reflection leads to the creation of wisdom which I describe in the following section.

5.5.14 Creating wisdom

Besides knowledge, other output from reflecting relates to the creation of wisdom. Wisdom relates to a particular kind of insight achieved through reflecting about past experience in interaction with others. For example, the insight not to continue anymore with the cooperation with publishers as Camilo commented:

> *This is one of the biggest disadvantages of publishing with a publisher and not publishing ourselves. This is one of the things that we are questioning, and talking to Jon K. […] and talking to Alex M. What we saw is that for the first games it is advisable to [publish them with a publisher]. Obviously [there should be something] like a spill-over of technology on behalf of the Publisher […] But then, perhaps, watching out for other opportunities that we can directly offer with the knowledge and abilities that we have […] Well, this is what we are thinking now for the new game.*
> (Follow-up interview 6, Camilo, 23 January 2013)

Camilo and Luis start to question the cooperation with publishers in favor of self-publishing. The entrepreneurs involve the consultants Alex M and Jon K. in the sensemaking about previous cooperation experience with publishers. It

was not until friend's Tommy visit that a final decision could be made in favor of the self-publishing business model. Hence, the creation of wisdom is related to critical reflection and a heightened learning ability which directly influences strategy making.

For example, making sense about the cooperation with the consultants Alex M. and Jon K. through the presence of friend Tommy creates wisdom regarding the experience lived with these consultants. The wisdom gained makes the entrepreneurs more sensible regarding future networking with consultants in favor of interactions with friends like Tommy:

> *[Through] that [the visit of Tommy] we became aware that the other people [industry experts] who visited us simply gave us a little bit [of information] but they don't share. […] They don't share all the information. This person [Tommy] arrived super frankly and super generous.[…] Many of the experts that visited us, including Alex who helped us a lot, since they are [professional] consultants who charge a lot of money, they really don't tell you everything, they are ambiguous. [Tommy] really is more the type of, "What do you need? As if he were a member of our team, he sits down and works with you. So I think that this, this was very, very, very important for us. (Luis, retrospective interview)*
> (Follow-up interview 8, Camilo/Luis, 23 January 2014)

It is then the wisdom created that is especially able to inform strategy making which I describe in the following section.

5.5.15 Strategy making

As already referred to in different examples above, the interaction with others is able to inform strategy making through the knowledge and wisdom created through reflection. Table 18 provides examples of the strategy making process. The strategic plan is constantly evolving based on the accumulated experience and changing trends within the environment. Trends are captured by interacting with ad-hoc contacts at industry events and informs reflecting. Strategy making is then informed by sensemaking with consultants and friends.

Table 18 Quotes that illustrate strategy making

Description	Exemplary quote
Strategy making is informed by accumulated experience and interactions with consultant.	*Luis started a document called "C2 Ideal". It contains a philosophy about the operations, how to search for innovation, what are the roles of the team members. […] After the conference in San Francisco [Unite] I looked at it again and talked to Diego A. [consultant] […] He visited us and I showed him the document and I didn't agree anymore with what Luis wrote down a year ago. And with everything we learned with the development of the game, there is the need to revise it [the strategic plan]. Here we have it [the strategic plan] and it is good to also think about the future.* (Follow-up interview 2, Camilo, 28 October 2011)
Strategy making is informed by interactions with ad-hoc contacts at Game Connection.	*Well, [comparing our strategic planning with what I observed at Game Connection], talking with everyone and already having it [the strategic plan], that was also useful for me. […] I have to sit down after my return [from Game Connection] and read it again in order to see what happens. Well, I think it clarified our mind [the visit to Game Connection].* (Follow-up interview 3, Camilo, 28 March 2012)
Strategy making informed by interactions with ad-hoc contacts at Colombia 3.0 and consultants.	*I was sitting down with Luis to talk about […] the vision of the firm. He agreed and last week we talked about the strategic options […]. The strategic options relate to the observations at Colombia 3.0 and mainly the feedback and point of view given by [Jon K.] and [Alex M.] [the consultants].* (Log, Camilo, 6 November 2012)
Strategy making is informed by sensemaking with friend.	*Well, what [Tommy] told us was, "don't get into this. If this is your strategy cut out the publishers. Don't cooperate with publishers. You have to get directly involved, self-publish". Besides, by self-publishing you need to learn about user acquisitions, because this is another, another new thing for us [how to conduct user acquisition].* (Follow-up interview 7, Camilo, 10 December 2013)

Description	Exemplary quote
Strategy making informed by sensemaking with friend Tommy.	*[During Tommy's visit] we gained something that we were searching for a long time which was a, a, a plan, something more specific and, and a direction. […]. I think that we finally found the, the strategy was the most important thing. This was, was an important issue that we carried around for a long time without being able to define well.* (Follow-up interview 8, Camilo/Luis, 23 January 2014)

As seen from the examples above, knowledge and wisdom is able to inform strategy making. Furthermore, the new knowledge and wisdom gained is able to trigger a new cycle of learning by creating the awareness of a lack of knowledge or experience. For example, C2 Game Studio was able to learn about the design and development of mobile video games and even experienced some learning about the marketing of games within the App Store for the first game Cowboy Guns. Nevertheless, the entrepreneurs felt that more learning was required as Camilo commented:

> *We learned a lot, a lot [through working with the Publisher for the first game Cowboy Guns]. We learned a lot. Nevertheless, publishing one game isn't that much of experience but adds to the learning. We know that we have a weakness and that is the marketing part for this type of niche [mobile video games].*
> (Follow-up interview 1, Camilo, 26 July 2011)

In this particular case the entrepreneurs felt that they were still lacking experience and knowledge of how to successfully sell their games on the global market of video games. Therefore they decided to continue the relationship with the Publisher.

Wisdom too can cause changes to the strategic plan and trigger the start of a new cycle of learning. For example, the wisdom to finally pursue the self-publishing strategy also required the acquisition of a new type of knowledge as Camilo expressed:

> *Besides, by self-publishing you need to learn about user acquisitions, because this is another, another new thing for us [how to conduct user acquisition].*
> (Follow-up interview 7, Camilo, 10 December 2013)

All in all, the framework shows that entrepreneurial internationalization is a process driven by learning intentions based on the awareness of a lack of experience and knowledge. Networking is able to enhance and to accelerate the experiential learning of the entrepreneur. Thereby, networking and learning abilities amplify the enhancing character of networking on learning.

5.6 Synthesis of findings and framework characteristics

The process of theory construction created three outputs: 1) The narrative of the process of entrepreneurial internationalization focusing on learning and networking in their context (see Chapter 4); 2) the learning-networking interaction graph (see Figure 9); 3) the framework of learning-networking interactions (see Figure 11). The narrative and the graph are both intermediate outputs of analysis leading to the creation of the final framework. Nevertheless, each output serves a particular purpose:

The *narrative* helped me to understand the unfolding of learning and networking and their interaction in context and related to the different actors and places where they take place, similar to the unfolding of a theater play (Saldaña 2003). The narrative was also an important opportunity to validate the unfolding of the processes with my two informants which contributes to the credibility of my findings and an important base for the continued analysis. In the narrative the interested reader also finds a detailed and 'thick' description of the unfolding of the case that contributes to the transferability of the findings to other cases and contexts and, hence, contributes to the trustworthiness of my study (see Chapter 3.8 on the quality of the study).

The *learning-networking interaction graph* illustrates the dynamics of the interaction of the two processes over the developmental periods. While the processes of learning and networking stay separated during pre-foundation and foundation, they start to interact during pre-internationalization, and finally harmonize at the later stage of the post-entry phase. The first international market entry is characterized by learning from mainly one particular partner, while the subsequent post-entry periods are largely concerned with relationship building first and subsequent harvesting the learning from these relationships before the two processes synchronize. The synchronization of the two processes I see as a balance between learning and networking, that means that learning is increasingly accomplished with selected others as opposed to a vast variety of contacts or the usage of many different learning types simultaneously. The graph provides an overview about the intensity of learning and networking and how they

relate to each other during each period. But it is only the framework that ultimately provides insights into the particular details of learning and networking and their interactions.

The *framework of learning-networking interactions* resembles a wheel. The outer circle represents the process of experiential learning starting with the awareness about a lack of experience or knowledge. In order to close the knowledge gap, the entrepreneur engages in learning-by-doing which eventually leads to an emerging new experience. Through reflection the experience is finally transformed into new knowledge or wisdom. Subsequently, the newly created knowledge or wisdom directs further of what needs to be learned and starts a new cycle of experiential learning. The activity of interacting with others represents the center of the wheel and is followed by the prior engagement with others. The center connects to the outer wheel in form of spokes that represent the different roles of networking in the context of learning. Connecting the center through spokes that directly impact distinct elements of the experiential learning process highlights the enhancing role of networking on learning.

What characterizes my framework of learning-networking interactions during entrepreneurial internationalization?

The framework reveals a process of experiential learning with networking enhancing the learning. Networking implies both activities of engaging with others and interacting with others. Networking accelerates the process of experiential learning. The wheel represents a continuous and spiraling cycle of experiential learning enhanced through networking (i.e. the continuous cycling of learning is expressed in the framework and the spiraling cycle is represented in the graph).

Networking in the form of interacting with others directly impacts different elements of the process of experiential learning: a) The instructional role of the interaction with others impacts the element of doing within the process of experiential learning; b) the observational role impacts the emerging new experience; c) the informational role impacts on reflecting; d) the sensemaking role equally impacts on reflecting; e) the awareness creating role triggers awareness about the lack of experience/knowledge.

Learning drives networking and not vice versa. Engaging with others is strategically managed in order to accomplish the desired learning. This implies that relationships are deliberately initiated and also ended if the learning is not achieved with that particular contact.

Networking and learning abilities amplify the enhancing and accelerating character of networking on learning. The networking and learning abilities are gained through practice. A learning ability involves the ability of learning to learn and to rethink the learning strategy, that means, the entrepreneur develops

knowledge about when, how, and why certain learning strategies work. Learning strategies involves learning-by-doing (practicing) and learning from the experience of others (engaging and interacting with others).

In a rapidly changing environment such as the mobile video game industry, the entrepreneur constantly needs to learn, either to acquire new knowledge or to make sense of how the firm confronts changes. Sensemaking is part of the reflection process jointly accomplished with others. The current world-view of the entrepreneurs (i.e. knowledge about the industry) is constantly challenged by interacting with others (i.e. awareness creating and sensemaking role of interactions). This causes a conflict with what is currently known and ought to be learned. The dissatisfaction sets in motion a new cycle of learning.

Changes to the strategic plan occurs at the transition from one observed stage to the other (i.e. the time-bracketed periods). This means that the firm's stages of engagement in the global market or different internationalization periods are determined by the entrepreneur's capacity to reflect and learn. This implies, the faster the ability to (critically) reflect and learn the faster the position-building process in the global network of the mobile video game industry. Sensemaking with others leads to the creation of wisdom which directly impacts the strategy making of the firm.

In the chapter that follows I will discuss these findings and compare them with literature on international entrepreneurship but also draw on complementary literature from other fields with the intention to extend our current knowledge and provide novel insights into the learning-networking nexus during entrepreneurial internationalization.

6 DISCUSSION AND CONTRIBUTIONS

This chapter presents and discusses the contributions and implications of my findings. I also outline the limitations of the study as they relate to the boundary conditions of my framework and the data collection and analysis methods. I finalize the chapter with ideas for future research building on my contributions. The theoretical contributions I present and discuss in five sub-chapters. The title of each sub-chapter is the theoretical statement I derived from the empirical data and resembles a proposition. Propositions are useful in order to communicate a new theoretical position, punctuate the contribution, and augment the transferability of the concepts to other contexts (Whetten 1989; Gioia et al. 2013). Each theoretical statement is linked to a discussion of extant literature in international entrepreneurship, the particular insight gained from my study, the practical implication of the contribution, and the potential for future research. In order to facilitate reading, Annex 15 provides an overview about the findings, their implications, and future research.

6.1 Theoretical contributions

This chapter presents the theoretical contribution of my research. I compare the findings with extant research in the field of international entrepreneurship as outlined in Chapter 2 on the learning-networking relationships in international entrepreneurship. However, I also draw on distinct fields such as entrepreneurial learning, adult learning, management learning, organizational learning, organizational sensemaking, social network theory, capability development, generative mechanisms in process research, and strategy-as-practice in order to show how conceptualizations from these fields are reflected in my framework and therefore able to extend our current understanding or even provide novel insights on the learning-networking nexus in international entrepreneurship. Annex 15 provides an overview about the theoretical contributions.

6.1.1 The role of the network goes beyond a source and transmission of knowledge

The *common view* in international entrepreneurship literature is that the network of the entrepreneur functions as a source of knowledge. The early landmark studies by Coviello and Munro (1997) and Yli-Renko et al. (2002) showed that networks are an important source for knowledge about international markets and technology. Subsequent studies confirmed the importance of the new venture's international network of contacts as a source for knowledge (e.g., Baronchelli & Cassia 2014; Fernhaber et al. 2009; Gil-Pechuan et al. 2013; Musteen et al. 2014; Presutti et al. 2007; Yeoh 2004; Zhou et al. 2007).

If the network contacts of the international entrepreneur function as a source of knowledge, then the learning occurs through a transmission of that knowledge from the contact to the entrepreneur. As the literature review in Chapter 2 reveals, almost all studies that look at the networking-learning nexus base their assumptions on the fact that the network functions as a *source of knowledge or information*. Consequently, learning happens through the transmission of that already existing knowledge or information. Most studies however remain silent on the process of how knowledge is transmitted, let alone, the process of how new knowledge is created on behalf of the entrepreneur based on the external information received.

Only three studies do not limit the role of the network to a source of knowledge and to the transmission of that knowledge. Harris and Wheeler (2005) show that relationships not only fulfill the function of providing knowledge about markets and technology or further network contacts, the relationships also drive, direct, and manage internationalization. This is in line with the finding of Prashantham and Dhanaraj (2010) who posit that learning outcomes of social capital might influence a firm's strategy. Furthermore, Prashantham and Floyd (2012) emphasize the role of networks for aiding sensemaking besides transmitting information.

Bingham and Davis (2012, 611, emphasis in the original) remark that *"despite the importance of organizational learning, empirical research generally explores one particular learning process (e.g., "trial-and-error learning," "vicarious learning," "experimental learning," and "improvisational learning") while underexploring the question of whether different learning processes get used together in sequence."* An important implication of my framework is that different learning types are not used over time in ordered ways but are rather *interrelated and happen concurrently*. Experiential learning is seen as the constant and other forms of (social) learning (e.g., vicarious learning, learning from the experience of others, learning from external advice) are able to enhance the experiential learning of the entrepreneur but are *not able to substitute for it*.

The longitudinal, real-time setting allowed me to observe and follow-up on all possible learning and networking incidents and learning-networking interactions as they emerged in real-time. Therefore, my research was able to consider the widest spectrum possible of direct and indirect learning compared to research that limit itself to networking-learning interactions with a limited number of stakeholders, usually suppliers, customers, and competitors. The more integral approach of how I collected my data revealed five different roles that can be attributed to the network in the context of learning from the interaction with others (see Figure 11): Instructional, observational, informational, sensemaking, and awareness creating.

The *observational and informational role* of the network is most often discussed in international entrepreneurship literature. Organizational learning literature refers to vicarious learning where firms observe the actions of other firms and change their behavior based on the observations (Haunschild & Miner 1997). In entrepreneurship, Minniti and Bygrave (2001, 6) already state that the knowledge of how to be entrepreneurial *"can be acquired only through learning-by-doing or by direct observation."* In international entrepreneurship literature learning by observing others is a central aspect regarding the decision to internationalize early (De Clercq et al. 2011). As outlined in Chapter 2, many studies that look into learning-networking interactions build on organizational learning types but do not explicate the learning process per se. The fact that the entrepreneur has access to (international) network contacts often assumes vicarious learning through observation or imitation of the behavior of that contact (e.g., Fernhaber & Li 2010; Fernhaber et al. 2007; Schwens & Kabst 2009).

My framework makes a case for observational learning by interacting with others and shows how it directly impacts the emerging experience of the entrepreneur as part of the experiential learning cycle. Also in this case, observational or vicarious learning is not able to substitute experiential learning as for instance argued by Bruneel et al. (2010). Vicarious learning rather enhances the experiential learning of the international entrepreneur – an argument also put forward by Michailova and Wilson (2008). In fact, Michailova and Wilson (2008) is the only international entrepreneurship related paper I identified that proposes a direct link between vicarious observational learning and the experiential learning of the international entrepreneur.

The observational role of network interactions is mainly present during the pre- and early internationalization phases (see Figure 9). This observation from my own empirical data coincides with Bruneel et al. (2010) who argue that vicarious learning is mostly useful during early stages of internationalization and diminished once the firm acquires more experiential knowledge.

The *informational role* of network interactions corresponds to what the international entrepreneurship literature usually refers to as the network as a

source for information or knowledge. This is the most typical view regarding the network-knowledge nexus. My research shows that the interaction with others is indeed an important source for new information. My findings however indicate that the information obtained through interacting with others do not automatically create new knowledge but rather enhance the activity of reflection needed in order to transform the entrepreneur's experience into new knowledge. Therefore, information obtained from others is combined with the entrepreneur's existing experience and transformed into new knowledge (see Figure 11).

The process of reflection is not only enhanced by information obtained from others but also through sensemaking. The *sensemaking* role of interacting with others has not been addressed in the literature on international entrepreneurship that addresses the learning-networking nexus, with the only exception of Prashantham and Floyd (2012) who conceptually suggest that external sources of knowledge or social capital from international network relationships support the process of sensemaking of the international entrepreneur and therefore facilitates learning in high psychic distance contexts.

Sensemaking is considered a critical organizational activity (Weick 1995). It is an organizing process through which people try to understand issues or events that are novel, ambiguous, confusing, or unexpected. Maitlis and Christianson (2014) underline the fact that sensemaking has a variety of meanings and is also often used in a general sense without an associated definition. The authors, however, attribute the following *four characteristics to sensemaking* based on common characteristics of different sensemaking definitions: First, sensemaking is dynamic and of a transitory nature rather than constantly present. Second, sensemaking is triggered by cues in form of issues or events that are somehow confusing or surprising. Third, sensemaking is considered a social activity influenced by the presence of others. Fourth, sensemaking is linked to action that people take in order to make sense of the situation. Therefore, action leads to an enactment of the environment that people try to understand.

The sensemaking role that I ascribe to the interaction with others within my proposed framework is linked to the activity of reflection of the experiential learning cycle of the international entrepreneur. Reflecting refers to the mental process of transforming experience into knowledge or wisdom. Especially sensemaking stimulated by the interaction with others leads to the creation of wisdom that subsequently informs strategy making.

The sensemaking I observed in my empirical data are triggered at particular points in time, especially during and after the visit of industry events where Camilo confronted the firm's current strategic plan with the observations made at the event, often in interaction with consultants and friends (i.e. *sensemaking is a dynamic, recurrent process*). The cues gained from the interaction with others at industry events confront the entrepreneur´s own mental model with the

perceived new reality of the industry environment and creates confusion (i.e. *sensemaking as triggered by cues from the environment*) – the confusion which is subsequently tried to be resolved in a sensemaking/reflection process with consultants and industry friends (i.e. *sensemaking as a social activity*). The resulting action from sensemaking consists in the modification of the firm's strategic plan based on the reframed mental models of the entrepreneurs (i.e. *sensemaking leads to action and the enactment of the environment*). Therefore, I consider the sensemaking observed in my empirical data to be consistent with sensemaking as proposed in organization literature.

Sensemaking in my framework directly links to experiential learning. My framework is therefore able to contribute to our understanding about the *sensemaking-learning nexus*. Catino and Patriotta (2013, 462) remark that *"[w]hile learning and sensemaking are often considered as kin concepts, a rather limited number of studies have addressed the interaction between learning and sensemaking and its effects on organizational performance."* Although my framework does not explain the performance of the internationalizing new venture, it shows that sensemaking in interaction with others aids the process of reflection and thereby enhances the experiential learning of the international entrepreneur. I therefore consider sensemaking as part of the experiential learning of the entrepreneur.

Jones and Casulli (2014, 62) claim *"that experience as a sense-making or reasoning process is under-theorized in [international entrepreneurship]"*. The authors put forward a view of comparison-based reasoning in order to better understand the reasoning how entrepreneurs draw on their experience to make sense of uncertain, novel, and complex situations during entrepreneurial internationalization. The reasoning approach the authors draw on resembles sensemaking with a focus on the cognitive aspect of reasoning and less on the social, intersubjective role of the sensemaking process as put forward in my framework.

As previously mentioned, my framework suggests that the action that results from sensemaking leads to modifications and changes in the strategic plan. Therefore, the type of sensemaking my entrepreneurs engage in have a future-oriented character. Sensemaking has typically be portrait as a retrospective activity. The future-oriented or prospective character of sensemaking has gained recent attention and is still in an ongoing debate and considered a fruitful area for future research (Gephart et al. 2010; Maitlis & Christianson 2014). Future-oriented sensemaking uses past and present temporal states in order to provide context for proposed future states. This resembles the *future-oriented sensemaking* within my framework by combining past experience with present information obtained through the interaction with others and project them on to the strategic plan that guides future actions.

Altogether, the type of sensemaking depicted in my framework corresponds to a social activity that is stimulated by and happens in interaction with others, is future-oriented, and enhances the experiential learning by impacting the reflection of the international entrepreneur. The sensemaking role of networking extends our current knowledge on the learning-networking nexus by showing *how sensemaking actually takes place* in order to impact the experiential learning of the entrepreneur leading to modifications and changes in the strategic plan of the internationalizing venture.

Besides the sensemaking role of the interaction with others, the instructional and awareness creating functions are not mentioned in the international entrepreneurship literature that focuses on the learning-networking interactions. By the *instructional role* of the network I refer to the situation where the entrepreneur receives and directly implements the instructions received from the network contact. For instance, during the cooperation with the Publisher´s producer, C2 Game Studio received important instructions in order to develop the game further before its launch in the App Store. Receiving instructions I differentiate from receiving advice. Receiving advice I rather associate with the informational role. Receiving instructions directly impacts the 'doing' of the entrepreneur without going through the activity of reflection, whereas receiving advice rather impacts the reflecting of the entrepreneur within the experiential learning cycle (see Figure 11). Hence, instructions I consider as the unreflected implementation of advice and recommendations received through the interaction with others.

Engaging in conversations with potential clients and experts at industry events, Camilo was able to become aware about new trends in the global video game market such as the emergence of mobile video games, the shift towards Android-based games, and the importance to integrate analytics and monetization features into the games. Becoming aware about new trends not only created awareness about their importance but also about the lack of knowledge and experience regarding the implementation of these trends within the firm's process of product design and development. The current literature does not discuss the *awareness creating role* of network interactions on the lack of the knowledge and experience-base of the entrepreneur. What the literature in international entrepreneurship discusses are the role of the network for opportunity recognition (Mainela et al. 2013) and the sensing of trends and opportunities in the environment (Al-Aali & Teece 2014).

The awareness creating role depicted within my framework is less concerned about how international opportunities are realized or enacted but how opportunities are sensed that subsequently lead to their enactment driven by the curiosity and desire to acquire the relevant knowledge to realize the opportunity detected. The awareness creating function is therefore more similar to the activity

of sensing as depicted in the dynamic capabilities framework (Teece 2007; Al-Aali &Teece 2014). According to Teece (2007, 1319) *"dynamic capabilities can be disaggregated into the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets."*

The sensing of opportunities requires a constant alertness on behalf of the entrepreneur about new emerging trends. The entrepreneur within my framework interacts with others, that is, he or she engages in conversations with potential clients and industry experts at mainly industry events and obtains relevant information about trends. My framework therefore makes a point for social interactions in the activity of sensing new opportunities. Ozgen and Baron (2007) highlight a similar point in their research on opportunity recognition where they link the active participation in professional forums to a greater alertness about new business opportunities.

The dynamic capability framework considers the sensing and seizing of opportunities as an entrepreneurial act. As Teece (2007, 1346) remark:

> *Entrepreneurship is about sensing and understanding opportunities, getting things started, and finding new and better ways of putting things together. It is about creatively coordinating the assembly of disparate and usually cospecialized elements, getting 'approvals' for nonroutine activities, and sensing business opportunities. Entrepreneurial management has little to do with analyzing and optimizing. It is more about sensing and seizing—figuring out the next big opportunity and how to address it.*

At this point I do not discuss my framework with the dynamic capability framework as put forward by Teece. I will do so in Chapter 6.1.3 when I discuss the enhancing character of networking and learning abilities. What I would like to highlight for the moment is the fact that the awareness creating role of my framework resembles the sensing activity as a dynamic capability and that the sensing is rooted in social interactions. Since sensing is intimately linked to the activity of engaging and interacting with others, a networking ability greatly enhances the awareness creating role of networking as I will discuss in Chapter 6.1.3.

Altogether, my framework shows that the role of the network goes beyond the common view in international entrepreneurship literature of the network as a source of knowledge. The interaction with network contacts does not only allow access to information, it is also an opportunity to learn from receiving instructions, learning from observations, engage in sensemaking, and create

awareness about trends and missing experiences and knowledge. My framework therefore is able to extend our current knowledge on the learning-networking nexus by providing a more diverse and also a more holistic view on learning and networking interactions. Especially the sensemaking role of network interactions has not received much attention in the international entrepreneurship literature. The future-oriented type of sensemaking of my framework is able to explain how learning outcomes of social capital influence a firm's strategy as posited by Prashantham and Dhanaraj (2010) and makes a strong case for the importance of sensemaking in order to direct the firm's strategy in a technologically fast-changing environment (Harris & Wheeler 2005; Prashantham & Floyd 2012).

6.1.2 The network is purposefully managed in order to achieve the desired learning

The empirical evidence makes a strong case for the *prevalence of learning intentions* and efforts over networking. The central tenet of the proposed framework is that learning drives networking and not vice versa. The decision to engage with others mainly depends on the perceived lack of experience and knowledge triggered through the interaction with others or the learning outcome in form of the knowledge or wisdom created.

For instance, the intentionally planned initiation with the UK-based publisher was a result of the lack of perceived experience with the launch and sale of mobile video games through the App Store. The subsequent successful cooperation with the Publisher based on the positive learning experience led to its continued engagement, while the negative experience in terms of learning outcomes with the same publisher for the second game resulted in discontinuing the relationship.

The planned initiation of a contact, and the continuing or ending of a relationship are different forms of engaging with others. Other forms consist of spontaneous ad-hoc initiation, being introduced to someone, actively building relationships, reactivating them, or inviting someone (see Chapter 5.5.3). All forms of engaging with others are clearly driven by learning intentions, for instance, in order to receive feedback and advice on the features of game prototypes, to make sense of past cooperation and learning experiences, to acquire particular type of knowledge of how to market games globally.

As the literature review revealed, the international entrepreneurship literature usually assumes *network contacts to be preexistent* (see Chapter 2.3). A notable exception is Loane and Bell (2006), classified as a Quadrant 2 paper in the lit-

erature review, who addresses the creation of new networks for knowledge acquisition and network development as a continuously ongoing process. Even Quadrant 4 papers that consider the network as a dynamically evolving phenomenon assume a preexisting network from where new relationships evolve. Sharma and Blomstermo (2003) for instance argue that internationalization knowledge is gained through existing ties and that existing ties are intermediaries for new, indirect ties. Consequently, if the firm increases its commitment to a new market indirect ties might become direct ties and vice-versa. Freeman et al.'s (2010) model of rapid knowledge development also assumes the creation of newly formed business and social networks to be a result of established networks.

As the literature review revealed (see Chapter 2.4) most studies on the learning-networking nexus recognize the importance for future research to investigate the *network dynamics* related to the learning of the entrepreneur. That is, how new networks are created for the purpose of knowledge acquisition, even from scratch, how the network is configured and reconfigured during the process of learning, and the role of non-business relationships for learning.

I suggest the empirical evidence of my research shows how *learning intentions drive networking* which sometimes requires the intentional planned initiation of new relationships from scratch, the continuation with existing contacts and the ending of relationships, etc. Again, the decision and action of the entrepreneur to engage with others is driven by the perceived lack of knowledge or learning outcomes based on prior experiences.

The graph on the learning-networking interactions (see Figure 9) reveals different intensities of learning and networking and their relationship over time. Especially the period of 'Engaging with the global community' is marked by more intense networking than learning activities. Although the networking activities where more intense during this period, the networking intentions where clearly driven by the desire to learn from experienced others compared to the learning focused on one particular partner (the Publisher) during the previous period. The intense networking efforts in one period let to the consolidation of new network contacts which subsequently allowed intense learning from the consolidated new network contacts (the shift from period 'Engaging with the global community' to 'Tying international game experts to product and business development'). The synchronization between learning and networking during the following periods reveals learning from particular, selected, others. Although the networking intensity varies between different periods of developmental progressions, the networking activities are always driven by the expected learning to be achieved by the entrepreneurs. Issues of network configuration and re-configuration respond to the learning intentions of the entrepreneur.

Hence, relationships are *purposefully managed* in order to achieve the desired learning.

I suggest the results of my research to be in line with findings from Loane and Bell (2006) and Fletcher and Harris (2012) who propagate that the *intentional creation of new relationships* is an important source of knowledge. My research also coincides with Prashantham and Dhanaraj (2010) who advocate that conscious action is needed in order for the entrepreneur to manage the network and to take advantage of network learning opportunities. The conscious action relates in my case to the learning intention or the desire to learn that trigger different forms of engaging and interacting with others. Beyond our current understanding, I consider my research to shed new light on to the *network-building activities* during the process of entrepreneurial internationalization as asked for by Loane and Bell (2006). As mentioned above, the network-building activities are driven by learning intentions and the outcome of previous learning.

By linking network development to the learning of the entrepreneur, my research is also able to provide insights into *network dynamics* (Coviello 2006; Hite & Hesterly 2001). The empirical evidence shows that for early internationalization the entrepreneurs mainly relied on a single partner (the Publisher). The hands-on, learning-by-doing approach of the entrepreneurs during that period was enhanced through the instructional and observational role of the interactions with the partner. The post-entry period was then characterized by, first, making new contacts and building a vast variety of relationships, and, subsequently, by consolidating these contacts in more stable relationships. The experiential learning during the post-entry period was rather enhanced through the informational and sensemaking role of network interactions.

What does this mean for network theory? Hite and Hesterly (2001) propose the network of a firm to evolve from an initially identity-based, path-dependent network during emergence towards a more calculative, intentionally-managed network during early growth. This shift comes along with different resource needs and different strategic contexts during different development phases of the new venture. My empirical data confirm the more *calculative, intentionally-managed network* over all development periods. *Identity-based or path-dependent networks* were rather rare but existent. Luis's friends from former study and work experiences, Stephen and Tommy, correspond to the identity-based network that the entrepreneur developed during the pre-foundation period. Although *dormant contacts*, these relationships were re-activated during the post-entry period. Path-dependence occurred where existing contacts provided access to further contacts. This was the case when Camilo met the consultant Alex M. during a lunch invitation from a friend and CEO of Effecto Studios at the

industry event Casual Connect in the U.S. Furthermore, the contact to the consultant Jon K. emerged from a meeting Camilo conducted with a potential client at the industry event Game Connection in the U.S.

Therefore, my results contrast Hite and Hesterly (2001) and are more in line with findings from Coviello (2006, 725) who propose that *"[t]he young INV's network will be both path-dependent and intentionally managed at all three stages of early evolution: concept generation, commercialization and growth, including internationalization."*

From a learning perspective I suggest that strong, *identity-based contacts* such as Tommy and Stephen contribute significantly to the sensemaking role of the experiential learning of the entrepreneur whereas *calculative contacts* such as ad-hoc contacts at industry events are more associated with the informational role of network interactions. Ad-hoc contacts, for instance, correspond to weak ties (Granovetter 1985) and therefore provide less redundant information and are better able to bridge structural holes of the network (Burt 1992).

Since learning intentions and expectations drive networking, my framework is also able to explain *discontinuities in relationships* if they do not fulfil prior learning expectations. Therefore, my research corresponds to findings of Prashantham and Dhanaraj (2010) who make a plea for creating more awareness about discontinuities inherent in social capital. In fact, most studies assume that networking activities follow a linear process of a continuous increase in social capital and network contacts over time.

All in all, learning intentions drive activities of networking. The learning intentions determine if new relationships are build, existing relationships continued or ended. The fast-changing technological environment implies the continuing need for new knowledge. Therefore, more calculative, intentionally-managed networks are able to deal with the different arising knowledge needs and identity-based networks are able to make sense of the past and provide orientation for the future.

6.1.3 Networking and learning abilities amplify the enhancing character of networking and learning

My framework considers two types of abilities: Networking and learning abilities. I like to call them abilities in order to emphasize on *individual or team-level abilities* in contrast to capabilities at the firm-level. These abilities emerge and are sharpened through *practice*. That means, the more the entrepreneur engages and interacts with others, the more skillful he or she becomes in networking and the more the entrepreneur gains experience and engages in reflection, the better he or she is able to critically reflect and learn. This cumulative view

coincides with Zahra et al. (2006) who posit that capabilities strengthen with their use.

From a longitudinal perspective, the networking and learning abilities become most evident during post-entry starting with the period of 'Engaging with the global community' (see Figure 9). This indicates that abilities emerge over time and need to be developed which I will discuss more profoundly within this chapter.

As the data analysis revealed, experience and reflection have a cumulative character (see Chapter 5.3 on the deliberation). That means, the more the entrepreneur gains experience and engages in the activity of reflecting about past experiences the more he or she sharpens the ability to reflect critically and to learn. For instance, the ability to reflect more critically about their own learning, let the entrepreneurs to become more critical regarding the feedback and advice they received from others and therefore more selective with whom to interact in the future. Critical reflection therefore has the ability to alter the entrepreneurs´ learning strategy and eventually the networking strategy.

There are few studies on networking capabilities in the international entrepreneurship literature (Mort & Weerawardena 2006; Torkkeli et al. 2012; Torkkeli et al. 2016). Mort and Weerawardena (2006) make a point for dynamic networking capabilities, that is, the abilities of the entrepreneurs to create, configure and reconfigure their networks in order to enact their strategic vision for internationalization. Torkkeli et al. (2012, 2016) take on a firm-level view of network competence for SME internationalization building on Ritter et al. (2002) whereby network competence relates to the ability of the firm to develop and manage relations with key partners and to deal effectively with the interactions among these relations. The findings of Torkkeli et al. (2012, 2016) relate to a positive relationship between the SME´s network competence and its propensity to internationalize, to grow internationally, and its performance in international markets. Studies on networking-learning interactions that take on a capabilities perspective are also scant within the international entrepreneurship literature (Evers et al. 2012; Peiris et al. 2012; Schweizer 2013; Weerawardena et al. 2007). Schweizer (2013, 100) makes clear that:

> *[…] when explaining the importance of networks on SMEs' internationalization, the focus should be not only on whether the firm has access to adequate relationships but also on the resources and capabilities necessary to alter existing relationships. Access to merely adequate relationships is not a sufficient precondition for internationalization; they may need to be altered and formalized, and the process of doing so also calls for further research.*

Schweizer propagates a view that the sole access to the (international) network is not enough. The entrepreneur needs capabilities in order to leverage these relationships for internationalization. A capabilities view on accelerated internationalization has earlier been put forward by Weerawardena et al. (2007). The authors propose a conceptual framework building on the dynamic capabilities view of strategic management and organizational learning. Networking and learning capabilities are especially relevant in order for the firm to achieve accelerated internationalization. The focus is on learning and networking processes that allow to continuously revise and create knowledge instead the firm to rely on already existing knowledge. The process character of knowledge creation is also central to Peiris et al.´s (2012) integrative model of international entrepreneurship. They view international opportunity development as a process of learning, knowledge creation, and capability application. Entrepreneurial capabilities allow to reconfigure the firm and network resources in order to adapt to the requirements of a changing environment.

My framework confirms the importance of learning and networking capabilities for entrepreneurial internationalization. However, it goes beyond our current understanding by showing how these capabilities are actually developed and how they contribute to the dynamic reconfiguration of knowledge and network resources. My research is therefore able to contribute to a better understanding about *capability development* in the (international) new venture (Zahra et al. 2006).

What does the networking ability mean? Networking abilities are especially relevant for the awareness creating, informational, and sensemaking role and less for the instructional and observational role. Being skillful with how to approach others, how to engage them into conversations, how to conduct conversations, and how to sustain these relationships, allow the entrepreneur to capture important information on trends, receiving feedback and advice regarding the development of new products, and aids sensemaking. Observing the actions and behaviors of others usually do not require much networking skills. Receiving instructions usually occurs within an existing contractual relationships and does not require much networking skills either for interaction, such as the relationship between C2 Game Studio and the Publisher.

Since the informational and sensemaking role of network interactions directly enhance the reflection of the entrepreneur, the ability to network is of significant importance for the rapid development of new knowledge and wisdom. As previously mentioned, the ability to network is based on practice, that is, the continued engagement of approaching and interacting with others. Therefore, it is important for the entrepreneur to actively participate in and to proactively seek out networking opportunities.

What does the learning ability mean? Learning constitutes a process whereby knowledge is created through the transformation of experience (Kolb 1984). It is the action of reflecting that intermediates between experience and creation of knowledge or wisdom. Therefore, the ability to learn is directly associated with the ability to reflect. The process of critical reflection constitutes a heightened learning ability of the entrepreneur and critical reflection is positively influenced through the interaction with others.

The literature on organizational learning distinguishes between different levels of learning (Fiol & Lyles 1985). *Lower-level learning* is learning from repetitive past behavior. It signifies learning at the surface or at the routine level. Instead, *higher-level learning* focuses on a development of an understanding of causation which is able to change the frame of reference or underlying assumptions of learning. Argyris and Schön (1974) refer to single and double-loop learning. *Single-loop learning*, as lower-level learning, is an adaptive form of learning which gradually modifies existing strategies and assumptions of the individual or the organization. *Double-loop learning* instead, as higher-level learning, questions the underlying values that guide action and is therefore able to change an individual's theories for action. Senge (1990) populized the terms of adaptive and generative learning. Whereas *adaptive learning* involves coping with the environment in new and better ways, *generative learning* requires to develop new ways of looking at the world. Gibb (1997, 17) introduced the term of generative learning to the entrepreneurship literature:

> *This learning [generative learning] entails not only a process of adaptive learning in order to cope with change and survive but also what has been deemed 'generative' learning which embodies the capacity to create and 'bring forward' experience, rather than wait for (and learn from) it.*

Based on my previous argumentation of the experiential learning cycle of the entrepreneur, I suggest that generative learning is a learning ability that leads to wisdom and stems from sensemaking with others. The wisdom itself nurtures the strategy of the firm. Generative learning and sensemaking are related concepts since both rely on the interaction between the past and the future in order to trigger and shape further intention and action. The retrospective and prospective elements are both inherent in generative learning and sensemaking. *I therefore argue that in a situation of generative learning, which requires a critical reflection process of sensemaking with others, the entrepreneur engages in generative sensemaking.* For example, the interaction with friend and industry expert Tommy triggered a new way of seeing the world by re-thinking past cooperation experiences with publishers and consultants and the acceptance of the

freemium business model by Luis. The wisdom gained through the interaction with Tommy significantly altered the future strategy of the firm in terms of how to engage in future learning and the type of business model to pursue. The combination of the generative-type of learning and the prospective sensemaking in this situation coins the term of generative sensemaking.

In literature on entrepreneurial learning, Cope (2005) suggests the concept of generative learning to entrepreneurial activity as of significant potential for future research. I agree in that future actions and learning of the entrepreneur seem to be significantly influenced by the critical reflection about past experience and current information. For international entrepreneurship this means that generative learning and more specifically generative sensemaking seem to have an important role to play for the accelerated learning about internationalization. Both networking ability and learning ability in the form of critical reflection enhances generative sensemaking. The learning and networking abilities therefore contribute in order for the entrepreneur to *leverage the learning opportunities* from the network (Schweizer 2013; Prashantham & Dhanaraj 2010).

Bringing forward past experiences under consideration of current information obtained through interaction with others leads to the creation of wisdom and informs strategy making. The new knowledge or wisdom gained has an impact on how the entrepreneur pursues further learning. This might imply the decision to engage in more learning-by-doing alone, to continue with existing relationships for learning, to end relationships, to seek out new contacts, etc. *The process of deliberately changing learning strategies and to reconfigure the network for that purpose resembles a dynamic capability.*

A *dynamic capability* can be understood as "the capacity of an organization to purposefully create, extend, or modify its resource base" (Helfat et al. 2007, 4). The resource base in my research constitute the knowledge and wisdom created and the network of contacts of the entrepreneurs. Hence, the ability of the entrepreneur to create, extend, or modify the venture´s knowledge base is therefore a dynamic capability which I attribute the name of a learning ability directly related to the activity of reflecting of the experiential learning cycle of the entrepreneur. Likewise, the ability of the entrepreneur to create, extend, or modify the firm's network of contacts is another dynamic capability which I label networking ability in my framework. Since the entrepreneurs purposefully manage the network in order to achieve the desired learning (see Chapter 6.1.2), the conscious action of the entrepreneurs drive the reconfiguration of the venture's resource base in terms of knowledge and network configuration.

What type of knowledge is reconfigured by the dynamic learning capability?

My empirical data show that learning creates knowledge that is directed toward the design and development of mobile video games, the marketing of these games, and business development and cooperation strategies. This knowledge

determines for instance the routines the entrepreneurs develop and employ in order to design and develop games or the way they cooperate with partners in order to market and sell their products. The literature on dynamic capabilities talks about substantive capabilities, meaning the routines employed for problem solving (Zahra et al. 2006; Winter 2003). In that case, the ability to change the way the firm solves its problems relates to a dynamic capability. That is, a higher-order dynamic capability that alters the substantive lower-order capability. For instance, employing new techniques for game design or trying out new forms of cooperations with publishers is a result of the learning ability as a higher-order dynamic capability. Similarly, changing and trying out new ways of how to engage and interact with others is a result of the networking ability as a higher-order dynamic capability. Therefore, *the learning and networking abilities in my framework represent higher-order dynamic capabilities that regulate the creation of knowledge or wisdom and consequently impact what and how things are accomplished in the new venture*.

How do these dynamic capabilities emerge? Through practice and the willful and purposeful action of the entrepreneurs (see chapter 6.1.2). I coincide with Zahra et al. (2006, 924) to *"view dynamic capabilities as the abilities to reconfigure a firm's resources and routines in the manner envisioned and deemed appropriate by the firm's principal decision-maker(s)."* Such definition focuses on the ability to reconfigure resources as desired and not on financial performance and emphasizes on the strategic choice perspective (Child 1997).

Therefore, an important contribution of my research is to illustrate empirically of *how dynamic capabilities emerge in a new venture and how they are able to reconfigure the resource base of the firm in a concrete way on the micro-level*. Research on dynamic capabilities has been criticized to be mainly focused on conceptual understanding and for their lack of understanding at the micro-level (Vogel & Güttel 2013).

The learning ability as a dynamic capability is directly related to the entrepreneur's capacity to reflect critically. Wisdom that is able to significantly alter the strategy of the firm results from generative sensemaking with others and is a form of higher-order learning. In order to understand how the dynamic capability of generative sensemaking develops, it is important to understand the context out of which the capability emerges. In this sense, the literature on entrepreneurial learning relates higher-order learning to be triggered by critical learning events or critical experiences (Cope & Watts 2000; Cope 2003; Deakins & Freel 1998; Rae & Carswell 2000). Entrepreneurial learning is seen to be not only a process of continuous, cumulative character but also characterized by discontinuous, non-linear learning events that significantly trigger higher-order entrepreneurial learning. These learning events, episodes, or experiences are often related to negative experiences such as financial losses, marketing mistakes,

confrontations with partners and employees, rupture of relationships (Cope & Watts 2000).

The empirical evidence of my data shows that the participation in industry events are important triggers for reflection. At industry events the entrepreneurs confront their current world-view with trends in the industry which causes a cognitive dissonance about the way things are done and the way things should be done in the near future in order to stay in line with the latest developments in technology and consumer behavior. In order to reduce the cognitive dissonance, the entrepreneurs engage in sensemaking with consultants and friends. However, reflection does not always relate to critical reflection that touches underlying assumptions and changes of world views. My empirical data show that critical reflection emerges and matures over time along with the accumulation of experience and that the process of reflecting is increasing accomplished with others (see Chapter 5.3). It is therefore the combination of the cognitive dissonance triggered through event participation, the accumulated past experience, and the increasing interaction with others that sharpens the ability to reflect critically. This is somehow understandable since the entrepreneur first needs to construct a particular world-view about the industry before it can be changed, especially in the case where the entrepreneur does not possess significant prior industry experience or where changes in the environment happen extremely fast.

Thus, the development of the dynamic learning capability as related to critical reflection is triggered by particular events and is sharpened over time through the increasing interaction with others. The gradual development of learning and critical reflection abilities indicates the existence of what Helfat and Peteraf (2003) coined the capability lifecycle that corresponds to the founding, development, and maturity of capabilities.

I argue that dynamic capabilities themselves are dynamic in their development and that they experience different intensities over their lifecycle. This I consider a contribution of my research to the concept of dynamic capabilities. Namely, the dynamics of dynamic capabilities. As previously argued, networking enhances the experiential learning of the entrepreneur. Similarly, the dynamic capability of networking – the networking ability of the entrepreneur – enhances the development of learning as a dynamic capability. Subsequently, the dynamic learning capability alters the networking capability which points at the cyclical nature and interplay of different dynamic capabilities. Extant literature discusses the interplay between substantive, entrepreneurial capabilities, and dynamic capabilities (Zahra et al. 2006; Aramand & Valliere 2012) but not the interplay between different dynamic capabilities.

Altogether, the networking and learning abilities as depicted in my framework make it possible for the entrepreneurs to leverage the learning opportunities that stem from networking. These abilities do not appear by themselves –

they need to be developed through practice. That is, they require the continued engagement and interaction with others in order to develop and flourish. Since both networking and learning ability have the potential to reconfigure the learning and networking of the firm, I consider them as dynamic capabilities. More specifically, they become higher-order dynamic capabilities through practice, accumulation of experience, and triggered during particular episodes. The process of reflecting for instance does not necessarily constitute a dynamic capability. Only critical reflection as higher-order learning is able to alter subsequent learning and networking. My research therefore contributes to a better understanding about the development of dynamic capabilities and how they impact the resource configuration of the firm at the micro-level. I am also making a case for the dynamics of dynamic capabilities through capability development and the cyclical nature and interplay between dynamic capabilities which I will discuss in more detail in the following chapter.

6.1.4 Experiential learning is a continuous and spiraling cycle

My suggested framework of learning-networking interactions is depicted as a cycle of experiential learning enhanced through activities of networking. Learning is a continuous process that starts with the desire to learn in order to accomplish something new like creating video games. The subsequent learning-by-doing can be greatly enhanced through the interaction with others, that is, through activities of networking. The resulting knowledge from learning-by-doing and enhanced through the interaction with others is able to inform further strategy making and feeds back into the awareness about new knowledge and experiences to be acquired in order for the firm to develop its business in the global market of video games. Hence, the outcome of learning triggers new learning and drives subsequent activities of networking.

Many articles within Quadrant 4 consider – at least conceptually – activities of learning and networking as *continuous, cyclical, and interacting based on feedback loops* (see Chapter 2.3). The knowledge that is acquired through learning from the firm's changing network of relationships leads to further opportunities for networking and learning, and so on. Thus, the dynamics of learning and networking is not only based on interactions between the learner and the network but also inherent in the continuous, cyclical process based on feedback loops from the learning outcomes achieved through activities of networking.

Casillas et al. (2009) propose that the experiential learning from international market entry provides a new source of knowledge that feeds back into the firms existing knowledge base and subsequently directs the search for new knowledge either internally or externally through the network. Freeman et al. (2010) model

of rapid knowledge development proposes a feedback loop between the knowledge developed from business and social networks and further development of new networks. The authors however leave it open for future research to investigate the feedback loop. Sharma and Blomstermo (2003) emphasize on the co-evolutionary nature between the international operations of a born global and their network ties. Existing ties provide access to new knowledge that makes international operations possible. In turn, operating internationally provides access to new ties and further knowledge, and so on. In a similar turn, Johanson and Vahlne (2009) in their revised process model emphasize on the interaction between the firm's current knowledge based on its network position and further learning through relationship and trust building in a path-dependent manner. Welch and Welch (1996) propose a feedback-loop between the outcomes of the internationalization process in terms of learning and network development and further internationalization.

All the above papers have in common that they conceptually predict the cyclical nature of learning and networking but they *fail to show it empirically*. They leave it open for future research to investigate the possible feedback loop that exists between the two processes.

My framework advances our understanding on the cyclical nature and feedback-loop between learning and networking. I am able to show that the new knowledge created based on interaction with others triggers new learning and further activities of networking. Since the network is purposefully managed in order to achieve the desired learning, path-dependence in terms of networking is absent. Certainly, the entrepreneur in some situations takes advantage of networking opportunities based on existing contacts (for instance of being introduced to someone by an existing contact) but the entrepreneur rather manages intentionally with whom to network. As discussed in the previous chapter, what regulates the continuous cycle of experiential learning are the dynamic (cap)abilities. Learning abilities in form of critical reflection determine further learning and networking. And networking abilities in form of being skillful in engaging and interacting with others determine the type of learning from others (for instance, the spontaneous interaction with ad-hoc contacts at industry events requires heighted networking abilities than interacting with an existing partner).

An important consideration is also that the creation of new knowledge does not automatically lead to further networking. It is the conscious and willful action of the entrepreneur to keep the cycle going by constantly reconfiguring the firm's resource-base in terms of knowledge and network as discussed in the previous chapter on dynamic capabilities.

I use the metaphor of a wheel in order to illustrate the experiential learning cycle and spikes that support the outer wheel as the different enhancing roles of

networking on experiential learning. Using the metaphor of the wheel, I ask: *What triggers the wheel's movement and what keeps it running?* Answering this questions aims at the detection of the *underlying mechanisms*. Van de Ven (1992) and Van de Ven and Poole (1995) propose four ideal types of process theories or motors for explaining the underlying mechanisms that causes and drives development and change in organizations. Each process theory is based on a fundamentally different logic that explains the progression of a particular event sequence, and, hence, constitute the generative mechanism. These are, the imminence of change in a preconfigured program for the life-cycle theory, the progression towards an envisioned end-state in the case of teleology, the contradictory forces of thesis and antithesis in dialectics, and natural selection within the evolutionary theory of change. The authors contend that all change processes within organizations can be traced back to one or several of these ideal types. Although cases might exist where change is explained by only one ideal type, in most cases it is the interplay of several process theories over time and different levels of analysis that explain the observed changes.

The dynamics inherent in my framework I particularly associate with the interplay of the teleological motor and dialectical progressions. I do so due to the constructive mode of change that is associated to these two particular type of motors which I explain further in the following.

Processes of change happen at different levels of analysis and different mode of change (Van de Ven & Poole 1995) (see Figure 12). For example, processes of learning impact the individual entrepreneur, the entrepreneurial team, and the new venture. New technological developments do not only impact the larger population of firms active in a particular sector but also the individual firm. Thus, change can occur within a single entity or in interaction with multiple entities. The evolutionary and the dialectical process theories operate on multiple entities, whereas the life-cycle and teleological process theories operate on a single entity. The evolutionary dynamics is played out among a population of firms competing for scarce resources, and, hence, the process theory has no meaning on the level of the individual firm. The dialectical theory too requires the interaction of at least two entities in order to set in motion the confrontation between thesis and antithesis. This, for instance, might happen between the entrepreneur and ad-hoc contacts he or she engages at industry events as a dialectical confrontation resulting in conflict and synthesis. Life-cycle and teleology operate on a single entity. The developmental change that is set in motion in a life-cycle or teleological motor comes from within the entity. Although environmental influences can impact the direction of development, they are considered secondary to the internally driven change process. Thus, developmental changes within a single entity such as the new venture seems best to be explained by a life-cycle or teleological process theory, whereas change processes

between multiple entities require an evolutionary or dialectical motor for explanation.

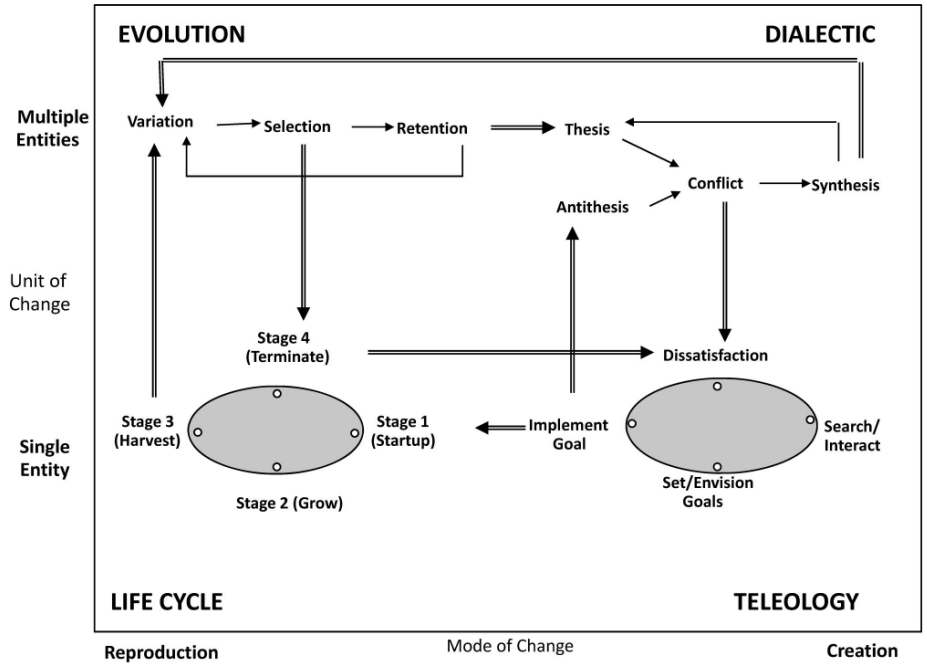

Figure 12 Possible interrelationships among the change motors (Van de Ven & Sun 2011)

The generative mechanisms of the different process theories are also distinguished by their mode of change (Van de Ven & Poole 1995). The development of the entity within the life-cycle theory follows a prescribed and regulated path defined at the onset of the cycle. The prescribed mode of change refers to small, incremental adaptations that continuously build on previous states. This triggers change within an existing framework – so called first-order change (Watzlawick et al. 1974). Besides the life-cycle theory, evolutionary theory also operates on a prescribed motor. New variations emerge gradually building on earlier retained variations progressively selected-out. Second-order change, however, breaks with the past triggering change in basic assumptions and world-views. This constructive mode of change generates novel forms which often appear to be discontinuous and unpredictable departures from the past. Teleological and dialectical motors operate on a constructive mode of change. The intentional nature and the purposeful envisioning of new goals independent from the past is able to trigger second-order changes within the entity. This also happens to be the case in a change process driven by a dialectical motor. The emerging

synthesis often produces a revolutionary change that breaks with the past and leads to novel forms of activities or entities.

The different types of changes that the entrepreneur experiences under such changes might have different impacts on the person and the firm. As Van de Ven and Poole remark (1995, 522), *"the uncertainty experienced by people undergoing such changes [first-order change] is relatively low, because they typically perceive sufficient continuity to anticipate and discern the direction of change."* Second-order change, however, creates high uncertainty and the people experiencing these changes need to make sense of them.

Related to the characteristics of my framework, I argue that it follows a *constructive mode of change* giving way to novel forms of acting by breaking with the past. Hence, the teleological and the dialectical process theories seem to best explain what triggers the movement and the continuous cycling of the learning wheel. In the following I briefly present both change motors before discussing their implications on my framework.

In the *teleological process theory* change is progressing through the purposeful enactment or social construction of an envisioned end state among members of an entity (Poole & Van de Ven 2004). Hence, intentional change is the generative mechanism that drives event sequences towards the envisioned goal. Development is depicted as a cyclical process of goal formulation, implementation, evaluation, and modification of actions or goals based on what was learned or intended by the entity. Thus, the process theory makes no assumption about historical necessity but rather relies on agency as the explanatory principle (Van de Ven 2007). The entrepreneur, for example, is not necessarily constrained by his past in order to realize his aspirations. He rather needs to envision a desired end state and work towards its fulfillment. Poole and Van de Ven (2004) remark that most models of strategic planning and decision making are based on a teleological process theory.

A teleological motor starts to work once the entity defines goals in response to a perceived problem or opportunity. The theory assumes that the entity acts purposeful and adaptive as a single collective unit. For instance, the entrepreneur alone or the entrepreneurial team define the envisioned end state as a collective unit, implement the goals, and monitor their progress.

In contrast to the life-cycle theory, teleological processes are goal-driven which does not predetermine the development path. Several equally effective ways are possible in order to reach the goal. Thus, the process theory considers the systems theory assumption of equifinality. Given the fact that the entity moves towards an envisioned end state and thus requires coherence in its activities, the teleological motor too emphasizes on convergence of its processes.

Similar to the life-cycle theory, the teleological process theory exhibits variations. Teleological theories might either build on processes of intentional planning or on post-hoc rationalizations. The international entrepreneur for example might purposefully plan the internationalization of the new venture and anticipate the different activities that will move the venture towards that goal. Nevertheless, as Poole and Van de Ven (2004, 379) affirm *"sometimes reason operates after the fact (March 1994). In such cases, agents rearrange the process as they make sense of what is happening (Weick 1995). As the process unfolds, their understanding of it changes and they act according to their emerging sense of the situation; their actions form the basis for future interpretations that in turn reestablish the grounds for action."* The sensemaking process in these situations rearranges the purposeful intentions and creates post hoc the actual 'plan'. For instance, the entrepreneurial team might define a detailed plan of how to position the new venture in the global market. The emerging plan, however, might look different from the intended plan due to unforeseen changes in competition and technology. Mintzberg (1978) refers to this as deliberate and emerging strategies.

The envisioned end state is not an end in itself. Due to internal (e.g., conflict) and external (e.g., changes in technology and consumer trends) instabilities, the development process might be pushed into a new direction, and a new cyclical process begins.

The learning of the entrepreneurs and their intentional and purposeful pursuit of the learning goals resembles a teleological process theory where intentional change is the generative mechanism that drives event sequences towards the envisioned goal. Generative sensemaking envisions new emerging goals based on post-hoc rationalizations under current information. The entrepreneurs therefore enact their sensemaking in the emergent strategy.

In the *dialectical process theory* conflict emerges through opposing forces of thesis and antithesis which collide to produce a synthesis (Poole & Van de Ven 2004). The synthesis then becomes the thesis for the next cycle of dialectical progression. Thus, conflict and confrontation between opposing entities becomes the generative mechanism for the dialectical cycle.

In contrast to the teleological and life-cycle theories, dialectical processes do not strive towards a clear end goal. The goal is rather emerging during the process. For example, changing market trends (antithesis) might collide with the international new venture's current product design. The confrontation between the two opposing views might trigger a rethinking of product design by the entrepreneurial team and a modified or completely new product might emerge (synthesis).

Similar to a teleological motor, dialectical progressions are not predetermined. The process of coping with conflict and contradiction might vary greatly

between different entrepreneurial teams and produce different developmental paths. However, in contrast to the life-cycle and teleological change motors, the dialectical process theory emphasize divergence with its focus on conflict, contradiction, and tension between opposing forces.

I argue that within my framework the confrontation of the entrepreneurs´ current perception about reality of the industry – the current world-view of the entrepreneurs – with the new reality they perceive through interacting with others creates a conflict of two opposing forces (e.g., self-publishing of video games versus publisher-let distribution of games, or the production of video games for consoles versus the production of mobile video games for iOS or Android devices). This conflict leads to a questioning of the status quo (e.g., how the new venture distributes its game globally, what forms of cooperation the firm engages in, or what type of games are produced) and causes dissatisfaction regarding the new venture's current way of learning and knowledge sought after. Hence, the conflict that results from the dialectical process of differing aspects within the industry impacts on the currently ongoing envisioned learning and has the ability to envision new goals that might lead to changes in the firm's current strategic plan.

It is therefore the interplay between the dialectical and the teleological motor that characterizes my framework of learning-networking interactions. More specifically I argue that the generative mechanism of confrontation between different perceptions about reality relates to the mechanism that sets off the experiential learning cycle and pushes it towards new learning goals – it is the invisible hand that regularly pushes the wheel forward. The new envisioned learning then defines the direction of where the wheel is heading.

Taking the metaphor of a wheel that moves along and does not remain in a static position like the wheel of a stationary exercise bicycle, resembles a *spiraling view*. In the literature on firm internationalization, Hurmerinta et al. (2016, 811) recently put forward a view *"where time is considered to be spiraling, bringing together the past, present and future and embracing both unique and the recurring events and actions and their interlinkages, content, contexts and processes within time."* The authors further contend:

> *In a cyclical view, events are often viewed as recurring, i.e., past events can take place again and again, whereas in a linear view progress from past to future is definitive. However, past, present and future are inescapably linked together, influencing each other in an iterative manner. In this iteration, the past is neither seen to be left behind as something already consumed, nor is it expected to be recurring or repeating itself precisely in the present or future. Viewing time rather as a spiral would accommodate past,*

> *present and future iteratively, perceiving events and actions and their linkages each time as unique.* (Hurmerinta et al. 2016, 811)

My framework of learning-networking interactions resembles this spiraling view. Although context, processes, and content might repeat itself, the interplay of all three elements remain unique during different cycles. For instance, the entrepreneur participated in the same industry events every year (e.g., Game Connection, Casual Connect, Colombia 3.0). Therefore, the context for networking and learning remains the same. The networking and the learning however changed depending on the networking and learning abilities of the entrepreneur during that particular moment. The recurring networking activity of interacting with someone has different qualities depending on the networking ability of the entrepreneur during the particular moment. Similarly, the recurring learning activity of reflecting is unique depending on the particular combination of context, networking-, and learning ability. Reflecting in the context of the presence of others, like consultants and friends, might trigger learning at the highest level in form of generative sensemaking. Generative sensemaking, however, is an advanced type of learning compared to simpler forms of learning like adaptive or single-loop learning as discussed in Chapter 6.1.3 on networking and learning abilities. Since networking and learning abilities are sharpened over time through practice, each cycle contributes to the refinement of recurring activities linking past experience with present information in order to direct future strategy, learning, and networking.

Therefore, the *cycling view* coincides with the wheel I depicted in Figure 11, whereas the *spiraling view* explains the different manifestations of development periods illustrated in Figure 9 on the graph of learning-networking interactions.

All in all, my framework is able to extend our current knowledge on the cyclical nature between learning and networking by providing empirical evidence of the feedback loop between these two processes. So far, the literature is rather limited to conceptual ideas regarding the cyclical nature of learning and networking interactions but lacks empirical evidence. By asking what triggers the wheel's movement and what keeps it running, I am able to provide novel understanding and explanations based on the underlying mechanisms, on the one hand, about the cyclical nature of learning-networking interactions and, on the other hand, about the spiraling perspective of their interplay over time.

6.1.5 The strategy emerges through a process of generative sensemaking in interaction with others

Strategy-making is an important outcome of the learning-networking interactions. Not all learning informs strategy-making. It is rather the wisdom created through a process of generative sensemaking that provides the input for the emerging strategy (see Chapter 6.1.3 for the description on generative sensemaking).

There are two aspects to be taken into account when considering strategy-making in my empirical context. On the one hand, the accumulated experience of the entrepreneurs through their every-day practical coping and the changes in technological and consumer trends trigger constant modifications to the current strategy, and, on the other hand, the entrepreneurs are in the search for the most suitable business model that allows them to be competitive in the global video game market. The strategy process literature refers to the former as the tension between the deliberate and the emerging strategy (Mintzberg & Waters 1985).

The data analysis shows that transitions between the developmental periods are manifested in changes to the firm's strategic plan (see Chapter 5.3 on the deliberation of findings). These changes are characteristics of the developmental growth of the entrepreneurs in terms of their experiential learning. Therefore, the learning achieved within each period does not only add new knowledge but also wisdom. Especially the transition between periods is where wisdom emerges through a process of generative sensemaking in interaction with others.

The periodic engagement in generative sensemaking that leads to strategy-making is therefore a recurrent activity that remains constant or consistent over time, similar to other recurrent activities such as the participation in industry events, moments of reflection, the ongoing development of video games, and the search for the most suitable business model (see Chapter 5.3 on the deliberation of findings). These activities are continuously ongoing in parallel but they also influence each other, that is, they are conjunctive. For instance, ongoing changes in the industry effect the strategic options of the firm; the new strategic options become subject to reflection and might impact the type or genre of video game developed. Again, the transition periods mark the moment where apparently separate processes of activities connect with each other in order to create the emerging strategy.

As previously mentioned, the international entrepreneurship literature rather remains silent on the influence of the entrepreneur's network on the firm's strategy. Few studies do not limit the role of the network to a source of knowledge but recognize its influence on strategy-making (Harris & Wheeler 2005;

Prashantham & Dhanaraj 2010). Both articles relate to Quadrant 4 papers characterized by learning from a dynamically evolving network (see Chapter 2.3). Harris and Wheeler (2005) show that relationships not only fulfill the function of providing knowledge about markets and technology or further network contacts, the relationships also have the ability to direct strategy. Similarly, Prashantham and Dhanaraj (2010) posit that learning outcomes of social capital might influence a firm's strategy.

I suggest my findings to contribute to a better understanding of how the interaction with others contribute to strategy-making in the international new venture. That is, *how the process of social interactions unfolds that leads to strategy making*. I am therefore able to extend our knowledge on strategy-making in international entrepreneurship. However, these insights also inform the emerging literature on *strategy-as-practice* which I discuss in the following. Comparing my findings with this strand of literature also provides a new perspective onto strategy-making in international entrepreneurship and opens new possibilities for future research informed by the literature on strategy-as-practice.

The process approach I adopted for collecting and analyzing my data shares important assumptions with *strategy-as-practice*, namely, the doing and making of strategy. Strategy-as-practice has emerged as an alternative to mainstream strategy research that is rather interested in explaining the effects of strategies on performance, whereas strategy-as-practice is concerned about opening the black box of strategy work by uncovering of what strategy practitioners actually do (Golsorkhi et al. 2010). It is the social embeddedness that places the process of strategy making within a broader web of social practices and in the context of macro-level changes of industry and society (Whittington 2007). Strategy-as-practice therefore goes beyond methodological individualism which focuses on individuals and their actions or behaviors without regarding the enabling and constraining effects of social practices. As Vaara and Whittington (2012, 288, reference in the original) remark:

> *[…] practice theorists distance themselves from methodological individualism […]. Practice theory pays close attention to human activity, often termed "praxis" (Reckwitz, 2002). However, in practice theory, individual behavior is always embedded within a web of social practices: praxis relies on practices. The practice perspective thus confronts one of the central issues in social studies: how social structures and human agency link together in the explanation of action.*

Vaara and Whittington (2012) identified several directions for further research in order to extend the practice perspective of strategy making. I suggest

my framework to be able to contribute to a better understanding of two key directions. That is, *agency in strategy-making* and *emergence in strategy-making*.

The processes associated with strategy-making in my framework are manifold. At the core lies the process of generative sensemaking that is accomplished through the interaction with consultants and industry friends. What triggers generative sensemaking, however, is the dialectical process of confrontation between the entrepreneurs' current world-view based on the accumulated experience and the new reality they perceive through interacting with especially ad-hoc contacts at industry events (see Chapter 6.1.4 on the continuous and spiraling cycle of experiential learning). This process of dialectics causes breaks in the general flow of activities. The entrepreneurs pause in order to critically reflect in interaction with consultants and friends about their past and future under consideration of current information obtained through the interaction with ad-hoc contacts at industry events (the process of generative sensemaking). Generative sensemaking results in the creation of wisdom which then informs strategy-making.

These processes imply different aspects for strategy-making:

- The actors involved in strategy-making (the practitioners, the entrepreneurs) do not act solely for strategy-making – they are embedded within a network of ad-hoc contacts, consultants, industry friends, and their own team of entrepreneurs.
- Practices such as the interaction with ad-hoc contacts at industry events and the sensemaking process in interaction with consultants and industry friends are fundamental to strategy-making.
- Strategy-making is closely linked to the interplay between the dialectical and the teleological motor that characterizes my framework. The dialectical process triggers sensemaking which eventually leads to the envisioning of new goals – the emerging strategy.

My framework is therefore able to extend our current knowledge within the field of strategy-as-practice. On the one hand, the framework broadens our view of agency in strategy-making, and, on the other hand, it elucidates emergence in strategy-making as opposed to formal planning.

Regarding *agency in strategy-making*, my theory emphasizes on the embeddedness of the strategist in the context of other actors and it highlights practices usually not associated with strategy-making. The practices associated with strategic planning are well researched (e.g., Giraudeau 2008; Eppler & Platts 2009; Spee & Jarzabkowski 2011). However, we lack an understanding about practices often not considered as strategic but important for strategy-making (Vaara & Whittington 2012). The ad-hoc interaction with others at industry events is

an important practice not directly related to strategy-making but an important trigger that leads to it. These interactions set off the dialectical process of confrontation between the entrepreneurs' current world-view and the new perceived reality.

As mentioned above, the transitions between the developmental periods are important moments for critically reflecting with others about the past and the future under consideration of current information. This process of generative sensemaking then creates wisdom that informs strategy-making and eventually modifies the existing strategy. My research is therefore able to provide important explanations about the *process of emergence of the strategy*. The process of emergence can be placed between two different points of reference in my process narrative. On the one side there is the planned strategy called 'C2 Ideal' designed by the entrepreneur Luis during the period of pre-internationalization 'Becoming a video game producer' (around October 2010), and, on the other side there is the moment when the entrepreneurs finally identified and agreed on a strategic plan marked by the visit of Tommy during the developmental period of 'Seeing the world through different eyes' (November 2013). What lies between 'C2 Ideal' and the new strategic plan is the emergence of the new strategy.

The process of emergence of the strategy that I observe resembles of what Tsoukas (2010) refers to as deliberate coping. Deliberate coping occurs *"when actors encounter breakdowns in the spontaneous flow of their activities, they develop explicit awareness and move to* ***deliberate coping****: they pay explicit attention to what they do and retrospectively try to make sense of it through articulation or reinterpretation. Strategy here is retrospective framing. […] Strategic thinking emerges as a process of deliberately looking-back-in-order-to-look-forward, and it arises from a practical concern with the task at hand."* (Tsoukas 2010, 57, emphasis in the original).

Deliberate coping makes a strong case for what I termed generative sensemaking – the ability to critically reflect and interpret past activities in order to project future activities under consideration of current information. Strategizing then follows retrospective reframing and occurs when the entrepreneurs bracket task-related concerns in order to derive abstract organizational properties that define the strategic intent (Tsoukas 2010). The bracketing often takes place in strategic planning sessions facilitated by consultants. Thus, strategizing resembles the moment of planned strategy making when the entrepreneurs invite their industry friend Tommy with the purpose of defining the strategy.

Gaining a better understanding about the emergence of strategy before purposeful and deliberate planning sets in, is considered an important aspect for the strategy-as-practice field (Chia & Rasche 2010). As previously said, generative sensemaking is central to strategy-making in my framework since it produces

wisdom. Wisdom becomes important for strategy-making as it concerns the subjective valuation that defines the strategy (Nonaka & Toyama 2007). Chia and Rasche (2010) emphasize on Aristotle's three types of knowledge: Episteme, techné, and phronesis. Whereas episteme and techné relate to explicit and transferable knowledge, phronesis relates to practical wisdom and tacit knowing inseperately attached to oneself. Nonaka & Toyama put it this way: *"[I]f techné is the knowledge of how to make the car well, phronesis is the knowledge of what a good car is […] and how to endeavour to build such a car"* (Nonaka & Toyama 2007, 8, as cited in Chia & Rasche 2010, 39). Practical wisdom is acquired through experience and catalyzed through the interaction with others as in the process of generative sensemaking.

All in all, I argue that *generative sensemaking in interaction with others is central to strategy-making* during entrepreneurial internationalization. Closely linked to the sensemaking process is the process of interaction with ad-hoc contacts and the creation of wisdom. My framework therefore reveals the *social embeddedness* of the entrepreneur as a strategy maker and emphasizes on *practices* usually not directly associated with strategy-making. It therefore broadens our view on the role of agency in strategy-making. Furthermore, the *spiraling nature* of my framework highlights the recurrent activity of generative sensemaking which I compare to the activity of deliberate coping that eventually leads to strategizing in a planned manner. I am therefore able to provide insights into the *process of strategy-making* that actually leads to the deliberate, planned strategy in the context of the internationalizing new venture.

For international entrepreneurship, my framework advances our understanding on the role of networking for strategy-making and most importantly I am able to show how the process of social interactions unfolds that leads to strategizing during entrepreneurial internationalization. Sensemaking is central to strategy-making, especially in a context such as the international new venture operating in a global industry where trends change excessively fast. Sense needs to be made retrospectively but also how past and current activities fit into the continuously changing future of the industry. It becomes a question of survival for the firm to not only adapt to trends but to also find its own identity that allows the firm to stay competitive in the global industry. Networking through interaction with others and the learning gained through sensemaking with others are all important for the survival of the international new venture and should be researched more intensively.

6.2 Practical implications

In the following I present the practical implications of my findings. I therefore target three different type of stakeholders: The *educator* who teaches international entrepreneurship; the *practitioner* of international entrepreneurship – the *entrepreneur/manager* of an international new ventures; the *policy-maker* supporting the promotion of international new ventures.

As the case of C2 Game Studio shows, the entrepreneurs Camilo and Luis received continued support from business support organizations like Proexport and Ruta N from foundation through to the post international-entry period. The support of Proexport mainly consisted in providing *financial support* for participation in international events of the global video game industry. Ruta N rather focused on providing support of *promoting the creation of a local ecosystem* for video game entrepreneurship. Hence, the implications for policy-makers and business support organizations are directly related to policy advice for both organizations. The implications do not only apply for Colombia's video game industry but generally to knowledge-intensive industries embedded in highly-dynamic global markets such as software development and related creative industries that are of relevance for the promotion of non-traditional exports in Colombia.

Experiential learning is central to the process of entrepreneurial internationalization. The student of international entrepreneurship should be exposed to *experiential learning activities* in order to live and experience of what it means to be an international entrepreneur. The course instructor may facilitate activities that allows the student going through the complete experiential learning cycle I propose enhanced through activities of networking. Such pedagogical approach puts emphasis on practices that allows the students to learn *how to do* international entrepreneurship compared to the more common approach of teaching *about* international entrepreneurship.

A critical element of the experiential learning cycle is *(critical) reflection* since it enables the transformation of experience into knowledge or wisdom. The practitioner of international entrepreneurship should recognize the importance of (critical) reflection and allow for its realization especially in interaction with others such as within the entrepreneurial team and external contacts like mentors and close friends from the industry. For the student of international entrepreneurship critical reflection should be exercised as part of the experiential learning activity and facilitated by the instructor. The literature on adult learning therefore offers a *variety of reflective techniques* such as learning journals, learning diaries, feedback/self-evaluation forms, concept maps, mind maps, peer- or group discussion, and problem-based learning (Smith 2011).

Similarly, the business support organization interested in the promotion of international new ventures may facilitate awareness and training on critical reflection as part of mentoring programs.

Since the interaction with others enhances the experiential learning of the international entrepreneur, all three stakeholders of educators, business support organizations, and entrepreneurs should actively promote activities that allow for the development of *networking abilities*. This includes activities of how to engage with others (e.g., approaching others, building relationships, ending relationships, re-activating relationships) and how to interact with others (e.g., leading discussions, holding a conversation, active listening, solicit feedback and advice). Especially the interaction with mentors should be promoted as it plays an important role for critical reflection.

Networking does not only provide access to new information it also is an opportunity to learn from receiving instructions, learning from observations, engage in sensemaking, and create awareness about trends and missing experiences and knowledge. Entrepreneurs, policy-makers, and educators alike should be aware about the *different roles* that result from interacting with others and that impact different elements of the experiential learning cycle. Distinguishing the different roles, the entrepreneur is able to accomplish networking more selectively depending on the aspired outcome of learning. So is the policy-maker able to design better training programs targeting learning deficiencies of international new ventures more efficiently.

The differing roles of networking also relate to different type of contacts. Ad-hoc contacts at industry events relate to the informational and awareness creating role; business partners relate to the instructional role; consultants and close industry friends relate to the sensemaking role. Being aware about these differences is useful too for targeting particular learning deficiencies more effectively.

The student of international entrepreneurship certainly gains from an understanding about the roles of different types of contact for his or her future career as an entrepreneur. The course instructor may invite people who act as consultants, mentors, business partners for international entrepreneurs in order to discuss and illustrate their work with the international new venture.

The international entrepreneur is able to *direct learning by purposefully managing the network of contacts*. This implies for instance to seek out contacts useful for obtaining particular type of information, to engage in partnerships suitable for developing particular skills, or to create close bonds to mentors. The entrepreneur is advised to actively build and maintain relationships but also to consider to end relationships if learning becomes stagnate with that particular contact. Making room for new contacts might be able to revitalize learning.

Important networking opportunities take place at industry events often located in countries different to the home-base of the international new venture. In such cases, business support organizations might *sponsor travel costs and attendance fees* for these events.

Engaging and interacting with others enhances the experiential learning of the international entrepreneur. Networking however is not automatic. It needs to be practiced in order to acquire a *networking ability*. The entrepreneur therefore needs to develop and sharpen this ability by actively seeking out and engaging in activities of networking. Business support organizations might facilitate access to networking opportunities and deliver skill training for networking. Networking skills might also be gained as part of class exercises. These exercises should be embedded in experiential learning activities related to international entrepreneurship.

The *learning ability* of critical reflection emerges with experience. Only critical reflection as higher-order learning is able to alter subsequent learning and networking. As previously mentioned, experiential learning activities and mentoring programs are able to create awareness and practice about critical reflection.

Experiential learning cannot only be understood as a cycle but also as a *spiral* where the same recurrent activities have different qualitative characteristics depending on the current level of networking and learning abilities. For example, the participation in the same annual industry event might lead to different outcomes in terms of interacting with others depending on the networking ability of the entrepreneur. Being aware about the spiraling effect of recurrent activities, the international entrepreneur is better able to manage expectations regarding industry event participation for example. That means, that certain learning outcomes might not be achieved due to a lack of networking abilities. The participation however might be an opportunity to sharpen networking skills instead.

The international entrepreneur should recognize that social interactions are important for *shaping the strategy* of the firm. Interacting with others provides useful information about industry trends and aids making sense of past, current, and future actions. For sensemaking, the interaction with mentors and close friends with significant industry experience is especially helpful. Besides, the entrepreneur should be aware about the influence of the emergent strategy on the planned strategy and be flexible for changes. Especially if the firm operates in an environment characterized by fast technological changes.

Business support organizations should consider the limitations of one-time strategy planning sessions and contemplate the importance of the *emergence as an activity of social interactions* over time including internal and external stakeholders. Training programs that support strategic planning should consider strategy-making as an act of social interactions with a variety of internal and external

stakeholders. Similarly, the student of international entrepreneurship should gain an understanding about the differences of the emergent strategy versus purposeful and deliberate planning. This is especially important for the international new venture that operates in global markets characterized by rapidly changing trends in technology and consumer behavior.

The practical implications that I derived from the insights of my research are influenced by my scholarly engagement with international new ventures over the last couple of years and my teaching on international entrepreneurship to master students. I am sure that others will detect similar or also different implications depending on their experience as scholars, entrepreneurs, policy-makers with doing, supporting, researching, or teaching international entrepreneurship. Deriving and implementing the practical implications of my research is therefore also an opportunity for future action-oriented research.

6.3 Methodological contribution

My study broadens empirical research on learning-networking interactions during entrepreneurial internationalization with a longitudinal research design focusing on the collection of process data as they unfold in real-time at the micro-level.

Despite the calls for more longitudinal research in international entrepreneurship few has been accomplished so far. Process studies are rare and even more so longitudinal research designs focusing on the collection of real-time process data. The community of process researchers acknowledges the challenges and difficulties of conducting event-driven process research focusing on real-time data (Langley 2009; Langley & Tsoukas 2010; Van de Ven & Engleman 2004; Welch & Paavilainen-Mäntymäki 2014).

Certainly, the identification of my case firm C2 Game Studio was not easy. It was due to my previous involvement with research in the creative industry in Colombia that I received the lead to the firm at the brink of its first global market entry. Fortunately I got the *support from the entrepreneurs* to participate in the longitudinal study. This can be a major challenge gaining the commitment of the entrepreneur, especially while using a time-intensive data collection method such as diary research. Another difficulty concerns the *uncertainty of development and survival of the new venture.* In an event-driven, real-time setting the uncertainty regarding the commitment of the participants and the actual survival of the firm is high. This requires *flexibility* on behalf of the researcher to eventually switch to different data collection methods (for instance, from the diary to more periodic interviewing) or to reframe the initial research idea including a study of firm failure. An example is Meyer and Altenborg's (2008) study on

the failure of a merger that initially was concerned with the analysis of the challenges of a cross-border merger. I also was fortunate to be part of a *stimulating community of researchers* open for process research like my supervisors Peter Zettinig and Niina Nummela, faculty from the department Erikka Pavilainen-Mäntymäki, Leila Hurmerinta, and my occasional interactions with like-minded process researchers at the different conferences and seminars. Undoubtedly I could write more about the challenges of doing process research and how it can be overcome but I leave that for a possible article in the future. At this point I would like to outline the strength of my research regarding its empirical contribution to the community of researchers interested in conducting qualitative process research.

Welch and Paavilainen-Mäntymäki (2014) refer to *six challenges* in order for more process studies to happen which I would like to address in the following: 1) New research questions; 2) new methods; 3) new data sets that allow to place time at the center of the inquiry; 4) richer process based vocabulary; 5) evaluation of process studies; 6) not losing the process character of the study. I understand my research as an example of how we can study the unfolding of processes and particularly longitudinal research design focusing on the collection of process data as they unfold in real-time at the micro-level.

Regarding *the research question*, in Chapter 1.2 on the process perspective I point out the differences between what and how questions in an input-process-output model. My research inquiry was driven by the question of how processes of learning and networking unfold over time during entrepreneurial internationalization. It is important to ask the right question and to constantly be aware of the "how" and the process character of the study in order to not lose the process focus during all stages of the research.

The methods I made use of especially for the collection and management of the constantly, incoming real-time data I consider a particular strength of my study. The weekly email log for the diary research and the visual mapping of the real-time data were important techniques in order to capture and keep track of the unfolding of the events. The tools allowed to collect data broad enough for the creation of a track record and specific enough to focus on the two focal processes of learning and networking. The data management became key in order to avoid the 'death by data asphyxiation' (Pettigrew 1990).

The data sets focused on the process. I combined retrospective, event-driven data obtained through interviews with the real-time data obtained through the logs and social network updates. *Putting emphasis on the time dimension* was important, not only for registering the data but also for analysis. Process coding was particular useful in this regard by assigning a time coding to each activity. The time code facilitated the construction of dynamic network models of codes,

the creation of the event-listing matrix, and the graph on learning-networking interactions.

I used Pettigrew's (1990) meta-level analytical framework of process, content, and context for generating the code hierarchies. The process codes I expressed as *verbs in form of a gerund*, for instance, reflecting, doing, observing, participating, searching, etc. The actual outcome of these processes, the content, I expressed as nouns like the particular knowledge created. Using a vocabulary that focused on the process for coding was a good exercise to constantly remind myself about the fluid and dynamic character of the phenomenon I were interested in.

The *evaluation of process studies* I best compare to the evaluation of inductive, qualitative research. Similar to other qualitative research it is important for the reader to get a sense of being in the field and be able to judge of how the researcher came to the findings and conclusions (Glaser & Strauss 1967). I suggest real-time longitudinal studies to even contribute more to the credibility of the data due to the possible prolonged engagement in the field, the persistent observations through the logs and follow-up interviews which also implies a triangulation of sources and methods used. Perhaps the most important aspect for evaluating a process study is the assessment of the research process on behalf of the reader which relates to the dependability criteria by Lincoln and Guba (1985). Showing to the reader not familiar with process studies of how the process was conducted adds to the transparency and hopefully trustworthiness in the findings.

Selecting carefully the research question, the methods used for data collection, the techniques for analysis, and the process of theory creation itself are all important in order to *not lose the process character* of the study. I suggest my research to be a good example of how the process is maintained throughout the study. I would particularly would like to highlight the different steps and techniques I made use of for the analysis of process data with the intention to generate process theory.

Similar to the criteria for evaluating the quality of my study, in the end it is the reader who judges the usefulness of my empirical contribution. I hope my arguments to be convincing.

6.4 Limitations of the study

There are limitations to my study. These limitations relate to the boundary conditions of my framework and the data collection and analysis methods. Since I collected my data in a particular type of new venture, managed by a particular team of entrepreneurs, operating in a particular industry context, the question is

of how my findings are *generalizable* to a broader spectrum of firms and industry contexts.

As mentioned in Chapter 3.2, unlike variance explanations, process explanations do not focus on uniformity and consistency but on *versatility*. The generality of a process explanation lies in its ability to encompass a broad domain of developmental patterns for a variety of cases and contexts. The versatility stems from the complexity of narratives and their underlying event sequences. Narratives might differ in event sequences and contextual factors but nevertheless may share the same plot or through-line of a story. Thus, narrative explanations of process theory need to encompass the particularities of individual cases that share a common developmental process. Langley et al. (2013) observe an inference from the particular to the general for process generalization. Climbing the ladder of abstraction through *analytical generalization* by inferring the general theoretical phenomenon of which the observed particular is a part. This implies a detailed understanding of the particular. In other words, rich and detailed case descriptions contribute to the potential transferability of theoretical ideas (Lincoln & Guba 1985).

Regarding analytical generalization, the question arises of what my framework is a case of? Or what is the general case of where my framework is part of? I suggest the general case to be comprised of the following situation and context:

- *New ventures that are entering global markets with knowledge-intensive offerings*: The creation of a knowledge-intensive product like a mobile video game requires much knowledge and quick learning in order to position the product in the global market. Since C2 Game Studio was a new venture not much prior knowledge was available the entrepreneurs could build on.
- *The global markets are characterized by rapid changes in technological and consumer trends*: Rapid changes in the global mobile video game industry render prior knowledge useless and require constant learning on behalf of the entrepreneurs.
- *The entrepreneurs running such a new venture might be new to the industry or experts*: Due to the fast changes in technological and consumer trends, prior knowledge is less significant compared to the process of continuing learning.
- *The entrepreneurs however do not possess significant learning and networking abilities stemming from prior professional, experiential learning*: Entrepreneurs who already possess significant learning and networking abilities might be less dependent on others for their learning

and the creation of networking and learning abilities. Therefore, the interaction with others might be less pronounced as suggested by my framework.

As mentioned in Chapter 3.8 on the quality of the study, the processes that I suggest in my model (see Chapter 6.1 on the different theoretical contributions) are structurally equivalent and generally enough in order to be applied to other domains (Gioia et al. 2013). Experiential learning as a continuous, spiraling cycle enhanced through interaction with others constitutes a general process of learning equally applicable to other domains of entrepreneurial or managerial learning.

Lincoln and Guba (1985) suggest that it ultimately is the reader who decides about the transferability of the findings to other contexts. This requires a detailed and rich case description. The case narrative in Chapter 4 provides such a thick description of the actors, context, processes, and the content in order for the reader to assess the potential transferability of the findings to other contexts.

The data collection and analysis methods also imply limitations to my study. The main informant for the diary was Camilo. His partner Luis participated at the beginning and end of the data collection period. Luis's participation was important in order to reconstruct the firm´s history up to the point where I entered the company for the real-time data collection and as a means to triangulate the information I had received from Camilo during the diary phase of data collection. Since Camilo was the one responsible for (global) business development I considered him the more adequate partner for data collection. Luis rather focused on product development. Nevertheless, the participation of Luis in the diary study could also have contributed to more variety in the information collected and strengthened the credibility of the findings. Contrary, it could have also contributed to more complexity and messiness during data collection and management.

I was the one responsible for collecting, transcribing, and analyzing the data. Hence, the research process suffers from my partial view of data interpretation. Involving multiple researchers in the process provides an opportunity to triangulate the data and interpretations. Lincoln and Guba (1985) suggest researcher triangulation as another technique for improving a study's credibility. The inductive and real-time character of data collection however would have required the constant presence of another researcher in order to grasp the information sufficiently in its depths. Being close to the data especially during their collection is important since constant interpretations occur during the follow-up emails and the follow-up interviews in order to determine further data collection.

6.5 Avenues for future research

In the following I provide ideas of how to build on the findings of my research in order to further advance our understanding on the experiential learning process during entrepreneurial internationalization. Future research might continue to investigate learning at the *level of the individual entrepreneur*. This is useful in order to elucidate further the learning, knowledge, and skills of the international entrepreneur (Reuber & Fischer 1997) and to explain the emergence of firm-level processes (Chetty et al. 2006; Fletcher et al. 2013). Since learning at the individual level is extensively researched in the fields of management and adult learning and to some extent in entrepreneurship, future research should draw on concepts from these strands of literature in order to advance our understanding. Making use of conceptual and empirical insights from these fields also has the potential to not only make contributions to international entrepreneurship but to these complementary fields of knowledge as well.

My research provides insights into how experiential learning occurs among international entrepreneurs. This is a process hardly researched in the fields of international entrepreneurship (Jones & Casulli 2014; Michailova & Wilson 2008) and entrepreneurship (Wang & Chugh 2014). We know about the diminishing effect of prior experiential knowledge over time (Bruneel et al. 2010) which points at the importance of the continued accumulation of first-hand international experiential knowledge. My framework makes a strong argument for the ongoing accumulation of international experience and knowledge/wisdom through current activities. However, what needs to be researched further is how the *team composition* affect individual and team-level experiential learning. The team composition is especially relevant regarding the different networking and learning skills different entrepreneurs bring into the new international venture. Although the importance of congenital knowledge diminishes over time the individual learning and networking abilities of the entrepreneur acquired prior to the startup of the new venture might greatly influence the speed at which new knowledge and wisdom is acquired. The question also is, how does the development of learning and networking abilities differ for people with different levels of professional experience? Does a learning advantage exists for the expert entrepreneur compared to the novice? Hence, future research should consider both the initial endowments of the entrepreneur in terms of abilities and how these abilities are developed further based on the initial endowment at startup.

Critical reflection as a learning ability is central to the experiential learning. My research shows that critical reflection in interaction with others is a process of generative sensemaking and fundamental for strategy-making. Further research is necessary in order to understand how generative sensemaking takes

place from a micro-perspective. In my research I relied on the retrospective account of the entrepreneurs telling me about the events related to sensemaking. I did not assist these events as an observer which might have been helpful in order to gain more detailed insights into the actual making of sensemaking and the linguistic and visual artifacts used during sensemaking (Stigliani & Ravasi 2012). Gaining insights on the *micro-level into the making of generative sensemaking* also has useful practical implications for the entrepreneur, policy-maker, and educator in order to identify techniques of how to facilitate and train this important learning ability for strategy-making within the international new venture.

When and how does individual and team-level experiential learning becomes *organizational learning* is a further important area for research building on my insights on the experiential learning cycle. The new venture growths and so does the team and the accumulated experience which triggers the emergence of routine practices at the level of the firm. The emergence of organizational learning as routines from a practice perspective is a useful area for future research in order to better understand the microfoundations of (learning) routines and capabilities (Parmigiani & Howard-Grenville 2011; Salvato & Rerup 2011).

The shift from individual and team-level to firm-level capabilities also relates to the dynamic capabilities. Based on my insights on the creation of dynamic capabilities on the team-level, further research might look into the *emergence of dynamic capability as a firm-level capability* during the growth of the international new venture. Generally, future research can provide interesting insights into the question of, what patterns of decision-making, practices, and routines at the firm-level emerge from individual-level abilities (Vogel & Güttel 2013)? These insights illuminate both international entrepreneurship literature and organization and management literature where more multi-level research is needed in order to better understand the emergence of organizational routines and (dynamic) capabilities in the international new venture.

My research shows that reflecting is increasingly accomplished with others and that the entrepreneurs look out for strong relationships with mentors as the firm continues its internationalization. The instructional role of interacting with others also seems to be more important at earlier than later periods of internationalization. Future research might shed light on the question of how do the *different roles of the network change* with regard to their impact on experiential learning once the entrepreneur gains experience? For instance, is the instructional and observational role more important during early stages of the international new venture? Does the sensemaking role increases over time and why so? Although sensemaking is increasingly accomplished with others, the continued increase in experience and wisdom might also enable the entrepreneur to look

less for external feedback and advice during sensemaking after a certain threshold is passed. Therefore, an interested question could be if generative-sensemaking with increasing experience is more and more accomplished alone rather than in interaction with others? This points at the *dynamics of the dynamic capability of generative sensemaking* which certainly warrants more research (Helfat & Peteraf 2003).

Relationships to close friends with significant industry experience or mentor-type of relationships seem to play an important role for critical reflection and generative sensemaking. Future research might shed more light on the *role of mentors* for the accelerated learning during entrepreneurial internationalization (Cumming et al. 2015; Michailova & Wilson 2008; Ozgen & Baron 2007; Sullivan 2000). An interesting conceptual perspective to explore is the literature on *developmental networks* that is emerging from within the mentoring literature (Molloy 2005). Developmental networks relate to concurrent dyadic relationships that include but are not limited to a primary mentor. These might include, among other, peers, former colleagues from previous work, and assigned mentors. In general, people who are interested in the protégés career development. As my empirical insights have shown, the entrepreneurs seem to build and orchestrate a network of a variety of contacts external to the firm in order to positively impact the learning. The literature on developmental networks might provide interesting insights into the building activities and dynamics of networks (processes and contents) that contribute to the accelerated learning of the international entrepreneurs during entrepreneurial internationalization.

The question I asked of what triggers the wheel's movement and what keeps it running aimed at the detection of the underlying mechanisms that caused the observed pattern of learning-networking interactions to occur. Van de Ven and Poole's (1995) change motors seem to over plausible explanations for these underlying mechanisms. Since the internationalization of a new venture is a multi-layered and complex organizational change process reducing its explanation to one possible motor operating on a particular generative mechanism would be a naïve under-taking. It is rather the interplay between the dialectical and the teleological motor that trigger the wheel's movement and that keep it running.

Besides the direct relationships between motors, Poole and Van de Ven (2004) contend the development of composite theories in order to provide explanations for organizational change processes which implies to detangle the interrelationships of different change motors across levels and time. I therefore suggest future research to provide insights into composite theories analysing the *interplay of different change motors across levels and time*. Future research may tackle the question, how do cross-level relationships of different change motors play out within my framework? For example, how do the teleological and dia-

lectical progressions at the firm-level relate to possible evolutionary progressions at the industry level? How does the teleological progression at the level of the individual entrepreneur influence the life-cycle of the international new venture? Another question may ask, how does the temporal relationships among motors play out in my framework? For instance, how do different change motors relate to each other in order to accelerate, decelerate or maintain constant pace over time in relation to the new venture's internationalization?

Building composite theories from the perspective of their cross-level relationships allows to gain insights into interdependencies at multiple levels that shape the learning and networking and their interactions. Uncovering these interdependencies requires to look at the contextual conditions at play and how these shape the focal processes (Pettigrew 1990, 1997, 2012). The analysis of the temporal pacing might uncover important (process) explanations regarding the speed of internationalization of the new venture beyond first international market entry (Casillas & Acedo 2013).

The strategy-making that I observe as an outcome of experiential learning within my framework is ultimately linked to the constant transformation of the business model. I suggest that the entrepreneurs experiment with different business model designs until a consensus is reached regarding the most suitable business model the firm identifies with. For future research I propose to *link the strategy-making to business model design*. Onetti et al. (2012) recently suggested more research on the link between business models, internationalization, innovation, and entrepreneurship. This link is especially relevant for high-technology firms operating in global markets. I therefore suggest the following question to be addressed for future research: How does strategy-making based on generative sensemaking influence the construction and identification of the suitable business model that makes and maintains the INV competitive in global markets?

Reaching consensus on the business model is an important milestone for the new venture. For C2 Game Studio this point was reached not until the visit of Tommy during the end of my observation period during post-entry. Stakeholders like investors might delay their judgement about success and failure of the firm until this milestone, and even beyond. This period is known as the *liability of adolescence* – the period stakeholders grant the new venture before judging about success or failure (Brüderl & Schüssler 1990). Sleuwaegen and Onkelinx (2014) also found that active learning and networking may help to reduce the risk of failure within the first eight years of the firm's first international sales. I suggest that the speed of experiential learning enhanced through the interaction with others can be considered as a necessary but not sufficient condition for the existence of an international new venture. The entrepreneurs need to identify quickly how their business works best in the market, that is, they need to identify

quickly the most suitable business model. The learning to create and iteratively test the emerging business model then occurs in interaction with others. This argument, however, I leave open to be judged and informed by future research of how generative sensemaking impacts the liability of adolescence of the international new venture.

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ANNEX 1 LITERATURE REVIEW

For the literature review I built on existing reviews and complemented by key word search in databases for academic literature. I first analyzed De Clercq, Sapienza, Yavuz, and Zhou (2012) and Jones, Coviello, and Tang (2011) for articles that relate network and knowledge/learning. This process yielded 27 articles. Since De Clercq et al. (2012) and Jones et al. (2011) only include literature for the periods 1994-2010 and 1989-2009, respectively, I complemented the search for the period 2011-2015 using the Proquest ABI/INFORM Global and EBSCO Business Source Complete databases.

Following De Clercq et al. (2012) and Jones et al. (2011) I only considered peer reviewed articles in academic journals. Such search excludes less validated sources like book chapters, books, and conference papers. The search method and the already identified 27 articles from the previous literature reviews provided useful hints regarding the definition of relevant key words. The search in Proquest yielded 28 and EBSCO 38 results. The following search strings were used.

Proquest: all(("born global*" OR "international entrepreneurship" OR "international new venture*" "new venture internationali*" OR "early internationali*" OR "international young venture*" OR "international new firm*" OR "international young firm*" OR "entrepreneurial internationali*" OR "global start*" OR inv OR "instant internationali*" OR "rapid internationali*" OR "instant export*" OR "rapid export*" OR "micro MNE*") AND (knowledge OR learning OR grafting OR vicarious OR "absorptive capacity") AND (network* OR social* OR external OR interorgani* OR alliance* OR relationship OR "from others")) AND schol(yes) AND peer(yes) AND yr(2011-2015)

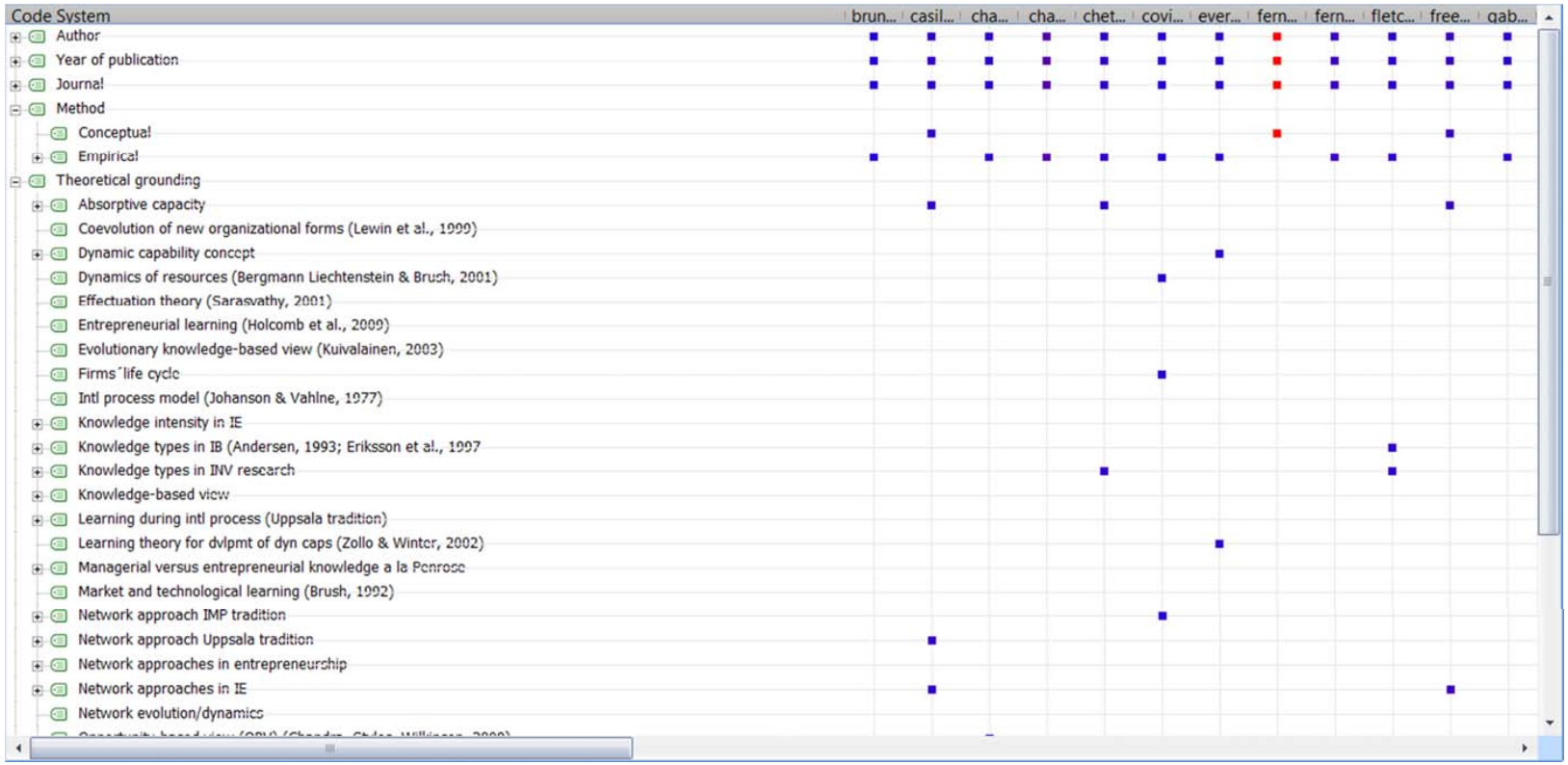
EBSCO: (("born global*" OR "international entrepreneurship" OR "international new venture*" "new venture internationali*" OR "early internationali*" OR "international young venture*" OR "international new firm*" OR "international young firm*" OR "entrepreneurial internationali*" OR "global start*" OR inv OR "instant internationali*" OR "rapid internationali*" OR "instant export*" OR "rapid export*" OR "micro MNE*") AND (knowledge OR learning OR grafting OR vicarious OR "absorptive capacity") AND (network* OR social* OR external OR interorgani* OR alliance* OR relationship OR "from others"))

After eliminating the repeating articles from the search in both databases, I manually checked each article for its focus on network-learning interactions. This required some articles to be dropped since they did not focus on knowledge creation/learning from the network. This resulted in a list of 46 articles.

In a next step I content-analyzed all 46 articles by using MAXQDA (Version 11), a software for qualitative data analysis, according to the following criteria: Author, Year of publication, Journal, Method (Conceptual, Empirical), Theoretical grounding, Findings (static versus dynamic aspects of network/networking, knowledge/learning), Future research opportunities.

The content analysis let to the identification of seven more articles which were subsequently included in the analysis. A total of 53 articles were finally considered for the literature review.

For illustration purpose I insert on the following page a snapshot of the code-system created in MAXQDA. The snapshot only shows parts of the code system and does not reveal the complete and more detailed structure of codes.


Code System
brun...
casil...
cha...
cha...
chet...
covi...
ever...
fern...
fern...
fletc...
free...
gab...
Author
Year of publication
Journal
Method
Conceptual
Empirical
Theoretical grounding
Absorptive capacity
Coevolution of new organizational forms (Lewin et al., 1999)
Dynamic capability concept
Dynamics of resources (Bergmann Liechtenstein & Brush, 2001)
Effectuation theory (Sarasvathy, 2001)
Entrepreneurial learning (Holcomb et al., 2009)
Evolutionary knowledge-based view (Kuivalainen, 2003)
Firms´life cycle
Intl process model (Johanson & Vahlne, 1977)
Knowledge intensity in IE
Knowledge types in IB (Andersen, 1993; Eriksson et al., 1997
Knowledge types in INV research
Knowledge-based view
Learning during intl process (Uppsala tradition)
Learning theory for dvlpmt of dyn caps (Zollo & Winter, 2002)
Managerial versus entrepreneurial knowledge a la Penrose
Market and technological learning (Brush, 1992)
Network approach IMP tradition
Network approach Uppsala tradition
Network approaches in entrepreneurship
Network approaches in IE
Network evolution/dynamics

ANNEX 2 ARTICLES FOR LITERATURE REVIEW (N=53)

Static conceptualizations of the relationship between network and knowledge (n=14)

Andersson, 2011
Baronchelli & Cassia, 2014
Bengtsson, 2004
Fernhaber, McDougall-Covin, & Shepherd, 2009
Gil-Pechuan, Exposito-Langa, & Tomas-Miquel, 2013
Musteen, Datta, & Butts, 2014
Musteen, Francis, & Datta, 2010
Oviatt & McDougall, 2005
Prashantham, 2005
Presutti, Boari, & Fratocchi, 2007
Weerawardena, Mort, Liesch, & Knight, 2007
Yeoh, 2004
Yli-Renko, Autio, & Tontti 2002
Zhou, Wu, & Luo, 2007

Dynamic conceptualizations between network/networking and knowledge/learning interactions (n=39)

Quadrant 1 (n=6)

Bruneel et al. (2010)
Chandra et al. (2009)
Fernhaber & Li (2010)
Fernhaber et al. (2007)
Fletcher & Harris (2012)
Mejri & Umemoto (2010)

Quadrant 2 (n=2)

Loane & Bell (2006)
Pettersen & Tobiassen (2012)

Quadrant 3 (n=13)

Evers et al. (2012)
Gabrielsson et al. (2008)
Kauppinen & Juho (2012)
Keen & Wu (2011)
Michailova & Wilson (2008)
Odorici & Presutti (2013)
Park & Rhee (2012)
Peiris et al. (2012)
Prashantham & Floyd (2012)
Prashantham & Young (2011)
Schwens & Kabst (2009)
Zhu et al. (2006)
Zou & Ghauri (2010)

Quadrant 4 (n=18)

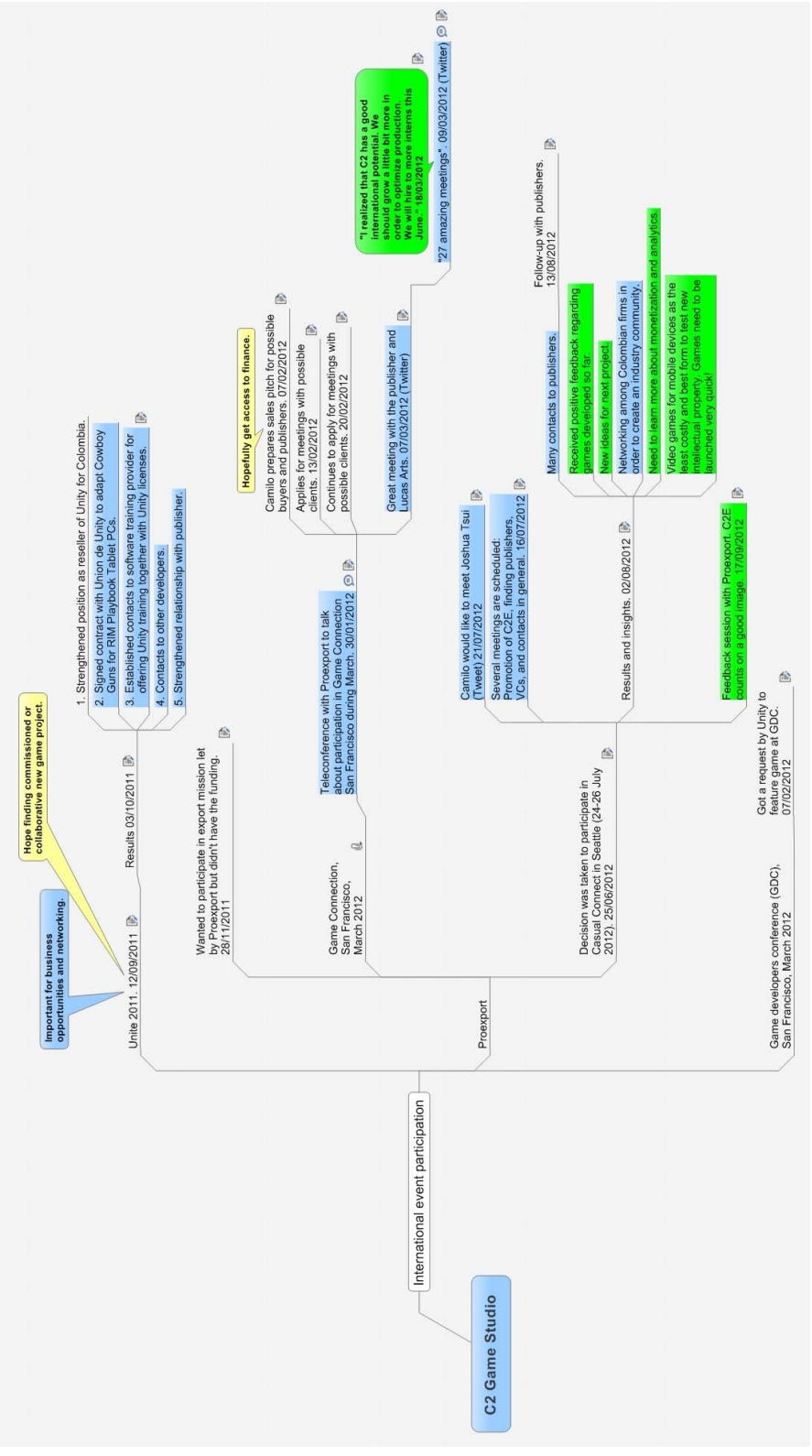
Casillas et al. (2009)
Chandra et al. (2012)
Chetty & Campbell-Hunt (2004)
Coviello & Cox (2006)
Freeman et al. (2010)
Fuerst & Zettinig (2015)
Harris & Wheeler (2005)
Johanson & Vahlne (2003)
Johanson & Vahlne (2009)
Pellegrino & McNaughton (2015)
Prashantham & Dhanaraj (2010)
Schweizer (2013)
Sharma & Blomstermo (2003)
Tolstoy (2010)
Voudouris et al. (2011)
Welch & Welch (1996)
Wu & Hsu (2013)
Zettinig & Benson-Rea (2008)

ANNEX 3 INTERVIEW SCHEDULE

Date	Interview type	Partici-pant	Circumstances that triggered interview
June 2011	Retrospec-tive inter-view	Camilo, Luis	Reconstructing firm history in order to es-tablish a basis for the real-time data collec-tion.
July 2011	Follow-up interview #1	Camilo	Previously the logs reported intensive inter-actions with producer and lessons learnt in order to prepare game for launch.
October 2011	Follow-up interview #2	Camilo	Previously the logs reported the launch ac-tivities of the first game and a splurge in new networking activities. It was also a good moment to review the cooperation with the alliance partner. The month of the interview coincided with the end of the pe-riod ‘Creating competencies for the devel-opment and sales of mobile video games in cooperation with alliance partner’.
March 2012	Follow-up interview #3	Camilo	Previously, the logs and Tweets indicated interesting networking activities and possi-ble changes of firm strategy. I also wanted to inquire about the experience of an im-portant participation in an industry event in the U.S., Game Connection. The month of the interview coincided with the beginning of the period ‘Engaging with the global community of mobile video game develop-ment’.
August 2012	Follow-up interview #4	Camilo	Previously the logs reported a variety of new networking activities that I wanted to inquire further about. There was also an important participation in an industry event in the U.S., Casual Connect. The month of the interview coincided with the end of the period ‘Engaging with the global commu-nity of mobile video game development’.

Date	Interview type	Partici-pant	Circumstances that triggered interview
October 2012	Follow-up interview #5	Camilo	Previously the logs reported an unusual high amount of networking activities combined with an industry event participation, Colombia 3.0. The month of the interview coincided with the beginning of the period 'Tying international game experts to product and business development'.
January 2013	Follow-up interview #6	Camilo	Review launch of second game and experience so far. The logs also indicated a review of the firm strategy and strategy making for the new year. This marked the beginning of the period 'Experimenting with new product and cooperation strategies'.
December 2013	Follow-up interview #7	Camilo	General follow-up interview to review the happenings of 2013 since logs were suspended during that year.
December 2013	Review of focused narrative	Camilo, Luis	Review of the focused narrative in order to validate the information with both entrepreneurs. Especially important was to get Luis's perspective on the data since he was not directly involved in the log.
January 2014	Follow-up interview #8	Camilo, Luis	Meeting with both entrepreneurs in order to get Luis's perspective on the happenings during 2013 and the complete focused narrative that I prepared.

ANNEX 4 EXAMPLE OF VISUAL MAP STRUCTURE



ANNEX 5 DIFFERENT STEPS OF ANALYSIS

Steps one to seven relate to the engagement phase of the theory creation process, and steps eight and nine to the deliberation phase of ideas as related to the process of conceptual leaping as explained in Chapter 5.1.

Step	Purpose	Technique	Tool
One	Pre-analysis during data collection in order to guide ongoing data collection.	Visual mapping (Langley 1999; Miles et al. 2014).	Software for mind mapping Mindjet
Two	Identification of central "themes" and interactions between learning and networking through creation of hierarchical structure of codes.	Coding following Pettigrew's (1990) meta-level analytical framework through open coding, axial coding, and process coding (Corbin & Strauss 2008; Saldaña 2013).	Software for qualitative data analysis MAXQDA
Three	Analysis of codes according to their temporal development.	Constructing network models (Langley 1999; Miles et al. 2014).	Software for qualitative data analysis MAXQDA. Visual tool MAXMaps.
Four	Construction of map in chronological order of events and according to level of analysis.	Constructing event-listing matrix (Miles et al. 2014).	Excel
Five	Based on event-listing-matrix establishing periods of development.	Temporal bracketing of time periods (Langley 1999).	No particular tool

Step	Purpose	Technique	Tool
Six	Based on bracketed time periods and codings, creation of the learning-networking interaction graph.	Visual display of code variations.	Code Relations Browser within MAXQDA, Excel
Seven	Based on event-listing-matrix, write-out of development history.	Creation of focused narrative (Langley 1999; Miles et al. 2014; Pentland 1999).	No particular tool
Eight	Identification of event sequences, their origin, their direction, and interactions across different levels of analysis.	At-the-glance review (Miles et al. 2014)	Printed event-listing matrix, colored stickers
Nine	Identification of event sequences, their origin, their direction, and interactions across different levels of analysis.	Application of a set of questions (Pettigrew 1990; Saldaña 2003; Van de Ven 1992).	No particular tool

ANNEX 6 SET OF QUESTIONS FOR INTERPRETATION OF THE EVENT-LISTING MATRIX

Question	Related concepts and authors
How can time-bracketed phases be distinguished related to the focal processes?	• Framing question: What is different from one pond or pool of data through the next? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997) • Temporal bracketing of time periods (Langley 1999) • What types of progression are at play? (Van de Ven 1992)
What shifts can be observed during transition from one phase to the other?	• Framing question: What is different from one pond or pool of data through the next? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997) • What types of progression are at play? (Van de Ven 1992)
What contextual conditions are at play? How do they shape focal processes?	• Framing question: What contextual and intervening conditions appear to influence and affect participant changes through time? (Saldaña 2003) • Embeddedness of processes (Pettigrew 1990, 1997)
What increases or emerges through time?	• Descriptive question: What increases or emerges through time? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997) • What types of progression are at play? (Van de Ven 1992)
What remains constant or consistent through time?	• Descriptive question: What remains constant or consistent through time? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997) • What types of progression are at play? (Van de Ven 1992)

Question	Related concepts and authors
What is cumulative through time?	• Descriptive question: What is cumulative through time? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997) • What types of progression are at play? (Van de Ven 1992)
What is idiosyncratic through time?	• Descriptive question: What is idiosyncratic through time? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997)
What is missing through time?	• Descriptive question: What is missing through time? (Saldaña 2003) • Temporal interconnectedness (Pettigrew 1990, 1997)
What type of progressions are at play within and across phases?	• What types of progression are at play? (Van de Ven 1992)
What is the through-line of my study?	• Analytic and interpretive questions: What is the through-line of the study? (Saldaña 2003)

ANNEX 7 CODING RESULTS

Question	Coding result
Who are the actors involved in the learning and networking?	• **Ad-hoc network of industry experts** (contacts resulted from ad-hoc networking at industry events): Different individuals • **Network of consultants** (contacts often converted from ad-hoc contacts): Diego A., Luis G., Alex M., Jon K. • **Network of friends** (i.e. contacts from past study and industry work experience): Stephen, Tommy • **Support network** (i.e. contacts from business support organizations): e.g., Proexport, RutaN • **Network of partners** (i.e. publishers): Seismic Games, The Publisher, RPG Company, The Koreans • **Network of peers** (i.e. competitors from Colombia): Brainz, Effecto
Where does learning and networking take place?	• Networking and learning happens outside the firms extended network mainly at **industry events** such as Casual Connect (USA), Colombia 3.0 (Colombia), Game Connection (USA), Game Developers Conference (USA), Unite (USA). • Networking and learning happens inside the firms extended network mainly in **online interactions via Skype** (i.e. virtual space) and in **interactions within the firm's office** (i.e. physical space).
What knowledge is acquired?	Mainly knowledge related to: • **Design and development of mobile video games;** • **Marketing of mobile video games;** • **Business development and cooperation strategies;** • **Venture financing;** • **Legal aspects of cooperations;** • **Different learning strategies.**

Question	Coding result
How is learning accomplished?	Mainly activities related to: • **Receiving feedback and advice;** • **Reflecting;** • **Doing;** • **Accumulating experience;** • **Observing;** • **Learning from experience of others;** • **Listening to event speaker;** • **Reading;** • **Discussing;** • **Comparing with others.**
How is networking accomplished?	Mainly activities related to: • **Interacting with international game experts;** • **Participating in industry events;** • **Interacting with the publisher;** • **Being contacted;** • **Making new contacts;** • **Searching for feedback/advice;** • **Engaging with potential publishers.**
When do activities of networking and learning happen?	Activities of networking and learning were captured during time periods related to a **particular year** (retrospective interview), **month and year** (follow-up interviews), or a **particular day** (log information via email) depending on the method of how the data were collected and influenced by the ability of the entrepreneurs to recall the time the event happened.

ANNEX 8 EXAMPLES OF OVERLAPPING CODES

Reference code	**Exemplary overlapping codes**	**Exemplary story**
[PR-LRN] Receiving feedback and advice	[CNTX-INN] [PR-NET] Interacting with international game experts [PR-NET] Interacting with publisher [PR-LRN] Reflecting, Rethinking, Discussing [CONT-NET] Industry expert, publisher [CONT-KNOW] Gaining new insights	Receiving feedback and advice often occurs in interaction with industry experts in form of networks of consultants, friends, and partners. This particular interactions leads to the generation of new insights through discussing, reflecting, and rethinking. This interaction happens within the inner context of the firm.
[PR-LRN] Reflecting	[CNTX-INN] [PR-NET] Interacting with international game experts [PR-NET] Receiving visit [PR-LRN] Receiving feedback and advice [CONT-NET] Industry expert\Tommy [CONT-NET] Industry expert\Alex M. [CONT-KNOW] Learning strategies	Interacting with international game experts (i.e. friend Tommy and consultant Alex M.) and receiving their visits triggers the reception of feedback and advice and to rethink the entrepreneurs' own learning strategies. This interaction happens within the inner context of the firm.
[PR-LRN] Doing	[CNTX-INN] [PR-NET] Interacting with publisher [PR-LRN] Accumulating experience [CONT-KNOW] Product development [CONT-KNOW] Marketing	Learning-by-doing happens within the inner context of the firm and leads to the accumulation of experience supported by the interaction with the publisher. The knowledge gained mainly relates to product development and marketing.

Reference code	Exemplary overlapping codes	Exemplary story
[PR-LRN] Observing	[CNTX-INN] [PR-NET] Interacting with publisher [PR-LRN] Accumulating experience [CONT-KNOW] Marketing\PR activities for game launch	Observing how the publisher executes the public relations strategy for the launch of the game contributes to the accumulation of experience and leads to the generation of marketing knowledge.

ANNEX 9 ITEMS AS THEY RELATE TO DIFFERENT LEVELS OF ANALYSIS WITHIN THE EVENT-LISTING MATRIX

Level of analysis	Item of analysis	Description	Examples
Macro	Industry	Trends within the industry	• Emergence of social media like Facebook that impact how video games are played. • Emergence of digital distribution formats. • Trend towards mobile video games.
	Industry events (national/international)	Industry related conferences, buyer-seller meetings, networking events, trade fairs.	Participation in Casual Connect (USA), Game Connection (USA), Game Developers Conference (USA), Colombia 3.0 (Colombia), Unite (USA)
	Sector (Colombia)	Training programs, pitches, sectorial meetings within Colombia.	Taking part in training programs and organizing digital content forum.
	Proexport	Interactions related to Proexport, the national government-led export promotion agency.	• Getting to know representatives of Proexport. • Receiving invitation to industry event Game Connection as part of export mission led by Proexport.
	RutaN	Interactions related to RutaN, the local government-led innovation and entrepreneurship promotion agency.	Participation and co-organization of video game seminar with RutaN.

Level of analysis	Item of analysis	Description	Examples
	IGDA	Interactions related to IGDA, the Independent Game Developers Association.	• Organization of first IGDA Meet & Greet event with the support of RutaN. • Delivering workshop about videogame entrepreneurship by IGDA with the support of RutaN.
Micro	Alejandro (Brainz Games)/Aivar (Efecto Studios)	Interactions with Alejandro and Aivar from competitor firms in Colombia.	• Getting to know Efecto Studios and Brainz Games during Colombia 3.0 • Meeting with Alejandro to prepare and discuss launch of Nitro Chimp.
	Tommy	Interactions with friend and industry expert Tommy.	Visit Tommy to C2 Game Studio's office.
	Stephen	Interactions with friend and industry expert Stephen.	• Offering role as external advisor and shareholder to Stephen. • Not able to sign contract due to confidentiality agreement with current employer.
	Alex	Interactions with consultant and industry expert Alex.	• Trying to get appointment with Alex who is invited to Colombia 3.0. • Receiving visit by Alex and consultancy services.
	Jon	Interactions with consultant and industry expert Jon.	• Re-encounter with Jon during Colombia 3.0 who still remembered Camilo from pitch during Game Connection.

Level of analysis	Item of analysis	Description	Examples
			• Several meetings with Jon in order to establish closer relationship. • Signing contract with Jon.
	Luis G./Diego	Interactions with consultants and industry experts Luis and Diego.	• Receiving visit of Luis G. and receiving feedback and advice. • Having lunch with Diego and receiving feedback and advice.
	Publishers/Producers (The Publisher, RPG company, the Koreans)	Interactions with publishers and producers.	• The Publisher accepts game and signing of contract for Cowboy Guns. • Weekly interaction with the Publisher in order to improve the game before its launch.
	Unity	Activities related to Unity, the maker of the software for the development of video games.	Becoming official distributor for Unity in Colombia.
	Local clients	Activities related to local clients.	Producing and selling simulations and visualization projects to local clients.
	Partner	Activities related to local production partners Skybranding (video game art design) and Volta Estudios (sound studio).	Starting alliance.
	Strategic plan	Actions taken with respect to C2 Game Studio's strategic plan.	• Re-thinking strategic plan. • Re-define vision and strategy. • Working on strategic plan.

Level of analysis	Item of analysis	Description	Examples
	Products/ Games	Activities and decisions related to the firm's products.	• Design and development of interactive 3D applications. • Taking decision to develop mobile video games for digital distribution through AppStore. • Launch of Nitro Chimp.
	Firm	Key event regarding the official start of the firm.	Firm constitution (i.e. registration Chamber of Commerce)
	Camilo	Activities related to pre-founding study and work experience.	• Working abroad. • Camilo's return to Colombia.
	Luis	Activities related to pre-founding study and work experience.	• Studying abroad. • Working abroad. • Decision to start video-game company.

ANNEX 10 EXAMPLES OF EVENT SEQUENCES

Item	**Chronological development**[15]					
Industry	July 2007: Due to the emergence of Facebook, the entrepreneurs consider the Internet as the future of gaming.	October 2007: Current physical distribution format of video games is considered challenging for a small firm like C2 Game Studio.	All 2010: The industry of video gaming reaches an important peak according to the entrepreneurs. The appearance of digital distribution platforms like Steam makes distribution of video games also accessible to small video game producers.	November 2010: The entrepreneurs become aware about a trend towards mobile video games that require the cooperation of a publisher in order to sell the game through online platforms.	March 2012: The entrepreneurs consider the industry to change excessively fast.	November 2013: According to the entrepreneurs, self-publishing through online platforms now becomes possible.

[15] Some event sequences are not completely shown due to space limitations.

Item	Chronological development[15]					
Alex	July 2012: Invited to lunch meeting by Efecto Estudios where Alex participated.	October 2012: Trying to get appointment with Alex who is invited to Colombia 3.0. Engaging in conversation with Alex and receiving feedback regarding own video games.	December 2012: Participation in workshop by RutaN with Alex. Receiving visit by Alex and consultancy services.			
Jon	March 2012: Jon present as advisor during Camilo's pitch with potential publisher at Game Connection (USA).	October 2012: Re-encounter with Jon at Colombia 3.0 who still remembered Camilo from pitch during Game Connection (USA). Starting to engage in conversation with Jon. Offering board of advisor position to Jon.	November-December 2012: Several online meetings with Jon in order to establish closer relationship.	January 2013: Continue conversations with Jon and receiving input regarding planned activities for 2013.	June 2013: Signing contract with Jon.	

Item	Chronological development[15]					
Publisher (The Publisher)	March 2011: Contacted the Publisher for first time to offer game.	May 2011: The Publisher accepts game and signing of contract for Cowboy Guns.	June-July 2011: Weekly interaction with the publisher's producer in order to improve and prepare the game for the launch in the App Store.	August 2011: The game is approved for publication. Signing contract with the Publisher for the new game Nitro Chimp.	September 2011: Launch of Cowboy Guns in the AppStore.	October 2011: Defining price strategy for Cowboy Guns update in order to promote sales. First meeting the publisher's producer for the new game Nitro Chimp.
Strategic plan	October 2011: Rethinking strategic plan of C2 Game Studio based on participation in Unite (USA) and experience with the production and launch of Cowboy Guns.	February 2012: Working on changes to the strategic plan.	March 2012: Verifying content of strategic plan at Game Connections (USA)	November 2012: Defining new strategic options for firm based on feedback from Jon and Alex during Colombia 3.0.	January 2013: Adapting plans for 2013 based on Jon's feedback.	November 2013: Rethinking and redefining firm strategy. Focus on free-to-play, mobile, role-playing video games under the self-publishing business model.

Item	Chronological development[15]					
Products/ Games	Mid 2010: Taking decision to start working on first video game Cowboy Guns.	November 2010: Taking decision to develop mobile video games for digital distribution through AppStore.	August 2011: Start working on design of new game Nitro Chimp.	February 2012: Advancing the development of Nitro Chimp as quick as possible for trade fair presentation, including trailer.	December 2012: Launch of Nitro Chimp.	January 2013: Start working on concept ideas of new games based on feedback from Alex.

ANNEX 11 TIME-BRACKETED PERIODS

Phase title	**Period**	**Period title**	**Events that characterize the beginning and end of the period**
Pre-foundation	1998 - October 2007	Gaining professional competencies and international work experience.	Start: The two entrepreneurs get to know each other during their bachelor studies in Colombia. End: Camilo's return to Colombia from his work abroad.
Foundation	July 2007 - March 2008	Setting up the business.	Start: Luis's decision to start a video game company. End: The official registration of the company in the local Chamber of Commerce.
	November 2007 - 2010	Gaining experience locally with development technology.	Start: Specification of product portfolio that is offered to local clients (interactive 3D-applications). End: Decision to end the design and development of interactive 3D-applications and to engage in the design and development of video games.
	March 2008 - 2010	Becoming part of the local ecosystem.	Start: Getting invited to local sector association meeting. End: Being locally known as a video game producer by presenting sales pitches to local angel investors.
Pre-internationalization	2010 - November 2010	Becoming an importer/re-seller of technology and know-how.	Start: Selling Unity licenses to the national agency for vocational training (SENA).

Phase title	Period	Period title	Events that characterize the beginning and end of the period
			End: Becoming the official distributor for Unity and representative for Design3 in Colombia.
	March 2010 - November 2010	Becoming a video game producer.	Start: Participation in bidding for video game for international client at Game Developers Conference (USA). End: The end of the period is rather marked by the beginning of the following period than associated to a particular event.
Early internationalization	March - October 2011	Creating competencies for the development and sales of globally competitive mobile video games in cooperation with alliance partner.	Start: Contacted the Publisher for first time to offer game. End: First meeting with publisher's producer for the development of the new game Nitro Chimp.
	September 2011	Becoming an industry pioneer locally.	Start/End: Free-press campaign for the launch of Cowboy Guns within Colombia.
Internationalization	October 2011 - February 2012	Building a local support infrastructure.	Start: Participation in Colombia 3.0, where Camilo got to know the manager for services export of Proexport, Alejandro and Aivar from competitor firms, and representatives from the IGDA chapter Bogota. End: The end of the period is rather marked by the beginning of the following period than associated to a particular event.

Phase title	Period	Period title	Events that characterize the beginning and end of the period
	March - November 2012	Creating a local ecosystem for video game entrepreneurship.	Start: Participation in Game Connection (USA) triggered the awareness about the importance of a national ecosystem for video game entrepreneurship. End: Delivering workshop about videogame entrepreneurship by IGDA with the support of RutaN.
	March - September 2012	Engaging with the global community of mobile video game development.	Start: Participating in Game Connection (USA) where Camilo established contacts to potential clients and industry experts. End: The end of the period is rather marked by the beginning of the following than associated to a particular event.
	October 2012 - January 2013	Tying international game experts to product and business development.	Start: Meeting Alex and Jon again during Colombia 3.0. End: Signing contract with Jon.
	February – November 2013	Experimenting with new product and cooperation strategies.	Start: Contacting RPG company and signing contract for new game. End: Termination of contract with the Koreans and rethinking relationship with RPG company.
	November 2013	Seeing the world through different eyes.	Start/End: Visit of Tommy and redefinition of firm strategy and business model.

ANNEX 12 EVENT-LISTING MATRIX[16]

[16] The photo is for illustration purpose only.

ANNEX 13 LIST OF CODES AND CODINGS

Question addressed	Code category	Code	Number of codings	Example
Who	CONT-NET Content: Stocks of networks expressed as nouns. The "static" view.	Industry expert	89	Long-time friends from pre-founding study and industry work experience (Stephen,Tommy) Industry consultants Jon Kimmich, Alex Mandryka
		Business support organizations	84	Proexport, RutaN, Innpulsa, International Game Developers Association (IGDA)
		Publishers	74	The publisher; RPG company; The Koreans.
Where	CONT-NET	Industry event	113	Casual Connect (USA), Game Connection (USA), Game Developers Conference (USA), Colombia 3.0 (Colombia), Unite (USA)
	CNTX-OUT Context: PESTEL (including sector/industry) as outer context.	-	177	Industry events; Meetings with potential clients.
	CNTX-INN Context: "Extended firm network" as inner context.	-	163	Interactions with publishers; consultants Alex M., Jon K.; friends Stephen, Mike; interactions among employees.
What	CONT-KNOW Content: Stocks of knowledge expressed as nouns. The "static" view.	Product development	64	Game design and development; Rapid prototyping and testing; Integration of game with social media like Facebook.
		Marketing	59	Game user behavior; Public relations activities for launch of game; Positioning of game in AppStore.

Question addressed	Code category	Code	Number of codings	Example
		Business development and cooperation strategies	50	Self-publishing; Different strategic business development options based on feedback and advice from others; Knowledge about industry trends that affect business development and cooperation strategies such as the trend towards mobile games.
		Financing	3	Knowledge about requirements of venture capitalists.
		Legal	2	Knowledge about legal considerations when signing contract with publishers.
When	TIME Time: Chronological time	-	143	1998, November 2007, 29/08/2011
How	PR-NET Process: Actions related to activities of networking expressed in verbs, as gerund. The "dynamic" view.	Interacting with international game experts	55	Meeting regularly with consultant in order to discuss particular topics; Soliciting ad-hoc feedback from contact at industry event.
		Participating in industry events	34	Attending a particular industry event mainly in the U.S. and Colombia.
		Interacting with the publisher	28	Conversations via Skype; Waiting for feedback; Preparation of online meetings; Discussions; Receiving feedback.
		Being contacted	26	Receiving invitations to participate in industry events; Receiving business offers from potential clients; Receiving invitations as a speaker.
		Making new contacts	20	Getting to know someone or meeting with someone for the first time.
		Searching for feedback/advice	13	Deliberately approaching others in order to show game concepts and proto-

Question addressed	Code category	Code	Number of codings	Example
				types in order to solicit feedback and advice.
		Engaging with potential publishers	13	Approaching and engaging in conversations with potential publishers in the context of industry events; Approaching publishers deliberately via email and engaging in conversations via Skype; Meeting with publishers in pre-organized buyer-seller meetings at trade fairs.
How	PR-LRN Process: Actions related to activities of learning expressed in verbs, as gerund. The "dynamic" view.	Receiving feedback/advice	29	Receiving feedback about game design from publisher, friends, consultants, ad-hoc contacts at industry events; Receiving feedback and advice from friend about business development and cooperation strategies.
		Doing	26	Working in industry prior to the foundation of the firm; Continuous game development; Applying checklist received from publisher regarding game publishing process in App Store; Launching the game in the market.
		Reflecting about experience	25	Self-reflections and reflections jointly undertaken with others.
		Accumulating experience	18	Accumulating experience with the development and launch of each game.
		Observing	14	Observing the launch of the games on behalf of the publisher; Observing how others acted during pitches and buyer-seller meetings.

Question addressed	Code category	Code	Number of codings	Example
		Receiving recognition	12	Receiving business offers from internationally recognized game development firms; Receiving positive feedback on the quality of the games from the international game development community.
		Gaining new insights	12	Generation of new insights into game design and development, game marketing strategies, cooperation strategies, and business development. Mainly stimulated through ad-hoc interactions with experts at industry events and interactions with friends.
		Reading	12	Reading reviews about the firm's games in the Internet, books, online articles and tutorials, general industry news in the Internet, and documents provided by the publishers.
		Learning from experience of others	11	Working alongside the publishers, hiring new personal, and interacting with friends and consultants meant to learn from their experience.
		Discussing	10	Prolonged interaction with the publisher, friend, or consultant in order to thoroughly talk things through.
		Analyzing	10	Self-directed learning activity such as comparing game analytics and user behavior with own and other games.

ANNEX 14 LIST OF CODES AS RELATED TO THE DIFFERENT PERIODS OF LEARNING AND NETWORKING INTERACTIONS

Period	Codes	Observations
Gaining professional competencies and international work experience.	PROCESS\PR-LRN\Studying PROCESS\PR-LRN\Doing PROCESS\PR-NET\Becoming friend with someone CONTENT\CONT-NET\Camilo CONTENT\CONT-NET\Midway CONTENT\CONT-NET\Luis C2E CONTENT\CONT-KNOW\Product development	Focal processes at this point are separated. More learning and some networking. Learning by doing approach through studying and practicing the profession. Friendships are made during study and work. Laying the seeds.
Setting up the business.	PROCESS\PR-NET\Being referenced by someone PROCESS\PR-NET\Becoming friend with someone PROCESS\PR-NET\Being introduced to someone PROCESS\PR-NET\Searching for business contacts PROCESS\PR-NET\Participating in industry events PROCESS\PR-LRN\Searching for product ideas PROCESS\PR-LRN\Doing PROCESS\PR-LRN\Listening to event speaker CONTENT\CONT-NET\Camilo	Focal processes at this point are separated. More networking and some learning. Start getting involved in network, mainly locally. Search for product ideas mainly drives networking activities. Event participation more passive (listening to …). Learning by doing for business development and product development knowledge.

Period	Codes	Observations
	CONTENT\CONT-NET\Luis C2E CONTENT\CONT-NET\Business support organizations CONTENT\CONT-NET\Client existing/potential CONTENT\CONT-NET\Developing partners CONTENT\CONT-NET\Industry event CONTENT\CONT-KNOW\Business development	
Gaining experience locally with development technology.	PROCESS\PR-NET\Receiving support PROCESS\PR-NET\Searching for business contacts PROCESS\PR-NET\Participating in industry events PROCESS\PR-LRN\Searching for product ideas PROCESS\PR-LRN\Doing CONTENT\CONT-NET\Business support organizations PROCESS\PR-LRN\Listening to event speaker CONTENT\CONT-NET\Client existing/potential CONTENT\CONT-NET\Industry event CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Financing	Focal processes at this point are separated. Some networking and some learning. Some networking at the local level but learning still dominated by self-learning by doing. Search for product ideas mainly drives networking activities. Event participation more passive (listening to …) Learning by doing for product development knowledge.
Becoming a video game producer.	PROCESS\PR-NET\Starting relationship	The two focal processes start to interact.

Period	Codes	Observations
	PROCESS\PR-NET\Attending conference speeches PROCESS\PR-NET\Being introduced to someone PROCESS\PR-NET\Participating in industry events PROCESS\PR-NET\Making new contacts PROCESS\PR-NET\Approaching [The Publisher] at GDC 2010-USA PROCESS\PR-LRN\Searching for product ideas PROCESS\PR-LRN\Asking questions PROCESS\PR-LRN\Accumulating experience PROCESS\PR-LRN\Gaining new insights PROCESS\PR-LRN\Rethinking PROCESS\PR-LRN\Doing PROCESS\PR-LRN\Observing PROCESS\PR-LRN\Listening to event speaker CONTENT\CONT-NET\Client existing/potential CONTENT\CONT-NET\Developing partners CONTENT\CONT-NET\Industry event CONTENT\CONT-NET\Industry expert CONTENT\CONT-NET\Publisher CONTENT\CONT-KNOW\Game bidding procedure	More learning than networking. Start getting involved in global network of industry with experts and publishers. Still more passive observer at international industry events but learning by observing the behavior of others. First moments of self-reflection triggered by observations and interaction with others. A surge in learning activities.

Period	Codes	Observations
	CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Product development	
Creating competencies for the development and sales of globally competitive mobile video games in cooperation with alliance partner.	PROCESS\PR-NET\Being contacted PROCESS\PR-NET\Signing contract PROCESS\PR-NET\Interacting with [The Publisher] PROCESS\PR-NET\Receiving visit PROCESS\PR-NET\Participating in industry events PROCESS\PR-NET\Making new contacts PROCESS\PR-LRN\Receiving feedback and advice PROCESS\PR-LRN\Discussing PROCESS\PR-LRN\Accumulating experience PROCESS\PR-LRN\Reflecting about experience PROCESS\PR-LRN\Doing PROCESS\PR-LRN\Observing PROCESS\PR-LRN\Learning expectations about business models for Internet firms CONTENT\CONT-NET\Business support organizations CONTENT\CONT-NET\Client existing/potential CONTENT\CONT-NET\Industry event	Two focal processes are interwoven at this point. Focused on one partner and learning from the experience of others and observation. More learning from one partner and limited networking with others. Engaging in a contractual relationships. Learning basically alongside the one partner. Limited networking activities with others. Continued moments of self-reflection based on accumulated experience.

Period	Codes	Observations
	CONTENT\CONT-NET\Industry expert CONTENT\CONT-NET\Publisher CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Marketing CONTENT\CONT-KNOW\Product development CONTENT\CONT-KNOW\Cooperation strategies	
Engaging with the global community of mobile video game development.	PROCESS\PR-NET\Being contacted PROCESS\PR-NET\Signing contract PROCESS\PR-NET\Becoming friend with someone PROCESS\PR-NET\Being introduced to someone PROCESS\PR-NET\Receiving visit PROCESS\PR-NET\Receiving support PROCESS\PR-NET\Searching for feedback/advice PROCESS\PR-NET\Searching for business contacts PROCESS\PR-NET\Participating in industry events PROCESS\PR-NET\Making new contacts PROCESS\PR-NET\Following-up contacts PROCESS\PR-NET\Engaging with potential publishers	Focal processes stay interwoven but with more emphasis on a diversification of networking activities. Networking becomes dominant. Diversification of networking activities. Learning more from others than the partner (The Publisher) from the previous stage. Different learning expectations drive search for feedback and advice. Search for "mentor" who supports decision-making and also provides emotional support. Different quality compared to learning from publisher.

Period	Codes	Observations
	PROCESS\PR-NET\Building relationship with other game studios PROCESS\PR-NET\Interacting with international game experts PROCESS\PR-NET\Trying to justify own actions backed by outsider opinions PROCESS\PR-NET\Responding to meeting invitation PROCESS\PR-NET\Interacting with [The Publisher] PROCESS\PR-LRN\Receiving feedback and advice PROCESS\PR-LRN\Learning from experience of others PROCESS\PR-LRN\Receiving recognition PROCESS\PR-LRN\Comparing with others PROCESS\PR-LRN\Accumulating experience PROCESS\PR-LRN\Reflecting about experience PROCESS\PR-LRN\Gaining new insights PROCESS\PR-LRN\Doing PROCESS\PR-LRN\Observing PROCESS\PR-LRN\Being encouraged [Emotional support] CONTENT\CONT-NET\Business support organizations CONTENT\CONT-NET\Chocoapps.com	

Period	Codes	Observations
	CONTENT\CONT-NET\Client existing/potential CONTENT\CONT-NET\Industry event CONTENT\CONT-NET\Industry expert CONTENT\CONT-NET\Publisher CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Marketing CONTENT\CONT-KNOW\Product development CONTENT\CONT-KNOW\Cooperation strategies	
Tying international game experts to product and business development.	PROCESS\PR-NET\Being contacted PROCESS\PR-NET\Trying to integrate outsider expert in board of advisors PROCESS\PR-NET\More networking more learning more opportunity recognition PROCESS\PR-NET\Receiving visit PROCESS\PR-NET\Receiving support PROCESS\PR-NET\Trying to influence someone PROCESS\PR-NET\Organizing event PROCESS\PR-NET\Searching for feedback/advice PROCESS\PR-NET\Participating in industry events	Focal processes stay interwoven but with more emphasis on learning this time from previously built relationships. More learning from previously built relationships. Not so much about making new contacts anymore but more of consolidating existing relationships. Climax of learning from relationships that were established during the previous stage. "Being criticized" becomes important. Learning that stimulates reflection and thinking

Period	Codes	Observations
	PROCESS\PR-NET\Following-up contacts PROCESS\PR-NET\Interacting with international game experts PROCESS\PR-NET\Engaging with potential publishers PROCESS\PR-NET\Making use of rltshp. with RutaN for paid consultancy service PROCESS\PR-NET\Getting in touch with network contacts PROCESS\PR-NET\Strengthening relationship PROCESS\PR-NET\Promoting game globally PROCESS\PR-NET\Interacting with [The Publisher] PROCESS\PR-LRN\Discussing PROCESS\PR-LRN\Analyzing PROCESS\PR-LRN\Receiving recognition PROCESS\PR-LRN\Asking questions PROCESS\PR-LRN\Learning from experience of others PROCESS\PR-LRN\Comparing with others PROCESS\PR-LRN\Working jointly on something PROCESS\PR-LRN\Learning from mistakes PROCESS\PR-LRN\Accumulating experience	essential at this stage. Not pure business/tech knowledge that is sought.

Period	Codes	Observations
	PROCESS\PR-LRN\Reflecting about experience PROCESS\PR-LRN\Being questioned PROCESS\PR-LRN\Being criticized PROCESS\PR-LRN\Absorbing expert advice PROCESS\PR-LRN\Gaining new insights PROCESS\PR-LRN\Rethinking PROCESS\PR-LRN\Acknowledging different opinions PROCESS\PR-LRN\Doing PROCESS\PR-LRN\Observing PROCESS\PR-LRN\Taking on trend, late (microtransactions) PROCESS\PR-LRN\Learning expectations PROCESS\PR-LRN\Desperate learning new things in order to make C2E successful a PROCESS\PR-LRN\Becoming aware about necessity to integrate intl. experienced b CONTENT\CONT-NET\Luis C2E CONTENT\CONT-NET\Awards CONTENT\CONT-NET\Business support organizations CONTENT\CONT-NET\Industry event	

Period	Codes	Observations
	CONTENT\CONT-NET\Industry expert CONTENT\CONT-NET\Publisher CONTENT\CONT-NET\Sales channel CONTENT\CONT-KNOW\Marketing CONTENT\CONT-KNOW\Product development CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Cooperation strategies CONTENT\CONT-KNOW\Dvlpmt. of each game doubles knowledge CONTENT\CONT-KNOW\Legal	
Experimenting with new product and cooperation strategies.	PROCESS\PR-NET\Change of contact person PROCESS\PR-NET\Relationship dissolves PROCESS\PR-NET\Participating in industry events PROCESS\PR-NET\Engaging with potential publishers PROCESS\PR-NET\Interacting with international game experts PROCESS\PR-LRN\Learning from experience of others PROCESS\PR-LRN\Observing CONTENT\CONT-NET\Study colleagues Luis	Focal processes become synchronized. Cooperation with other partners reinforces learning from experience of others and observation.

Period	Codes	Observations
	CONTENT\CONT-NET\Business support organizations CONTENT\CONT-NET\Industry event CONTENT\CONT-NET\Publisher CONTENT\CONT-KNOW\Product development	
Seeing the world through different eyes.	PROCESS\PR-NET\Exploiting Luis's social network of friends PROCESS\PR-NET\Proactively approaching network contacts (dormant) PROCESS\PR-NET\Regular contact PROCESS\PR-NET\Bridge to other networking opportunities PROCESS\PR-NET\Interacting as if a team member PROCESS\PR-NET\Receiving support in decision making PROCESS\PR-NET\Receiving visit PROCESS\PR-NET\Searching for feedback/advice PROCESS\PR-NET\Interacting with international game experts PROCESS\PR-LRN\Receiving feedback and advice PROCESS\PR-LRN\Learning about how to learn better (higher-order learning) PROCESS\PR-LRN\Making sense	Balanced approach between networking and learning. Networking and learning quite balanced and synchronized with Tommy. Interaction with friend Tommy as ideal situation of "mentor" that provides feedback/advice, supports decision-making, provides emotional support, and stimulates reflection/thinking.

Period	Codes	Observations
	PROCESS\PR-LRN\Discussing PROCESS\PR-LRN\Learning from experience of others PROCESS\PR-LRN\Analyzing PROCESS\PR-LRN\Reflecting about experience PROCESS\PR-LRN\Gaining new insights PROCESS\PR-LRN\Rethinking CONTENT\CONT-NET\Industry expert CONTENT\CONT-KNOW\Learning strategies CONTENT\CONT-KNOW\Business development CONTENT\CONT-KNOW\Cooperation strategies CONTENT\CONT-KNOW\Marketing	

ANNEX 15 CONTRIBUTIONS AND IMPLICATIONS OF MY FINDINGS

Theoretical statement based on my empirical findings	**Extant literature in international entrepreneurship**	**Insights from my research**	**Practical implications**	**Avenues for future research**
The role of the network goes beyond a source and transmission of knowledge.	The common view in international entrepreneurship literature is that the network of the entrepreneur functions as a source of knowledge (e.g., Baronchelli & Cassia 2014; Fernhaber et al. 2009; Gil-Pechuan et al. 2013; Musteen et al. 2014; Presutti et al. 2007; Yeoh 2004; Zhou et al. 2007). Only three studies do not limit the role of the network to a source of knowledge and to the transmission of that knowledge: Harris and Wheeler (2005) show that relationships not only fulfill the function of providing knowledge about markets and technology or further net-work contacts, the relationships also have the ability to direct strat-	The role of the network goes beyond the common view in international entrepreneurship literature of the network as simply a source of knowledge. The interaction with network contacts does not only allow access to information, it is also an opportunity to learn from receiving instructions, learning from observations, engage in sensemaking, and create awareness about trends and missing experiences and knowledge. Especially the sensemaking role of network interactions has not received much attention in the international entrepreneurship literature. The future-oriented type of sensemaking of my framework is able to explain how learning	Engaging and interacting with others does not only provide access to new information it also is an opportunity to learn from receiving instructions, learning from observations, engage in sensemaking, and create awareness about trends and missing experiences and knowledge. The entrepreneur should be aware about how different type of contacts (i.e. partners, ad-hoc contacts, consultants, industry friends, peers) impacts learning differently in order to direct learning more efficiently. Policy-makers should facilitate access to different type of contacts in order to target learning deficiencies of international new ventures more efficiently.	How do the different roles of the network change with regard to their impact on experiential learning once the entrepreneur gains experience? For instance, is the instructional and observational role more important during early stages of the international new venture? Does the sensemaking role increases over time? Is generative-sensemaking with increasing experience more and more accomplished alone rather than in interaction with others?

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
	egy; Prashantham and Dhanaraj (2010) posit that learning outcomes of social capital might influence a firm's strategy; Prashantham and Floyd (2012) emphasize on the role of networks for aiding sensemaking.	outcomes of social capital influence a firm's strategy as posited by Prashantham and Dhanaraj (2010) and makes a strong case for the importance of sensemaking in order to direct the firm's strategy in a technologically fast-changing environment (cf. Prashantham & Floyd 2012). I put forward the term of generative sensemaking as a future-oriented type of sensemaking that impacts strategy making.	Students of international entrepreneurship should learn about the differing role of network interactions for experiential learning in order to learn about its significance for doing international entrepreneurship.	
The network is purposefully managed in order to achieve the desired learning.	The international entrepreneurship literature assumes network contacts to be preexistent. However, it recognizes the importance for future research to investigate the network dynamics related to the learning of the entrepreneur. That is, how new networks are created for the purpose of knowledge acquisition, even from scratch, how the network is configured and reconfigured during the process of learning, and the role of non-business relationships for learning.	I provide empirical insights into the network-building activities and the network dynamics as asked for by Loane and Bell (2006) and Coviello (2006). The decision and action of the entrepreneur to engage with others is driven by the perceived lack of knowledge or perceived learning-outcomes based on prior experiences. Learning intentions drive activities of networking. The learning intentions determine if new relationships are build, existing relationships continued or	Making new contacts might be important for access to vital information. The entrepreneur should actively engage in making new contacts by attending for instance trade fairs and other gatherings of the industry. Policy-makers can provide support for access to these events by sponsoring travel costs and fees. Entrepreneurs should also consider to dissolve connections in order to avoid getting locked-in in stagnate relationships that do not contribute to learning anymore. Making room for new contacts might revitalize learning.	

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
	A notable exception is Loane and Bell (2006) who address empirically the creation of new networks for knowledge acquisition and network development as a continuously ongoing process.	ended. The fast-changing technological environment drives the continuing need for learning and the creation of new knowledge. Calculative, intentionally-managed networks are able to deal with the different arising knowledge needs and identity-based networks aid generative sensemaking.		
Networking and learning abilities amplify the enhancing character of networking and learning.	IE literature recognizes the importance of capabilities in order to leverage relationships and the dynamic creation of new knowledge (Peiris et al. 2012; Schweizer 2013; Weerawardena et al. 2007). However, research on dynamic capabilities has been criticized to be mainly focused on conceptual understanding and for their lack of understanding at the micro-level (Vogel & Güttel 2013).	My framework confirms the importance of learning and networking capabilities for entrepreneurial internationalization. However, it goes beyond our current understanding by showing how these capabilities are actually developed and how they contribute to the dynamic reconfiguration of knowledge and network resources. My research therefore contributes to a better understanding about capability development in the international new venture (Zahra et al. 2006). The networking and learning abilities as depicted in my framework make it possible for	The entrepreneur should constantly sharpen the networking ability by actively seeking out and engaging in activities of networking. The learning ability of critical reflection emerges with experience. Only critical reflection as higher-order learning is able to alter subsequent learning and networking. Policy-makers might facilitate access to networking opportunities and deliver skill training for networking. Students of international entrepreneurship should gain awareness about the importance of networking and learning abilities.	How does the development of learning and networking abilities differ for people with different levels of professional experience? Does a learning advantage exists for the expert entrepreneur compared to the novice? How do individual networking and learning abilities create firm-level capabilities within the international new venture? What patterns of decision-making, practices, and routines at the firm-level emerge

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
		the entrepreneurs to leverage the learning opportunities that stem from networking. These abilities do not appear by themselves – they need to be developed through practice. That is, they require the continued engagement and interaction with others in order to develop and flourish. Since both networking and learning ability have the potential to reconfigure the learning and networking of the firm, I consider them as dynamic capabilities. More specifically, they become higher-order dynamic capabilities through practice, accumulation of experience, and triggered during particular episodes. Events like trade fair participation have different qualitative character depending on the ability of the entrepreneur during that particular moment. The process of reflecting for instance does not necessarily constitute a dynamic capability. Only critical reflection as	Networking skills might be practiced as part of class exercises. Activities that allow for critically reflecting on past behavior sharpen the student's awareness about the importance of double-loop learning. These exercises should be embedded in experiential learning activities related to international entrepreneurship.	from individual-level abilities? How can learning abilities such as critical reflection be practiced and taught?

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
		higher-order learning is able to alter subsequent learning and networking. I am also making a case for the dynamics of dynamic capabilities through capability development and the cyclical nature and interplay between dynamic capabilities.		
Experiential learning is a continuous and spiraling cycle.	International entrepreneurship considers at least conceptually activities of learning and networking as continuous, cyclical, and interacting based on feedback loops (Casillas et al. 2009; Freeman et al. 2010; Johanson & Vahlne 2009; Sharma & Blomstermo 2003). The knowledge that is acquired through learning from the firm's changing network of relationships leads to further opportunities for networking and learning, and so on.	My findings confirm the cyclical nature of learning and networking based on feedback loops but also extend our current understanding by providing insights into the triggers and underlying mechanisms of the cycling and spiraling nature. The dynamic (cap)abilities of learning and networking regulate the continuous cycle of experiential learning. They make the wheel running faster or slower. It is the interplay between the dialectical and the teleological motor that trigger the wheel's movement and that keep it running. The generative mechanism of confrontation between different perceptions	In order for the international entrepreneur to benefit from accelerated learning, he or she needs to sharpen learning and networking skills. The benefits gained from participation in periodic industry events depends on the current level of learning and networking abilities. Therefore the repeated participation in the same event can have different effects on the learning and networking outcome. Business support organizations might target support for participation in industry events more selectively depending on the experience of the entrepreneurs. For the novice entrepreneur, the participation in an industry event might be a good opportunity for sharpening networking skills. For	The internationalization of a new venture is a multi-layered and complex organizational change process. Reducing its explanation to one possible mo-tor operating on a particular generative mechanism would be a naïve under-taking. Poole and Van de Ven (2004) contend the development of composite theories in order to provide explanations for organizational change processes which implies to detangle the interrelationships of different change motors

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
		about reality relates to the mechanism that sets off the experiential learning cycle and pushes it towards new learning goals – it is the invisible hand that regularly pushes the wheel forward. The new envisioned learning then defines the direction of where the wheel is heading. The metaphor of a wheel that moves along and does not remain in a static position like the wheel of a stationary exercise bicycle, resembles a spiraling view. Although context, processes, and content might repeat itself over different cycles, the interplay of all three elements remains unique within each cycle and therefore trigger the spiraling effect of the wheel.	more experienced entrepreneurs the participation might not only sharpen networking skills but also contributes significantly to learning depending on the professional experience and learning skills possessed during the moment. Making students aware about and practicing learning abilities for critical reflection could benefit their future career as (international) entrepreneurs.	across levels and time. How do cross-level relationships of different change motors play out within my framework? (Poole & Van de Ven 2004) For instance, how do the teleological and dialectical progressions at the firm-level relate to possible evolutionary progressions at the industry level? How does the teleological progression at the level of the individual entrepreneur influence the life-cycle of the international new venture? How does the temporal relationships among motors play out in my framework? (Poole & Van de Ven 2004)

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
				For instance, how do different change motors relate to each other in order to accelerate, decelerate or maintain constant pace over time in relation to the new ventures internationalization?
The strategy emerges through a process of generative sensemaking in interaction with others.	The international entrepreneurship literature rather remains silent on the influence of the entrepreneur's network on the firm's strategy. Few studies do not limit the role of the network to a source of knowledge but recognize its influence on strategy-making (Harris & Wheeler 2005; Prashantham & Dhanaraj 2010). Harris and Wheeler (2005) show that relationships not only fulfill the function of providing knowledge about markets and technology or further network contacts, the relationships also have the ability to direct strategy. Similarly, Prashantham and Dhanaraj	I suggest my findings to contribute to a better understanding of how the interaction with others contribute to strategy-making in the international new venture. That is, how the process of social interactions unfolds that leads to strategy-making. Regarding the field of strategy-as-practice, my framework is able to extend our current knowledge on two important aspects. On the one hand, it broadens our view of agency in strategy-making, and, on the other hand, it elucidates emergence in strategy-making before purposeful and deliberate planning sets in.	The international entrepreneur should recognize that social interactions are important for shaping the strategy of the firm. Interacting with others provides useful information about industry trends and aids making sense of past, current, and future actions. For sensemaking, the interaction with mentors and friends with significant industry experience is especially helpful. The entrepreneur should recognize the influence of the emergent strategy on the planned strategy and be flexible for changes. Especially if the firm operates in an environment characterized by fast technological changes. Business support organizations should recognize the limitations	How does strategy-making based on generative sensemaking influence the identification and construction of the suitable business model that makes and maintains the INV competitive in global markets? How does generative sensemaking impact the liability of adolescence of the international new venture, that is, the period stakeholders grant the new venture before judging about success or failure? (Brüderl & Schüssler 1990)

Theoretical statement based on my empirical findings	Extant literature in international entrepreneurship	Insights from my research	Practical implications	Avenues for future research
	(2010) posit that learning outcomes of social capital might influence a firm's strategy.	I argue that generative sensemaking in interaction with others is central to strategy-making during entrepreneurial internationalization. Closely linked to the sensemaking process is the process of interaction with ad-hoc contacts and the creation of wisdom. My framework therefore reveals the social embeddedness of the entrepreneur as a strategy maker and emphasizes on practices usually not directly associated with strategy-making. It therefore broadens our view on the role of agency in strategy-making. The spiraling nature of my framework highlights the recurrent activity of generative sensemaking which I compare to the activity of deliberate coping that eventually leads to strategizing in a planned manner. I am therefore able to provide insights into the emergence of strategy-making that eventually leads to the deliberate, planned strategy in the context of the internationalizing new venture.	of one-time strategy planning sessions and consider the importance of their emergence as an activity of social interactions over time including internal and external stakeholders. Make students aware about emergent strategy versus purposeful and deliberate planning. Not everything goes according to a plan. In order for small firms to survive in global markets they need to be flexible and adaptive to changing trends in technology and consumer behavior.	

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