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Master's Thesis:

**Decision making in Internationalization:
Perspectives from organizational- and
entrepreneurial learning**

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Executive summary

This thesis is based on the commonly held assumption that internationalization is a process of knowledge development. Based on a descriptive analysis of influential conceptualizations of learning in and by organizations, a model framework is developed. The model framework emphasizes learning and decision making as a path-dependent process consisting of four phases: Learning Trigger, Knowledge Acquisition, Knowledge Integration and Knowledge application. Multilevel integration and Reasoning are omnipresent constructs influencing the characteristics of the phases and their integration.

The comparative analysis of organizational learning perspectives, represented by the Uppsala internationalization model, and entrepreneurial learning reveals that the two learning perspectives have similar overall structures, but differ markedly in the mechanisms assumed to take place in the individual phases, which inhibits the understanding of learning and decision making in the process of internationalization. In order to reconcile these differences and thereby facilitate an understanding of the learning and decision making process in internationalization in general, five propositions are developed. The propositions focus on the importance of recognizing the multilevel mechanisms inherent in the process of learning and decision making in internationalization, and on the relevance of effectuation, i.e. a logic of control, as a means for leveraging main challenges of internationalization, specifically the negative effect of risk perception on internationalization and the difficulties of maintaining a balance between exploitive and explorative leaning.

Internationalization is a complex phenomenon of integrated and multilevel mechanisms of learning, and it is imperative that an analysis of decision making under these circumstances reflects this multilevel character. Consequently, there is no one appropriate level of analysis for decision making in the process of internationalization, as the phenomena requires a multilevel analytical approach in order to obtain valid results.

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1. Introduction

Internationalization is a widely researched subject and a dominant issue within international business studies (Andersson 2000, Andersen 1993, Madsen 2005). According to the process approach to internationalization, decision makers only have access to limited information, and the behavior of the organization, including the decision to internationalize, is to a large extent determined by the knowledge it has or does not have. Consequently, the process of internationalization is generally understood and explained as a process of learning (e.g. Lyles et al. 2005, Andersson 2000, Anderson and Skinner 1999, Petersen et al. 2003, Autio et al. 2000, Andersen 1993, Eriksson et al. 1997, Jones and Coviello 2005).

Organizational learning perspectives, exemplified by the Uppsala Internationalization model, have traditionally played a significant role in internationalization research, but as it empirically has become increasingly evident that organizations internationalize in different ways and at various speeds, the understanding of learning in the organizational context and the role of learning in the process of internationalization has evolved (Petersen et al. 2003, Eriksson et al. 1997, Madsen and Servias 1997). As a result of this development, the field of entrepreneurship and entrepreneurial learning perspectives has come to play a role in the internationalization discourse (Andersson 2000, Jones and Coviello 2005, Autio et al. 2000, Styles and Gray 2006).

Organizational- and entrepreneurial learning perspectives offer alternative explanations of the learning and decision making process taking place in the context of internationalization as traditional perspectives of organizational learning tend to focus on organizational level determinants and outcomes, whereas entrepreneurial learning approaches emphasize the importance of subjective interpretation and strategic choice by individuals as main determinants of the internationalization process (Andersson 2000, Autio et al. 2000). This discrepancy in terms of main analytical level broadens the field of internationalization research, and challenges ingrained assumptions and understandings of learning mechanisms in an organizational context. But it also increases the complexity as the perspectives exhibit contradictory traits in terms of which organizational level to focus theoretical as well as empirical research on. As a result of these two dominant strings, or research approaches, within internationalization research, the understanding of learning and decision making in the process of internationalization remains somewhat ambiguous. As a contribution to the ongoing discourse about the mechanisms and characteristics of internationalization, this thesis is focused on the

following research question: *“What is the appropriate level of analysis for decision making in the process of internationalization?”*

1.1 Clarification of aim and relevance of study

The aim of this study is to explore two theoretical conceptions of learning and decision making in the process of internationalization, i.e. organizational learning, represented by the Uppsala internationalization model, and entrepreneurial learning, with the purpose of discussing the appropriate level of analysis for decision making in the process of internationalization, and thereby obtain a comprehensive understanding of the processes inherent in internationalization.

The entrepreneurial – as well as the organizational learning perspective emphasize knowledge as a key driver of internationalization, but whereas entrepreneurial learning perspectives perceive decision making as a process primarily taking place at the individual level, organizational learning perspectives on internationalization sees decision making as an organizational level construct. The goal of the thesis is hence to examine the two approaches to learning, and thereby obtain a broader understanding of levels of learning and decision making involved in the process of internationalization. In order to achieve this aim, similarities and differences between the two theoretical learning approaches, which are relevant to contemporary developments and discussions within the internationalization discourse, are explored. Learning and decision making is understood as an integrated process, in which learning and knowledge development precedes internationalization. The level of analysis for decision making is a central element in internationalization, and it is in the interest of scholars as well as practitioners to obtain detailed knowledge of all potentially relevant aspects and elements of learning and decision making.

Looking at learning and decision making in the process of internationalization in a wider context of international business and management studies, the issue of internationalization remains a highly relevant area of research as international business activities, in addition to being of theoretical interest, are of interest to individual firms as well as to public policy makers. International commitment and activities by organizations have the potential to help the individual organization achieve and sustain an advantageous competitive position, while at the same time potentially supporting national economies at the macro level (Madsen 2005). Internationalization consequently remains relevant to multiple stakeholders in today's business environment, political environment and as field of academic study, and it remains relevant to continuously develop the area of internationalization. This study contributes to this aim by exploring in detail one piece, i.e.

learning and the level of decision making through the lenses of organizational and entrepreneurial learning, of the larger puzzle of internationalization.

1.2 Delimitations

Internationalization is relevant in most industries, and while the study recognizes that industry characteristics may influence organizational structures, learning environments, risk perceptions, performance etc., all of which may subsequently affect decision making, the thesis makes no industry differentiations or distinctions between the internationalization of goods and services. Some researchers argue that the defining characteristics of services, i.e. intangibility, inseparability, perishability, variability and ownership, makes internationalization of services distinct, while others maintain that the characteristics, which are potentially not universally applicable to all services, are only of minor importance and can be leveraged by modifications to generic theories of internationalization (Blomstermo and Deo-Sharma 2003). This thesis makes no deliberate choices in either direction and leaves the discussion for different fora. Similarly, possible differences in national or cultural environments are not considered. The study is focused on learning and decision making in a generic organizational context during a process of internationalization, as the discussion of the analytical approach in general, and analytical level in particular, is believed to be universally relevant regardless of industry or environmental differences.

Several studies in international research include firm size as a key variable, and it has been suggested on several occasions that development of knowledge is easier for larger organizations. There are however no conclusive evidence (Blomstermo and Deo Sharma 2003), and this study makes no distinctions between large and smaller organizations.

The common feature of these delimitations is that they would, if included, provide a higher level of detail. For the purpose of this thesis, a higher level of detail is beyond the aim as well as the scope of this study, but elaborations are encouraged for further research.

1.3 Definition of central concepts

In order to ensure a common understanding of terms and concept relevant to the present discussion, this section presents definitions as understood in the study.

Internationalization is fundamentally a firm level growth process aimed at successful exploitation of opportunities, for the purpose of improving or consolidating organizational performance. The defining characteristic of internationalization compared to other growth processes is that goods, services and/or resources are transferred across national borders.

Although there is a widespread belief that organizations often internationalize on the inward side before engaging in outward activities such as export, licensing and FDI, most studies concentrate on outward activities, which is also the focus of this thesis (Jones and Corveillo 2005, Wright et al. 2007).

Although **entrepreneurship** is an established field of research, the definition is continuously debated. Several scholars point to the fact that entrepreneurship overlaps with other areas (e.g. innovation, international business, change – and strategic management), is used to describe many different constructs, as well as being studied from various points of departure (e.g. economics, sociology, anthropology) which makes it difficult to pin down what entrepreneurship is. (McDougall and Oviatt 2000, Gartner 2001). There is however widespread agreement that entrepreneurship involves some level of innovation and proactive behavior and requires the presence of lucrative opportunity and enterprising individuals (McDougall and Oviatt 2000, Oviatt and McDougall 2005a, Shane and Venkataraman 2000). Most entrepreneurial activity takes place in start-ups, but entrepreneurship is not limited to the start-up of new ventures, and entrepreneurial behavior may take place at the individual, group or organizational level in organizations of any size (Shane and Venkataraman 2000, McDougall and Oviatt 2000, Perks and Hughes 2008). As entrepreneurial - and organizational learning processes are the locus of attention of the thesis, the concepts are elaborated and discussed in detail in chapters three and five.

As a final note, the terms “thesis” and “study” are used interchangeably, and refer to the entirety of this piece of work.

1.4 Structure

The purpose of this introductory chapter is to outline the overall aim of the thesis, as well as to clarify the flow of the study by providing a brief introduction to each chapter, which is the objective of this paragraph.

Chapter two addresses the central issue of what knowledge is, and how it is understood according to different theories of scientific method in a brief review of ontological, epistemological and methodological questions, applicable to social sciences in general, and to this study in particular.

In order to create the best possible base for discussing learning and decision making in the process of internationalization, the study is initiated with a descriptive analysis in chapter three. Basic issues concerning learning in an organizational context are clarified, and existing conceptualizations of learning in and by organizations, and how these relate to the issue of learning and decision making level in the process of internationalization are reviewed.

As a natural progression of chapter three, a model framework which reflects learning and decision making in the process of internationalization as understood in this thesis is developed and presented in chapter four.

Chapter five is a comparative analysis of an organizational learning perspective to internationalization, specifically the Uppsala model of internationalization, and entrepreneurial learning perspectives, structured according to the model framework. The analysis is explanatory in outlining the basic similarities and differences between the two approaches, as the purpose is to make the complex issue of learning and decision making in the process of internationalization understandable by looking at the processes and mechanisms at various levels which make up internationalization.

Based on the findings of the comparative analysis structured according to the model framework, five propositions about the interconnections between learning and level of decision making in the context of internationalization are developed.

The thesis does not include an empirical analysis, but as empirical research is closely related to the theoretical analysis and propositions of the thesis, chapter six concludes with a discussion of a research design, including research strategies and data collection methods, appropriate for such elaborations.

The study is concluded by chapter seven, which summarize the main finding of the study and places the work in a wider frame by discussing contributions and implications of the study.

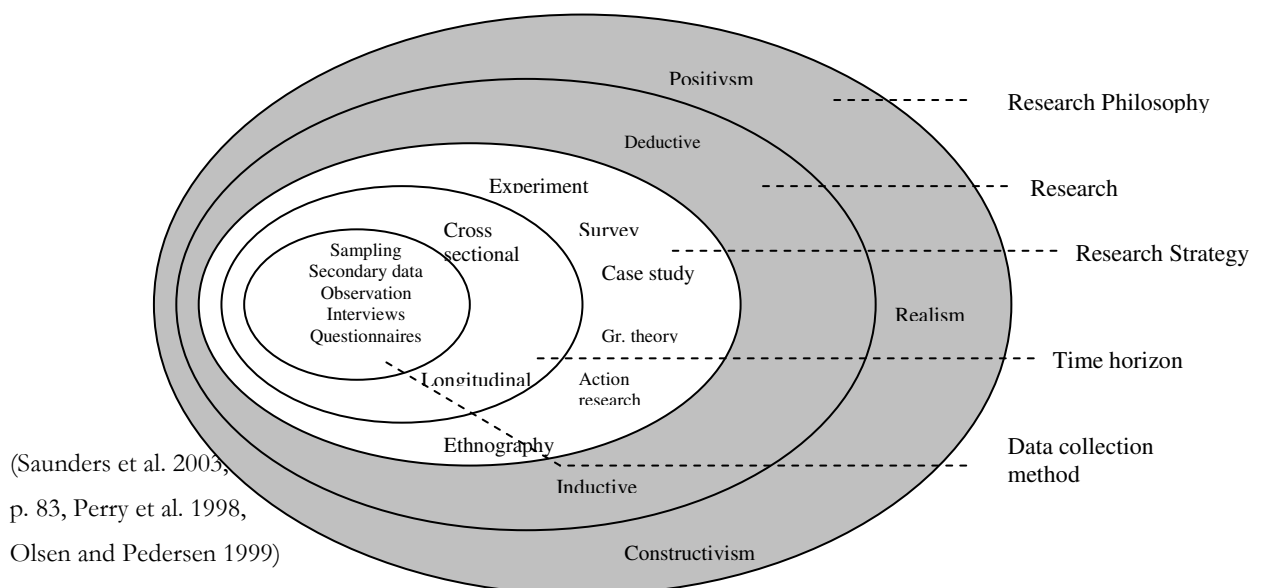
2. Theory of scientific method

Theory of scientific methods revolves around the rules and assumptions guiding any research process, and this chapter takes a meta-theoretical perspective and focuses on what knowledge is, how it is developed, and the research implications of particular views on what constitutes knowledge. Following a discussion of the process of research and philosophies of research in general, the chapter clarifies the paradigmatic position of the thesis and the implications of the choices made.

2.1 The process of research

In a research process different research paths are available, depending on which assumptions are held about the creation of knowledge, which is the overall aim of research. No research path is better than others, but as different paths are better at achieving different goals, choices should always be adapted to the aims and scope of the research project. Once the researcher has embarked on a specific path, subsequent decisions related to the research process should be guided by preceding decisions and the overall path in order to obtain a high level of coherence among decisions and consequently a well founded, valid and transparent research project (Kragh 2007, Saunders et al. 2003, Guba and Lincoln 1994). Saunders et al. (2003) has illustrated the process of research, specifically applicable to business and management studies, as an onion, from which layers are peeled off, one at the time, thereby clarifying the research path and the assumptions which, implicitly or explicitly, guide the development of knowledge.

Figure 2.1: The research process onion (I)



The research path is paved with a number of perceptions and understandings, which result in a set of assumptions, also known as a paradigm. A paradigm is a world view consisting of ontology, epistemology and methodology, all of which are internally consistent for a specific paradigm, and “*a particular ‘set’ of answers, then, defines the limits of one paradigm relative to another and, therefore, defines also what falls inside or outside the legitimate limits of a scientific community*” (Kragh 2007, p 16, Guba and Lincoln 1994). A paradigm hence represents a cross sectional path through the outer two layers of the research onion, starting by establishing the research philosophy, which is determined by ontology and epistemology.

Ontology deals with the fundamental issue of the nature of the world, i.e. what is reality and what can be known about this reality (Kragh 2007, Olsen and Pedersen 1999, Guba and Lincoln 1994). Classic ontological discussions for example revolve around (1) whether a research object is a conceptual construction composed through ideologies and the questions asked by the researcher etc., or whether it in fact is an objective reality, and (2) whether society is best understood through the making of law-like generalizations or by seeing all situations as unique (Olsen and Pedersen 1999). The ontological position of the researcher has significant impact on the way research is approached, but as there is no right or wrong way of perceiving and defining what reality is, an ontological position is primarily a matter of faith and conviction (Kragh 2007).

The second pillar of theory of scientific method is epistemology, which poses the question of how veridical knowledge is obtained. The relation between the researcher and the knowledge he/she is able to produce is central, and specifically the extent to which the phenomena under investigation and the researcher are (in)dependent. The continuum of epistemology ranges from objectivism, according to which it is in fact possible to obtain true knowledge about the social world, to subjectivism where the assumption is that all knowledge obtained is dependent on the specific and subjective context of the situation from which it is gathered, including the researcher and other individuals involved (Hüttel 2002, Kragh 2007, Guba and Lincoln 1994).

Methodology, which is the last element of the trinity of a paradigm, is concerned with which analytical strategy should be applied in a research process in order for the researcher to obtain knowledge which fulfils the criteria of what defines true knowledge according to the individual researcher, and/or the research community to which he/she belongs (Olsen and Pedersen 1999, Kragh 2007).

Ontology, epistemology and methodology are internally consistent within a paradigm but although a position in any of the three aspects to some extent restricts the choices available in the other two, paradigms are not fixed and objective constructs (Kragh 2007, Guba

and Lincoln 1994). Some level of flexibility exists within each paradigm, and it is questionable whether it is possible to obtain an understanding of the assumptions underlying a specific research project by simply stating a specific paradigmatic position. The following paragraphs focus on dominant views of how knowledge is created and how research should be undertaken, and subsequently relates these ideas to this thesis. Emphasis is on the outer two rings of the research onion, i.e. research philosophy, which addresses ontological and epistemological issues, and research approach, which is concerned with methodological questions. These elements are the most fundamental structures which guide operational strategies, timeframes and data collection methods, which will be touched upon in chapter six.

2.1.1 Philosophies of research

A research philosophy is a reflection of the way the researcher thinks about the development of knowledge, and by which criteria the validity and reliability of knowledge is evaluated (Saunders et al. 2003). As such, a research philosophy, i.e. the ontological and epistemological positions, is the first critical clarification to make.

Positivism has been a highly influential philosophy of research for several generations, and remains a dominant perspective within social science (Saunders et al. 2003, Knudsen 1994, Hüttel 2002). The positivist philosophy adheres to an objective ontology and emphasizes the objective analyst, who makes generalizations, often about cause-effect relations, based on facts about the external world and its objects, which are observable to the researcher. Reality is considered to be objective as well as “*identical across different social contexts and individual perspectives*” (Kragh 2007, p 16, Saunders et al. 2003, Hüttel 2002, Guba and Lincoln 1994). The strict reliance on objective laws and mechanisms has given positivism the label ‘Naïve Realism’ (Guba and Lincoln 1994, Perry et al. 1998). The basic positivist principle, that what is real and true is based on reliable facts, is naturally embedded in western culture, which is perhaps one reason for the broad appeal of a positivist research approach (Thurén 2001).

In terms of epistemology, the positivist researcher is unbiased towards and independent of the research project, and objectively analyzes collected data by means of a highly structured methodology, often through quantifiable observations and statistical analysis, which offers transparency and thereby facilitates replication and/or test of a specific study at a later point in time (Guba and Lincoln 1994, Saunders et al. 2003, Hüttel 2002).

At the opposite side of the research onion is Constructivism, which is founded on a belief that the world, in this case the field of business and management, is too complex and diversified for generalizations to provide relevant knowledge, i.e. an ontological position with

focus on uniqueness and subjectivity (Saunders et al. 2003, Olsen and Pedersen 1999, Perry et al. 1998). The constructivist sees business situations as a function of unique circumstances and the individuals involved in these circumstances, and the aim of research is to understand the subjective reality of an object or situation under research, in order to be able to form the bigger picture and obtain an understanding of motives, intentions and aspirations driving behavior (Saunders et al. 2003). Constructivism is hence founded on a perspectivist epistemology, according to which true knowledge only exists in a specific situation, which can not, or only to a limited extent, be transferred across barriers of time, distance and context. Reality, and hence true knowledge, is constructed by social relations, interactions between the researcher and the object of research, individual experience, social structures etc. over time (Kragh 2007, Saunders et al. 2003, Olsen and Pedersen 1999, Guba and Lincoln 1994). The goal of the research process, according to the constructivist, is to understand the subjective reality of the research subject(s), rather than to make generalizations, which are believed to neglect details and nuances which are gateways to knowledge (Saunders et al. 2003).

The philosophical debate about how to define knowledge is infinite (Guba and Lincoln 1994), and while the above review of the positivist and constructivist research philosophy, and research approaches provide an impression of the range within scientific method, it is important to note, that scientific method is not a discussion of 'for' or 'against' positivism and constructivism or the adjacent epistemological, ontological and methodological perspectives. There are several paradigms between the poles of positivism and constructivism, including post-positivism, critical realism and critical theory, which each offer alternative suggestions of what knowledge is and how it is generated (Guba and Lincoln 1994, Perry et al 1998). The exploration of a range of scientific paradigms is intended to provide a pragmatic understanding of the assumptions and choices guiding academic research in general, and this study in particular.

To start with a previously introduced paradigm, positivism exists in several variations of a rational ontology and objective epistemology. What is today often labelled as "Logic Positivism" is the original variation, which is associated with inductive research approaches as a way of verifying propositions (Knudsen 1994, Hüttel 2002). Logic Positivism in its original form has been one of the most influential philosophies of research in the twentieth century, but is at the same time a somewhat radical and rigid point of view (Knudsen 1994). Post-positivism has emerged more recently, and although based on the same set of basic belief as Logic Positivism, Post-positivism is a more moderate approach, accommodating "*the most problematic criticisms of positivism*", which has resulted in Post-positivism becoming the new and independent hegemonic philosophy of research in social sciences (Guba and Lincoln 1994, p 109). One of the main

contributions of Post-positivism has been the introduction of falsification of hypotheses by deduction as an alternative to the rigid requirement of Logic Positivism for verification by induction (Knudsen 1994, Thurén 2001).

Post-positivism takes a pragmatic approach to what knowledge is, and how it is created, in a similar way as Critical Realism. It is beyond the aim and scope of this study to enter into a discussion of the extent to which Post-positivism and Critical Realism are interchangeable paradigms, but both indirectly incorporate and balance elements from positivism and constructivism and hence represent a middle ground between the beliefs of detached objectivism, as seen in Logic Positivism, and interactive subjectivism which is dominant in Constructivism (Perry et al. 1998, Fisker 1994, Guba and Lincoln 1994). For the purpose of this study, and in accordance with Guba and Lincoln (1994), the term Post-positivism is applied to characterize a paradigm with a critical realist ontology and a modified objective epistemology as illustrated below in table 2.1.

Critical theory is, in Guba and Lincoln's interpretation a "*blanket term*" for a number of alternative paradigms, with similar attitudes to ontology, epistemology and methodology (Guba and Lincoln 1994, p 109). The views are internally divergent as each position is based on a historical realism, e.g. Feminism or neo-Marxism, but the common parameter is that a distinct set of values mediate the type of inquiry made.

Table 2.1 provides an overview of the main scientific paradigms within social science, and illustrates the flexibility in how to define and develop knowledge.

Table 2.1: Basic belief systems of main paradigms

	Positivism	Post-positivism/ Realism	Critical theory etc.	Constructivism
Ontology	<i>Naïve realism:</i> Reality is real and apprehensible	<i>Critical realism:</i> Reality is real but only imperfectly apprehensible.	<i>Historical realism:</i> Reality shaped by various values (social, economic, ethnic, gender etc.), crystallized over time	<i>Critical Relativism:</i> Multiple local and specific constructed realities
Epistemology	<i>Objectivist:</i> Findings are true	<i>Modified objectivist:</i> Findings probably True	<i>Subjectivist:</i> Findings mediated by values	<i>Subjectivist:</i> Findings are created
Methodology	<i>Experiments/surveys:</i> Verification of hypotheses mainly by quantitative methods	<i>Modified experiments/ case studies:</i> Falsification of hypotheses by qualitative and/or quantitative methods	<i>Dialogic/dialectical:</i> The researcher changes the social world within which participants live	<i>Hermeneutical / dialectical:</i> The researcher is an active participant within the world being investigated

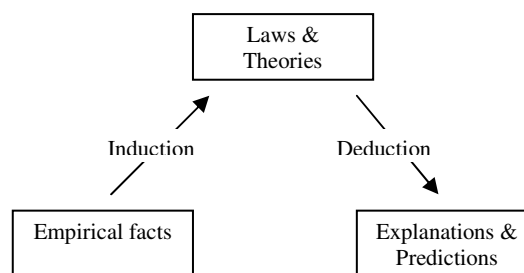
(Source: Guba and Lincoln 1994, Perry et al. 1998, Fisker 2004)

2.1.2 Research approach

The second layer of the research onion, the research approach, addresses the question of methodology, which is the third element of a paradigm.

As it appears from the research onion above, the main research approaches are induction and deduction (Olsen and Pedersen 1999). The main distinction between the deductive and the inductive approach is whether to take an analytical starting point at the empirical or the theoretical level (Olsen and Pedersen 1999, Saunders et al. 2003). The main principle of an inductive approach is to build theory on the basis of empirical data, while deduction starts at the theoretical level with the development of hypotheses about causal relationships between variables, which are subsequently tested (Saunders et al. 2003). Figure 2.2 below illustrates the key distinctions between an inductive and a deductive research approach.

Figure 2.2: Induction vs. Deduction



(Adopted from Knudsen 1994, p 57)

The aim of the deductive approach is to explain causal relationships between variables, which is done by first developing propositions or hypotheses about causal effects, and secondly to design a thorough research strategy which enables the researcher to test the suggested correlations. The third and final step is the execution of the research strategy, which is often done through quantitative data and large sample sizes. In other words, data follows theory by means of a structure methodology and large samples which facilitates replication of the conditions of the study as well as generalizations about the human social behaviour under investigation (Saunders et al. 2003).

When having a positivist approach there are strict requirements for a methodology which is able to provide results in accordance with the goal of developing objective and universal principles independently of individuals and situations (Hüttel 2002). A deductive research approach complies with these requirements, and deduction is the obvious methodological choice of the committed positivist.

In contrast to deduction, the inductive research approach starts with the collection of data, which is subsequently structured and analyzed with the purpose of formulating a theory. In the process of making sense of available data, the context from which it is collected and the human understandings of the situation under investigation play a significant role. In addition to the concrete formulation of theories, an inductive research approach provides an understanding of the situation behind a specific theory. Induction is a flexible research approach, as it potentially results in the development of several alternative explanations of the observed data. Consequently induction is advantageous when investigating an issue or phenomena of which little is known in advance (Saunders et al. 2003). The researcher applying an inductive research approach is likely to work with qualitative data and relatively small sample sizes in order to have access to the adequate level of detail. The limitation of induction is the inherent element of uncertainty, as results reached by induction are only as good as the empirical data on which they are based and the ability of the researcher to extract patterns and meaning (Guba and Lincoln 1994, Thurén 2001).

In principle, the application of either research approach may generate comparable results, but as outlined above, the choice of methodology should always be in accordance with the aim of the research project and comply with the characteristics of the research philosophy relevant to a study (Kragh 2007, Saunders et al. 2003).

2.2 Paradigmatic positioning

The above discussion of paradigmatic issues of relevance to the process of research in general facilitates a deeper understanding of the set of assumptions guiding this study. The purpose of this study is to explore learning and decision making in the process of internationalization, and thereby facilitate prediction of mechanisms driving this process. In accordance with the Post-positivistic paradigm, the main assumption guiding this study is that reality in general, and the research subject in particular, exists independently of the researcher's acknowledgement of it. The research subject, learning and decision making in the process of internationalization, can, in spite of its objective existence, be perceived differently by various agents, depending on the specific context and circumstances, which points towards the constructivist side of the research process onion. The defining characteristic of Post-positivism is that while "*constructivists and critical theorists consider there are many realities, ... realists consider there is only one reality although several perceptions of that reality must be triangulated to obtain a better picture of it*" (Perry et al. 1998, p. 1952). In line with this perspective, this study analyses the process of learning and decision making in the process of internationalization by exploring perspectives from entrepreneurial- as well as organizational learning theory, thereby obtaining a more comprehensive

picture of the actual process, which will never be fully disclosed (Perry et al. 1998). The realist research approach of Post-positivism matches my personal and subjective beliefs, and furthermore supports an understanding of an organizational environment in which people are independent, while at the same time part of a larger system, thereby creating a complex reality for organizational processes, which, as it will appear throughout the study, correspond with learning and decision making in an organizational context.

Objective findings, although modified, are central elements in the construction of this study, based on an assumption that organizations may be unique when looking closely, but the basic processes remain generic. The existence of identical mechanisms does however not necessarily mean similar outcome, as mechanisms are merely key building blocks which are imbedded in a phenomenon. The mechanisms can manifest themselves with different strengths and characteristics depending on the circumstances of a particular situation, which for this study implies that although organizations may learn and decide completely different things in the process of internationalization, the mechanisms of learning and decision making are universal (Nygaard 2002).

In terms of the methodological stance of this thesis, the existence of ample research and literature on learning and internationalization suggest a deductive approach (Huttel 2002). On the basis of the existing body of theory related to learning in an organizational context and internationalization, propositions about the relationship between the concepts of learning, decision making and internationalization are developed, and under ideal circumstances these propositions would subsequently be subjected to empirical analyses. Considerations about such empirical research, including research strategy, time horizons and sampling applicable are however hypothetical in terms of this thesis, and will not be elaborated at this point.

As an outcome of the paradigmatic positioning just described, the results offered on the basis of this study are not suggested as veridical truths about the learning and decision making in internationalization, but merely the best explanations which have emerged during this particular study.

3. Learning in an organizational context

As outlined in chapter one, internationalization is understood as a process of integrated learning and decision making. The purpose of this chapter is to provide a more comprehensive understanding of learning in an organizational context. The first part of this chapter introduces basic concepts which form the basis for a discussion about learning and decision making in an organizational context, while the second part reviews three conceptualizations of learning in an organizational context.

3.1 The basics of learning

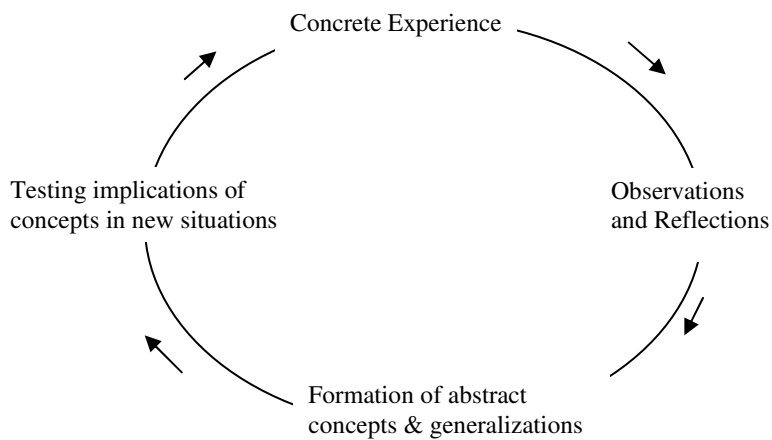
It is widely acknowledged that learning has a positive influence on the performance of organizations, and any organization not learning will likely face difficulties coping in the dynamic business environment characterizing most industries today, where knowledge is a main factor of competitive advantage (Fiol and Lyles 1985, Lundberg 1995, Zhang et al. 2006, Harrison and Leitch 2005, Anderson and Skinner 1999). Organizations engage in learning, consciously or unconsciously, in order to build capabilities through information and knowledge relevant to a specific situation (Dutta and Crossan 2005, Huber 1991, Madsen 2005, Kim 1993). Learning is hence universally relevant in the organizational context, but it is a complex issue, and in order to advance the appreciation of the complexity inherent in learning as the basis of organizational decision making, the following paragraphs introduces the distinctions and interactions between individual – and organizational level learning, as well as a presentation of the two main analytical approaches to learning in an organizational context, i.e. cognitive and behavioral.

3.1.1 Levels of learning

Individual level learning

Learning in any organizational context at any level always starts with the individual, and as such, learning at the individual level is an important element in the discussion of learning and decision making in the organization (Madsen 2005, Kim 1993, Leroy and Ramanatsoa 1997).

A well-known and highly influential conceptualization of individual learning is Kolb's cycle of experiential learning, which specifies that "*learning is the process whereby knowledge is created through the transformation of experience*" (Vince 1998, p 304, Politis 2005). Learning is depicted primarily as a single level process in which individual reflection transforms experiences into knowledge, which can subsequently be applied in business processes (Politis 2005, Vince 1998).

Figure 3.1: Kolb's learning cycle

(Vince 1998, p 305)

The model emphasizes that a transformation, or development, of the initial experiences is required in order to achieve effective learning, and it is by reflecting on and processing experience that the individual learns (Vince 1998, Corbett 2005, Politis 2005). A key feature of the Kolb's learning cycle is a focus on the process view on learning rather than on learning outcomes, and visible manifestations of learning are perceived as inferior to the continuous process of developing experiential knowledge (Vince 1998, Taylor and Thorpe 2004). Decision making is consequently not a final stage or action, but an integrated element in the continuous learning process.

The model is a straightforward conceptualization of the process of learning from experience, but it is also somewhat simplistic in seeing the individual as an intellectual recluse, thereby neglecting the synergies in learning from the experience of other individuals, which, as will be elaborated and supported in following paragraphs and chapters, is a critical element understanding learning in an organizational context (Vince 1998, Taylor and Thorpe 2004). Nevertheless the model offers a basic and accessible explanation of experiential learning as a path dependent process, which are recurring elements in the discourse of learning and decision making.

Organizational level learning

In contrast to individual level learning, organizational level learning is dependent on interactions among individual -, group - and organizational level (Crossan et al. 1999, Rae and Carswell 2001, Lundberg 1995). Organizational learning as a research field has existed for about half a century, but although it has received increasing attention during recent years and in spite of continuous work towards achieving a general consensus about a single theoretical framework, the

term remains somewhat elusive, and has been criticized for inconsistencies and significant flaws such as being too broad and without direction and integrated work (Fiol and Lyles 1985, Lundberg 1995, Kim 1993, Huber 1991). A contributing factor to the multifaceted nature of the concept of organizational learning is that it is based on a range of academic disciplines, including management science, economics, business history, sociology as well as the fact that the concept and/or terminology of organizational learning is applied to different domains such as information processing, product innovation and strategic renewal (Zhang et al. 2006, Crossan et al. 1999).

There is however definitional agreement about specific elements of organizational learning, which include that (1) Organizational learning is more than and different from the sum of the learning of the individual organizational members, which implies that what is generally labeled “organizational learning” in literature, is in most cases consistent with an, implicit or explicit, multilevel process of learning in an organizational context. Organizational level learning is however catalyzed by learning by individual organizational members, and the specific mechanisms or processes which connect individual level experiences with organizational level outcomes are generally characterized as a critical element in understanding learning in an organizational context (Kim 1993, Zhang et al. 2006).

It is also widely acknowledged that (2) Organizational learning is more than acquiring functional knowledge, i.e. learning must exceed lower level learning. The distinction between higher and lower level learning has no relation to organizational levels (individual, group and organization), but refers to the difference between short-termed performance activities, usually impacting only part of the organization, and the adjustment of rules and norms which have long term effects for the entire organization (Fiol and Lyles 1985, Cope 2005). There is also agreement that (3) Organizational learning is a process, and finally that (4) Organizational learning encompass cognitive elements as well as repeated organizational activities, similar to the concepts of cognitive and behavioral learning (Fiol and Lyles 1985, Lundberg 1995, Rae and Carswell 2001, Crossan et al. 1999, Zhang et al. 2006).

3.1.2 Cognitive and Behavioral Learning

When studying learning in an organizational context there are two dominant perspectives on learning: the behavioral and the cognitive approach. The behavioral learning perspective is concerned with learning by total organizational systems and change in behavior, whereas the cognitive approach to learning in an organizational context emphasizes the sharing of beliefs as learned by individuals (Lundberg 1995, Lumpkin and Lichtenstein 2005). As outlined above, the *process* of organizational learning is generally assumed to include cognitive as well as

behavioral elements, and behavioral - and cognitive learning, although distinct perspectives, are mutually supportive in optimizing the learning process in an organizational context. The two perspectives are in fact argued to be integrated to an extent to which they cannot practically or usefully be separated but for the purpose of obtaining a comprehensive understanding of the process of learning and decision making, the two approaches will initially be treated separately (Fiol and Lyles 1985, Lumpkin and Lichtenstein 2005, Leroy and Ramanantsoa 1997, Inkpen and Crossan 1995).

The notion of organizational learning is founded on concepts from behavioral theory, as established by Cyert and March in 1963 with their influential work *A Behavioral Theory of the Firm*, and the behavioral approach is hence the 'classic' perspective in organizational learning theory (Andersson 2000, Argote and Greve 2007, Lumpkin and Lichtenstein 2005). A distinctive feature from behavioral theory adopted by organizational learning theory is the process view, according to which decisions made and actions taken to support and sustain the development and success of the organization, are results of a learning process (Argote and Greve 2007, Lumpkin and Lichtenstein 2005). The behavioral perspective builds on an assumption that it is not possible to understand people's mental states, why focus should be maintained on developing patterns of stimuli and behavior connections (Leroy and Ramanantsoa 1997). Behavioral learning is hence an adaptive and incremental process, in which organizations adjust their behavior to changes in the environment (Kim 1993, Leroy and Ramanantsoa 1997). In doing so, the organization develops routines, and behaviors that have proved successful are repeated, and unsuccessful behavior avoided, which result in a highly routine-based system based on path dependent and experience based selection (Leroy and Ramanantsoa 1997, Lumpkin and Lichtenstein 2005).

Cognitive learning focuses on the process of acquiring and developing understandings through reflection and experience, and in an organizational context how individual cognitive maps influence and shapes the organization's cognitive schema, and thereby implicitly determines how the organization makes decisions and consequently acts. The key element of the cognitive learning approach is the ability of individuals to continuously develop their map of mental connotation and share the changes with others, thereby benefiting the organization as an entity (Lumpkin and Lichtenstein 2005). The cognitive learning approach emphasizes the content of learning, i.e. cognitive change, which may or may not entail behavioral change, and "real", higher level learning, which is a condition for organizational learning, is rooted in cognitive processes (Lundberg 1995, Lumpkin and Lichtenstein 2005, Fiol and Lyles 1985).

An optimized process of learning and decision making requires the integration of cognitive and behavioral elements of learning, and while cognitive changes can be argued to be the

predecessor of behavioral change, the opposite may also be the case (Inkpen and Crossan 1995, Leroy and Ramanantsoa 1997).

3.2 Conceptualizations of learning in and by organizations

As outlined above, individual as well as organizational level learning play a part in the process of learning and decision making in an organizational context, which makes it relevant to distinguish between learning *in* organizations and learning *by* organizations. Individual level learning is an example of learning *in* organizations, whereas organizational level learning refers to learning *by* organizations. Learning in the organization does not always result in learning by the organization, but learning by the organization is nevertheless conditioned by learning first taking place in the organization, i.e. individual learning by organizational members. As emphasized above, individual level learning is however an inadequate contribution to the development of an organization, i.e. organizational learning, even in a small and simple structure. Individual and organizational level learning are hence distinct processes, but they also bear many similarities in structure and explanations, indicating that individual and organizational learning are connected, and to some extent, interdependent processes (Cope 2003, Huber 1991, Lundberg 1995). In order to draw attention to these interactions, and how they are explained in existing theoretical work, as well as to grasp the dynamics of learning in an organizational context, the following section reviews three influential conceptualizations of organizational learning. In accordance with the post-positivist perspective, an understanding of learning and decision making in an organizational context requires the integration of various perspectives in order to be able to construct an adapted conceptualization which facilitates the discussion of the appropriate and relevant level of analysis for organizational decision making in the process of internationalization. The three conceptualizations are selected because they represent different approaches to why organizations learn which enable a broader understanding of learning in an organizational context.

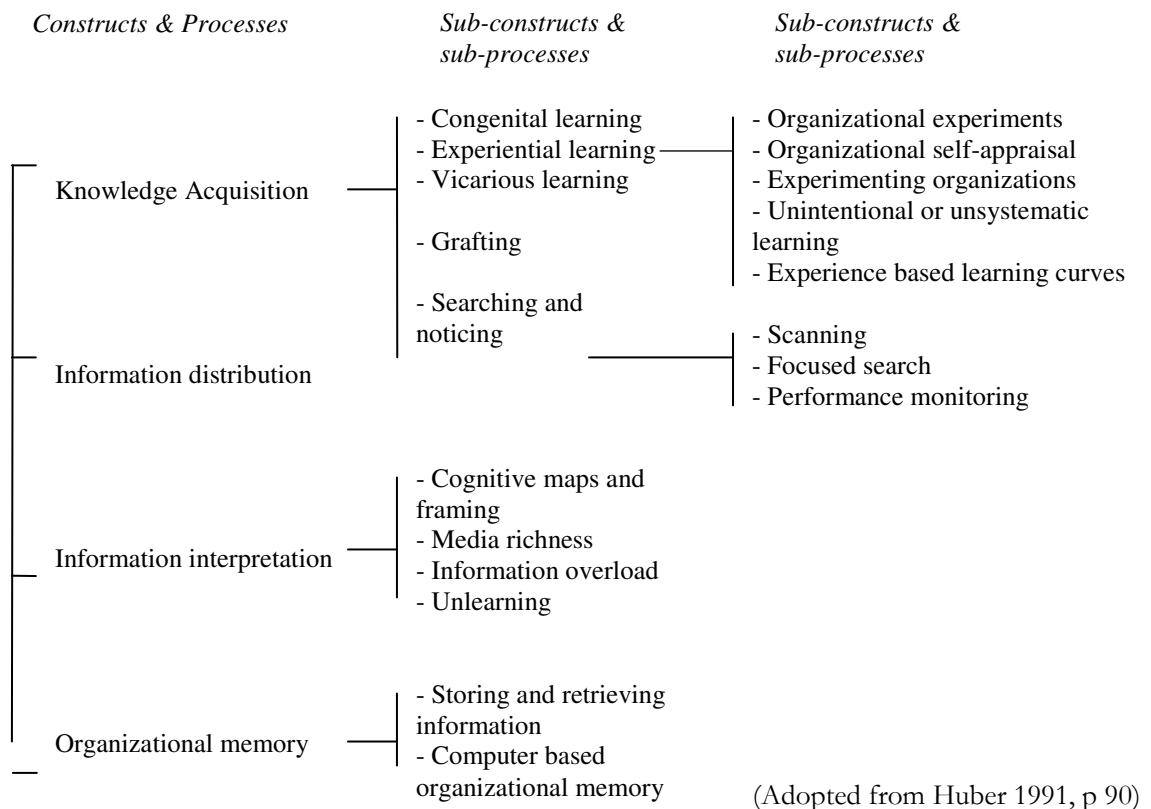
3.2.1 Organizational learning by information processing

Huber's influential work on organizational learning is founded on a broad definition of learning, according to which "[a]n entity learns if, through its processing of information, the range of its potential behaviors is changed" (Huber 1991, p 89, Zhang et al. 2006). This perspective implies that changed behavior or increased effectiveness is not a condition for learning to take place, which initially suggest a dominant cognitive perspective, which is also noted by Leroy and Ramanantsoa (1997). The learning process outlined by the model is not restricted to or focused on any specific

situation, but is concerned with the acquisition and processing of information and knowledge in general, which makes it applicable to the process of internationalization and to this study.

In explaining organizational learning as a process of information processing, learning is conceptualized as taking place through a four phase process. Learning is not necessarily intentional or conscious, but in either case information must be interpreted and subsequently embedded in the organizational memory (Huber 1991, Zhang et al. 2006).

Figure 3.2: Organizational learning by information processing



The first phase of learning is the acquisition of knowledge, which may take place in a number of ways, including knowledge and information acquired prior to the legal birth of the organization (congenital learning), first and second hand experiences (experiential and vicarious learning), employing people who bring new information to the organization (grafting), as well as obtaining information by searching the environment or simply by chance picking up information related to the organizational context (Huber 1991). This implies that information, which is a key ingredient in learning, may potentially be acquired from a range of different sources and by individuals from across the organization. The model illustrates the diversity and potentially omnipresent nature of learning processes within the organization in accordance with the widely held assumption that “an organization learns if any of its units acquires knowledge that it recognizes as

potentially useful to the organization” (Huber 1991, p 89). This is not to imply that simple knowledge acquisition equals learning, but as knowledge can be acquired from many different sources, as outlined in this model, it follows that the subsequent knowledge development potentially touches upon the entire organization at all levels. The different methods of acquisition are partially substitutes, but some methods are more appropriate and provide better results in specific cases and the organization should ideally recognize the relevance, strengths and weaknesses of the various approaches in order to make the most of learning, and hence have the best possible basis for making decisions.

The distribution of information is the focus of the second phase. The broader the acquired information is distributed, the more likely is it that the information is available to individuals who can apply it to a specific context or problem, and hence increase learning in the organization. Broad distribution is important in the learning process, as it increases the chance of synergies when new information and knowledge is combined with knowledge already existing across various levels in the organization. In many cases organizational members do not know what they know, or who might benefit from a specific piece of information, and broad distribution counters the negative effects of such a situation (Huber 1991).

The third phase in the learning process is interpreting information, which takes place when sense is made of the available information. Some level of shared understanding must be developed, but at the same time more varied interpretations of distributed information result in more diverse learning and potential synergies, which is advantageous for the development of the organization (Huber 1991). The interpretation of information is closely connected to the previous phase as multiple interpretations, which is positive, is highly dependent on an effective distribution.

When information has been acquired, distributed and interpreted, knowledge is stored in the organizational memory for immediate or future use, and the organizational memory is hence an important determinant of learning and decision making. The memory of an organization is obviously different from the memory of an individual, and consists of structures, behaviors, cognitive maps, norms and values. The core of this “memory” persists over time, thereby facilitating the development of frames of reference, which is the foundation for additional acquisition, distribution and interpretation of information and knowledge (Huber 1991, Fiol and Lyles 1985). Organizational memory is vulnerable to employee turnover, ignorance of the need for storing knowledge for future use, and ambiguity of where knowledge is stored - is knowledge explicit and documented, or is it tacit and restricted? - also inhibits the effectiveness of organizational memory, and ultimately the learning process.

An important point of the information processing perspective on organizational learning is that a learning process does not necessarily provide fundamentally true knowledge, as “[e]ntities can incorrectly learn, and they can correctly learn that which is incorrect” (Huber 1991, p 89), and new knowledge, veridical or otherwise, has the potential to make existing knowledge obsolete. This point to the fact that a learning and decision making process, although critical in organizational development, is no magical solution, and the results of the learning process should be critically evaluated, in order to avoid making decisions on the basis of non-veridical knowledge.

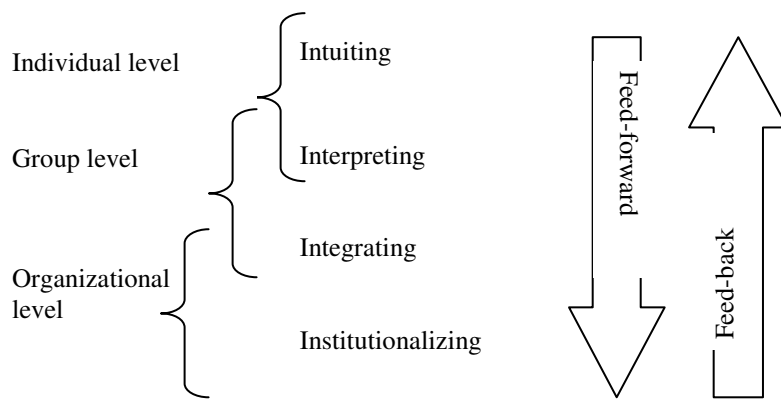
The information processing perspective illustrates the diversity of learning by pointing out alternative ways of acquiring, distributing and interpreting input, all of which enhance learning. With the conceptualization Huber (1991) aimed at presenting a broader scope and a more complete understanding of organizational learning by combining different streams of research within organizational learning, but it can also be argued that the perspective provides a simple explanation of learning as a constant process which supports ongoing business activities. By emphasizing and discussing sub-constructs and sub-processes of the main elements, the conceptualization demystifies learning by almost providing a “how to learn”- guide. The model also illustrates the complexity and possible diversity behind the main constructs of acquisition, distribution, interpretation and organizational memory, and the perspective leaves no doubt about the importance of learning for continued organizational development. At the same time it is however understood that learning is no shortcut to ultimate truths or superior performance. From the information processing perspective, organizational learning does not require that all units within the organization learn, and as a result, each learning construct (acquisition through organizational memory) has a somewhat short-term and perishable character. Among a multitude of learning processes taking place within the organization, the organizational memory is however a fixed point of reference, which balances stable core knowledge and the ongoing development and reevaluation, and the organization makes decisions and takes action on the basis of this stable, but yet dynamic memory.

3.2.2 Organizational learning for strategic renewal

According to the strategic renewal perspective, organizational learning is relevant due to its role as the main driver of strategic development. Renewal is defined as the process balancing continuity and change, and the renewal becomes strategic when it includes the entire organization and not only individuals or groups. Strategic renewal through learning is hence a multilevel process, in which organizational levels are linked by the phases intuiting, interpreting, integrating and institutionalizing (Crossan et al. 1999).

Intuiting represents a “*preconscious recognition of patterns and/or possibilities inherent in a personal stream of experience*”, which is the beginning of a learning process (Crossan et al. 1999, p. 325). In the process of interpreting the recognized patterns or opportunities are articulated or acted out, which makes the process conscious and apparent to others, thereby moving towards the group level. The third phase, integrating, is focused on developing shared understandings among individuals through processes of coordination, dialogue and adjustment, and the learning process is completed by institutionalizing, in which routines, rules and strategies are developed thereby integrating learning at individual and group levels at the organizational level.

Figure 3.3: Organizational learning for strategic renewal



(Adapted from Crossan et al. 1999)

The framework bridges individual level cognition and organizational level action in a dynamic process, in which feed-forward and feed-back mechanisms ensure that there at all times is agreement between individual, group and organizational levels. Or put simply “*Understanding guides action, but action also informs understanding*”, which points to the coexistence of cognitive and behavioral learning mechanisms (Crossan et al. 1999, p 524). Strategic renewal begins with individual learning, but the ability of the organization as an entity to assimilate and distribute knowledge at the collective level is of primary importance, and learning is hence a process balancing stocks and flows of knowledge (Jones and Macpherson 2006).

The integrative processes (feed-forward and feed-back) illustrate a key element of the model, i.e. the importance of recognizing and balancing explorative and exploitive learning. Exploitation is a matter of using pre-existing knowledge to replicate previous actions or taking actions resembling previous successful situations (Minniti and Bygrave 2001, Politis 2005). In exploration, according to which the learning entity chose actions which have not be applied previously. New possibilities are explored either because previous actions have proved unsuccessful or because opportunities have arisen which have provided incentives to differentiate

previous decisions, engage in experiments and/or innovate (Minniti and Bygrave 2001, Politis 2005). In the case of exploitation, the behavior of the learning individual or organization becomes routine based and stable, whereas a dominant explorative approach result in a discontinuous and changing pattern of decision making and behavior (Politis 2005, March 1991). Feed forward is a process of explorative learning taking place through the assimilation of new knowledge, while the feed-back mechanism ensures the application of existing knowledge through a process of exploitive learning (Crossan et al. 1999). The key element in the feed-forward mechanism is the ability of individuals to communicate, in words and actions, what they have cognitively developed to the group level in order to achieve a common understanding. This common understanding has the potential to influence the development of a collective mind at the organizational level, which takes place when knowledge becomes integrated in routines, systems and structures in the institutionalizing phase (Crossan et al. 1999, Jones and Macpherson 2006). The role of feed-back is to ensure that knowledge, which has already been institutionalized and integrated in the collective mind and applied in actions, is available at lower organizational levels in order to stimulate additional or related knowledge development. The process is characterized as one of exploitive learning, in which the aim is to exploit that which has already been learned (Crossan et al. 1999).

In order to optimize the learning process, feed-forward and feed-back mechanisms, i.e. explorative and exploitive learning, should coexist, but there is an inherent risk of feed-back from the organizational level to dominate intuiting at the individual level and thereby inhibit the explorative learning process. Firstly because institutionalized knowledge has already been implemented in rules and structures, to which individuals within the organization have been socialized, and in order to explore new knowledge which potentially is in conflict with the knowledge already institutionalized, individuals must engage in a challenging process resembling creative destruction, which may not be commonplace (Crossan et al. 1999). Secondly, returns from explorative learning are less certain than learning from exploitation, which may result in exploitive learning being favored (March 1991, Crossan et al. 1999). This tension between exploitive and explorative learning, or a tension between continuity and change, results in a trade-off between long term and short term strategies and considerations (Crossan et al. 1999, March 1991). Feed-forward is critical in ensuring that organizational level knowledge is updated according to internal and external circumstances and obsolete knowledge constructs are discarded and replaced by novel ones. At the same time the institutionalizing and subsequent feed-back is important in ensuring that the knowledge developments continuously taking place in the organization are fully utilized and distributed to all levels throughout the organization.

The strategic renewal perspective points to the importance of balancing explorative and exploitive learning processes throughout the entire organization, and the learning phases revolve around the development and assimilation of patterns and new connections of new and existing knowledge, which become embedded in systems, routines and practices. As such this conceptualization of learning in an organizational context assumes that the acquisition of information is implicit in the process of intuiting. The processes of feed-forward and feed-back ensure that the organization engages in explorative as well as exploitive learning, provided that the internal organizational environment does not create barriers which prevent learning. Organizational learning is hence depicted as a dynamic process, but changes in organizational structures and routines are nevertheless considered to be rare, which suggests that learning may have more long term implications than the case of learning by information processing (Crossan et al.1999).

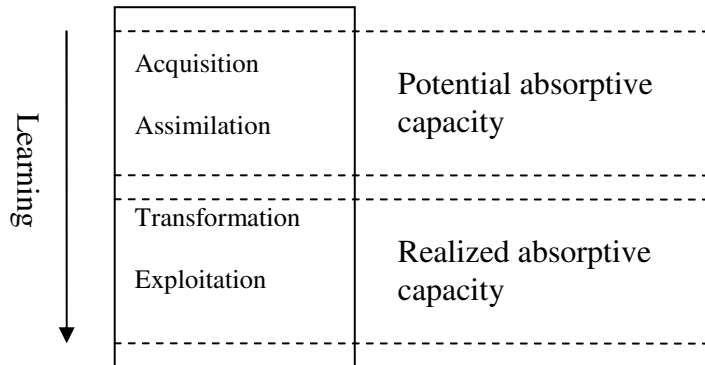
3.2.3 Organizational learning based on absorptive capacity

The term ‘Absorptive Capacity’ refers to the ability of an organization to recognize the value of new, external information, assimilate and apply it commercially for the purpose of facilitating organizational change and development, and thereby place the organization in a favorable competitive position. This ability, the absorptive capacity, is a function of the organization’s existing knowledge related to the new information (Cohen and Levinthal 1990, Zahra and George 2002). The basic idea is that learning is path dependent, and knowledge is easier accessible when the organization has prior knowledge which new information can build on or relate to (Cohen and Levinthal 1990). Path dependence is apparent in Kolb’s individual learning cycle as well as an implicit element in the two previously described conceptualizations of learning, but what makes the absorptive capacity perspective distinct is that the cumulative nature of knowledge is the main condition for learning to take place.

The notion of absorptive capacity was initially developed in order to explain a process culminating in product innovation, but in the broader frame of organizational studies absorptive capacity reflects the abilities of an organization to manage knowledge, which is an implicit condition for making informed decisions. Consequently, absorptive capacity influence the development of the organizational competency profile at an overall level, and is applicable to a range of organizational processes, including learning and decision making in an internationalization process (Zahra and George 2002, Lyles et al. 2005). Zahra and George’s (2002) breakdown of absorptive capacity into the distinct, but complementary phases of acquisition, assimilation, transformation and exploitation, and additionally into potential and realized absorptive capacity

facilitates the grasping of the somewhat ambiguous concept absorptive capacity, as illustrated below.

Figure 3.4: Organizational learning based on absorptive capacity



(Own development based on Zahra and George 2002)

Potential absorptive capacity consists of knowledge acquisition and the ability to assimilate knowledge, whereas *realized* absorptive capacity reflects the ability to manage the acquired knowledge by transforming and exploiting the knowledge. Potential - and realized absorptive capacity are mutually supportive and coexistent constructs, but a high level of potential absorptive capacity is no guarantee of a high realized level (Zahra and George 2002).

Organizations with high levels of realized absorptive capacity are however considered to be more likely to explore new information/knowledge and to demonstrate proactive behavior, which implicitly has a positive impact on performance (Cohen and Levinthal 1990, Zahra and George 2002). For the organization the development of absorptive capacity takes place over time, and is cyclical in both a positive and a negative sense. In the positive sense a high level of absorptive capacity facilitates continuous learning, whereas an organization may experience the downside of path dependency when knowledge is inaccessible because the organization at an earlier stage has failed to develop knowledge, on which the new knowledge build, and which may potentially results in a lockout (Cohen and Levinthal 1990).

Absorptive capacity is described as being embedded in routines and processes, and as the sharing and integration of knowledge among individuals and groups are central elements in constructing the firm level capacity, absorptive capacity is ultimately a multilevel process (Cohen and Levinthal 1990). In order for individuals to be able to share information and knowledge in this process, a shared knowledge base is necessary to some extent, but as diversity in interpretation improves the likelihood of innovative means-end relationships, an organization is in a better position to have a high level of realized absorptive capacity, and hence be in an advantageous

position, when it has a diverse staff and broad and active network, which indirectly represents a broad knowledge base (Cohen and Levinthal 1990).

3.3 Concluding remarks

The three conceptualizations outlined above present alternative approaches as how to explain learning in an organizational context and how learning contributes to organizational development. The three models of organizational learning all emphasize the interactions between individual, group and organizational level, path dependency, and the integration of cognitive and behavioral elements, although there appears to be a tendency for the models to be more explicit about cognitive changes. When examining the fundamental structure of the three conceptualizations they are very similar, and constructed in accordance with the process of individual learning, as presented earlier. The isomorphic similarities are illustrated below in table 3.1.

Table 3.1: Conceptualizations of learning

	Learning perspective	Phase I	Phase II	Phase III	Phase IV	Representative literature
Individual Learning	Experiential learning	Experiencing	Reflecting	Rational conclusions/ Emotional insights	Testing implications in new situations	Kolb (1984) (in: Vince, 1998)
Organizational Learning	Learning by information processing	Knowledge acquisition	Information distribution	Information interpretation	Organizational memory	Huber (1991)
	Learning for strategic renewal	Intuiting	Interpreting	Integrating	Institutionalizing	Crossan, Lane and White (1999)
	Learning as function of absorptive capacity	Acquisition	Assimilation	Transformation	Exploitation	Zahra and George (2002)

In the conceptualizations of organizational learning in the table above, learning is understood as a sequential process spanning multiple organizational levels, and a basic common feature is that a process of knowledge development links thought processes, i.e. knowledge, understanding and beliefs on the one hand, with actual or potential changes in behavior on the other hand, which collectively strengthen the organization (Crossan et al 1999, Huber 1991, Lundberg 1995). The three approaches to organizational learning, i.e. information processing, strategic renewal and absorptive capacity, overlap to some extent, but each perspective also adds distinct nuances and contributions to the understanding of learning mechanisms in an organizational context. The mechanisms inherent in the different phases are however universally

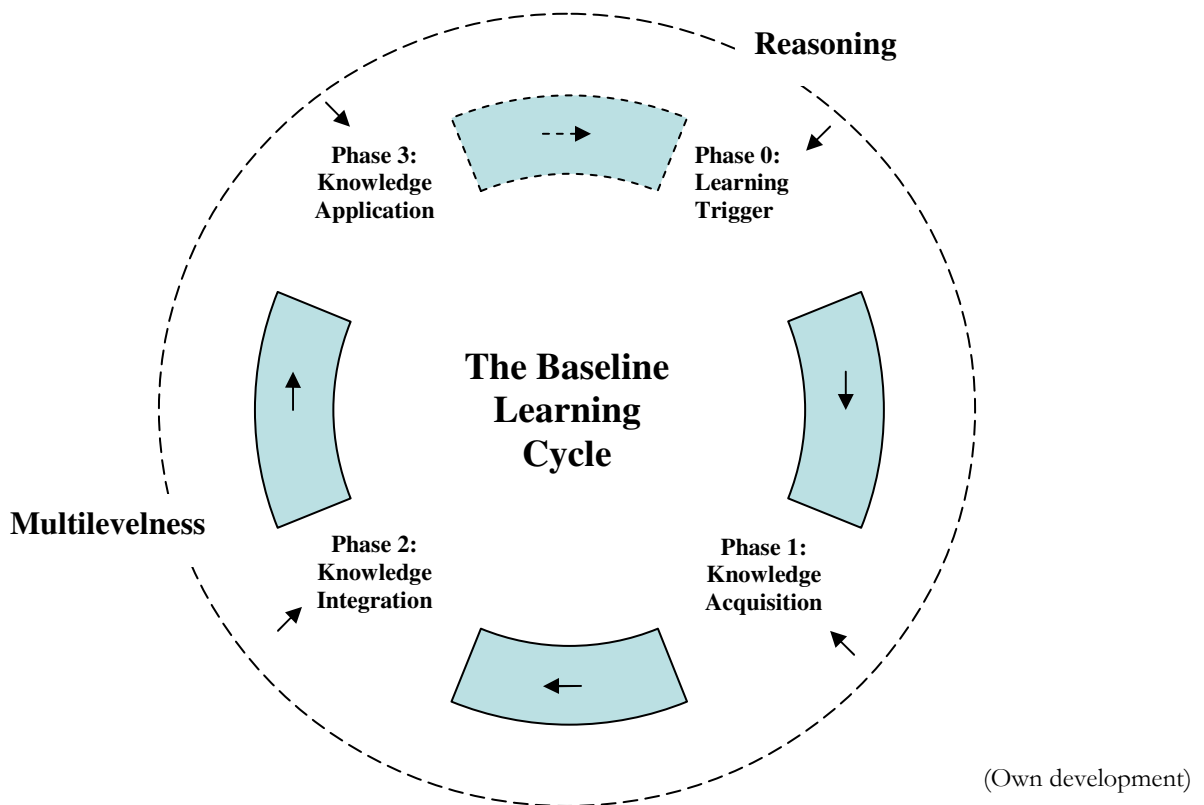
seen as highly interdependent in integrating individual, group and organizational levels, and it is apparent that strong processes initiating learning at individual and group levels are no guarantee of realized learning benefits at the organizational level.

As internationalization is a process of learning, the similarities among the perspectives of information processing, strategic renewal and absorptive capacity provide a framework for an understanding of the integrated learning and decision making process which drives internationalization, as well as suggesting a basic structure for modeling the processes of learning and decision making.

4. Synthesizing organizational learning and decision making: Model framework

The three conceptualizations of learning in an organizational context, presented in the previous chapter, have the same basic structure, but each offer complementary contributions to the understanding of learning. Figure 4.1 below illustrates a model framework based on the above analysis, intended for the purpose of synthesizing a model of learning and decision making in the context of internationalization which builds on the simplicity of experiential learning as well as on the complexity of an organizational context. The model integrates perspectives presented in the conceptualizations of learning in an organizational context in general, as outlined above, as well as adding nuances and details of particular importance to the process of internationalization.

Figure 4.1: The baseline learning cycle



The base line learning cycle is constructed of four phases, i.e. Learning trigger, Knowledge acquisition, Knowledge integration and Knowledge application, and the omnipresent constructs of Reasoning and Multilevelness influence the mechanisms inherent in the distinct phases as well as their integration. The model provides a representation of a process in which phases of the learning and decision making process are largely distinct, although this is a somewhat

artificial breakdown of the actual process, which is ultimately an integrated process. A separation between different phases is however advantageous in order to facilitate an understanding of the mechanisms taking place in each phase, and of the role played by different organizational levels in the process of learning and decision making.

4.1. Learning Trigger (phase 0)

The learning process is catalyzed, or triggered, by a need for new knowledge, which is reflected by the presence of phase 0. The above reviewed conceptualizations of organizational learning do not assign learning triggers a distinct role in the learning process, but in order to obtain a thorough understanding of the learning and decision making process, it is relevant to consider the origin of the process, i.e. the situation or event which sets off the process, as an independent parameter.

A learning process is usually triggered by changes in the environment and/or changes in the organizational context which challenges the organization and draw attention to the need for new knowledge (Zhang et al. 2006). Crises or threats to the organization are generally characterized as being important motivators for organizations to learn, which primarily makes learning a reactive process (Cope 2005, Autio et al. 2000). Organizations may however also learn proactively, in which case learning is triggered by the recognition of new opportunities or as a means of achieving a strategic outcome. It is relevant to note that both options are viable, and as elaborated in paragraph 4.6, the learning trigger may be influenced by the prevalent type of reasoning.

In terms of the triggers catalyzing a process of internationalization, organizations are generally assumed to engage in international activities in order to seek resources or markets with the purpose of creating, consolidating or improving their competitive position, which also allows for reactive or proactive learning triggers (Bartlett et al. 2003). Learning in general, and for the process of internationalization in particular, may be triggered at all levels of the organization.

4.2. Knowledge Acquisition (phase 1)

Knowledge acquisition represents the initial acquisition of information and the preliminary processing of this information taking place at the individual level. Although all individual organizational members may contribute to the process of organizational learning, members of top management teams and employees in other central positions are key individuals

when discussing the individual level in the process of learning and decision making in the context of internationalization (Corner et al. 1994).

The phase is labeled '*Knowledge* acquisition', but it is important to note the distinction between the acquisition of information and experience on the one hand, and knowledge on the other (Politis 2005, Forsgen 2002). Information and/or experience is a prerequisite for the development of knowledge, but as unprocessed information does not contribute to the learning process the term knowledge is applied in the model.

When discussing learning in an organizational context a distinction is often made between objective and experiential knowledge. The first type of knowledge is easily transferred within and between organizations and units, while the latter can only be obtained through first-hand experience, as it is subjective and context specific and consequently somewhat difficult to transfer across time and space (Johanson and Vahlne 2003a, Blomstermo and Deo Sharma 2003). As in Kolb's cycle of experiential learning, experiential knowledge is a central element in most models of learning, but in accordance with the perspectives of organizational learning by information processing, contemporary research points to the importance of recognizing several types of knowledge and different methods of acquiring knowledge, in order to optimize learning outcomes (Petersen et al. 2003, Forsgren 2002, Eriksson et al. 1997). As such, diversity in the types of knowledge acquired and flexibility in how knowledge is acquired supports the process of learning and decision making.

There are two approaches for transforming experience and information, i.e. exploration and exploitation, commonly referred to as explorative – and exploitive learning, as introduced above. Exploration and exploitation are interrelated, but compete for the same scarce resources, and finding the appropriate balance between explorative and exploitive learning processes is a central and challenging element in optimizing learning in the organizational context, as organizations are prone to "*become trapped into the dynamics of accelerating exploration or exploitation*" (Politis 2005, p 409, March 1991, Minniti and Bygrave 2001). An overemphasis on exploration is likely to generate too many underdeveloped ideas resulting in few distinct competences and benefits, whereas the risk inherent in focusing on exploitation is a state of stable equilibrium with suboptimal outcomes (Politis 2005, March 1991). Due to the discontinuity of exploration, this strategy implies a comparatively large variation of performance, and hence uncertain returns, whereas exploitive learning as the basis for decision making is argued to provide more stable returns, which may be effective in the short run, but potentially self-destructive in the long run due to limited focus on the development of new possibilities (March 1991, Politis 2005). By finding and maintaining an appropriate balance between exploitation and exploration, the organization is

able to get the best of both worlds, i.e. a balance between stability and change. The balancing of explorative and exploitive learning is relevant throughout the entire process of learning and decision making, as will be elaborated in later sections of this study, but the foundation for this balance is constructed by the initial approach to the acquisition of knowledge.

4.3 Knowledge Integration (phase 2)

In the phase of knowledge integration, acquired information and experience is processed through social interaction, and thereby distributed, interpreted and integrated beyond the individual level. This phase represents an integration of central elements from phases II and III in table 3.1, which, according to the above conceptualizations, act as intermediate processes linking initial acquisition and concluding application of knowledge. The processes are complex, but the argument for combining what is most often modeled as two learning constructs into one phase, is that the phases are deeply integrated and codependent. A key issue of understanding organizational learning processes is the link between individual and collective knowledge, and the combination of phases II and III into a single phase is in no manner an attempt to dispute the importance of the processes inherent in each, but simply a slightly different approach to drawing what is ultimately artificial dividers in a highly dynamic process of learning.

The conceptualizations of learning reviewed in chapter three all emphasize the importance of experience and information being shared among and processed by multiple organizational members, thereby acknowledging that organizational learning is more than the sum of individual learning. In short, the more individual and group interpretations of acquired knowledge, the more knowledgeable the organization (Huber 1991, Zahra and George 2002). The integration of the various organizational levels is also an important element in this phase of the learning cycle, which links knowledge acquisition taking place at the individual level, with the application of knowledge manifested in organizational level actions and behaviors.

4.4 Knowledge application (phase 3)

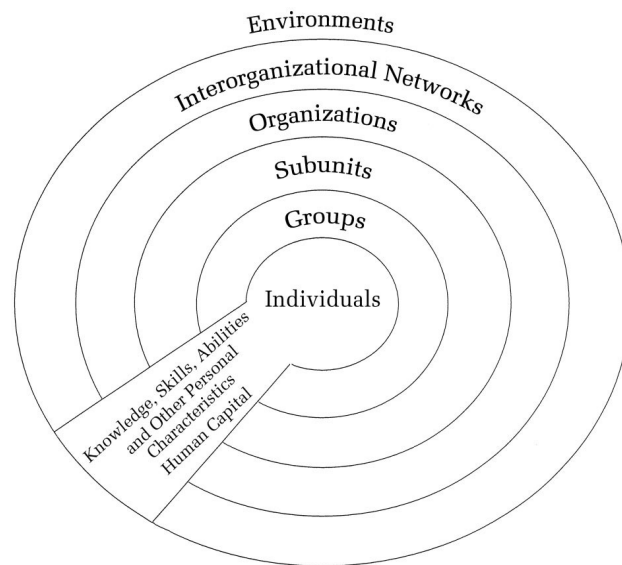
In phase 3, the knowledge which has been developed throughout the previous phases is applied in decisions concerning the internationalization, but rather than knowledge being transformed directly into decisions, knowledge is filtered through the perception of risk before manifesting in decisions and actions.

The process of internationalization is generally associated with uncertainty, which plays an important role in most models of internationalization, and the tension between risk and

opportunities is an important driver of decision making (Madsen 2005, McMullen and Shepherd 2006). Risk perception is a function of (1) subjective risk preferences, (2) the characteristics of a specific situation, and (3) the knowledge available to the decision making related to the situation and high knowledge intensity about a specific issue or situation is often reflected in a low perception of risk (McMullen and Shepherd 2006, Acedo and Florin 2006). Other factors associated with a reduced risk perception are firm characteristics such as age, size and scope of operations, and the individual experience of the decision maker(s), as risk perception is individual from one individual to the next. The evaluation of a situation is highly dynamic and a key assumption in the learning approach to internationalization is that individuals and organizations are able to reduce their perception of risk through a process of learning, and thereby support the internationalization process (Acedo and Florin 2006, O'Reagan et al 2005, Madsen 2005). Important decisions inherent in the internationalization process include timing and pace of internationalization, as well as decisions about which market(s) the organization expands to, and the level of resources committed. These characteristics of internationalization are not directly related to the level of decision making, but as defining characteristics of internationalization, and variables around which much debate within the field of internationalization revolve, they are highly relevant in linking the current analysis of level of decision making to the internationalization discourse.

4.5 Multilevelness

Learning is a multilevel process, which encompasses and integrates organizational levels, and this distinction is central in the theoretical approach to decision making in internationalization. Organizations are dynamic entities operating in constantly changing environments, and most management issues intuitively calls for some integration of several levels in order to understand events or resolve problems. Nevertheless, there is a tendency for business and management research, including that of learning in an organizational context, to apply a single level approach of analysis (Kozlowski and Klein 2000, Hitt et al. 2007, Inkpen and Crossan 1999). The multilevel approach acknowledges the multilevel nature of the organizational reality, and suggests that organizational entities are parts of a larger hierarchically nested system in which individual, group and organizational inputs and outcomes are integrated and connected. Figure 4.2 illustrates the notion of multiple interdependent levels, which is the basic logic of the multilevel approach.

Figure 4.2: Multilevel nesting arrangements

(Hitt et al. 2007, p 1387)

The foundation of the multilevel approach in organizational science in general is the appreciation of the interdependence among levels, and a belief that a multilevel perspective provides a more legitimate, deeper and more comprehensive explanation of organizational phenomena than single level theoretical conceptions are able to provide (Klein and Kozlowski 2000, Hitt et al. 2007). In other words, the multilevel perspective emphasizes cross level effects in the organizational context, in which “*micro phenomena are embedded in macro contexts and ... macro phenomena often emerge through the interaction and dynamics of lower-level elements*” (Klein and Kozlowski 2000, p 7).

As pointed out by Kim (1993) the understanding of learning is founded on a balance between simultaneously recognizing the role of the individual *and* the complexity of the organizational context, or in other words recognizing the importance of multiple layers/levels and the codependence between micro and macro processes. Consequently, a multilevel approach to the question of decision making in the process of internationalization provides a more comprehensive analysis than a single level approach, whether the single level of interest is high or low in the organizational context.

The multilevel nature of the learning and decision making process of internationalization is closely related to phase two and the integration and distribution of knowledge, but the entire process is essentially effected and shaped by integration among levels, and multilevelness is hence included as an independent parameter.

4.6 Reasoning

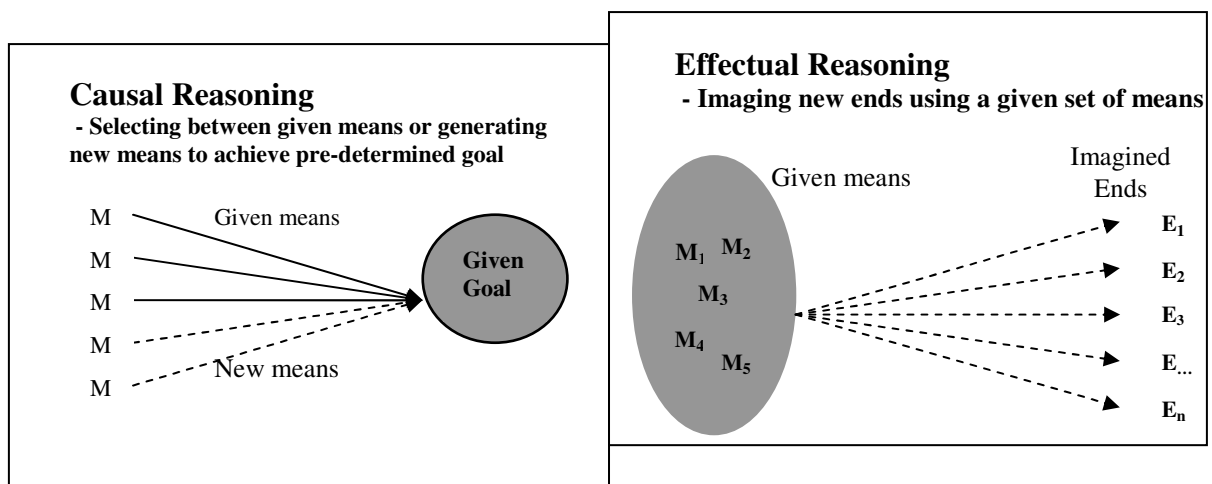
Similar to multilevelness, reasoning is not a distinct phase in the learning cycle, but more of an underlying or omnipresent approach which influences the characteristics of the phases and their integration. The multilevel and sequential structure of learning and decision making remain key characteristics of the process, but different approaches to reasoning influence how the process manifests.

The ability to make predictions about future events and circumstances have been considered highly useful in decision making, based on the assumption that what can be predicted can also be controlled. Uncertainty, which is an important variable in internationalization, is in other words often suggested leveraged by prediction (Wiltbank et al. 2006, Sarasvathy 2001). Under such circumstances decision making becomes a causal process, in which a goal, or a particular effect, is accepted as given. Focus is on selecting from a pool of given means, or alternatively on procuring or generating the means which make it possible to reach the pre-determined goal (Sarasvathy 2001, Dew and Sarasvathy 2002, Wiltbank et al. 2006).

Predictive strategy and causal reasoning dominate business and management studies, but non-predictive strategy and the use of effectual reasoning is an interesting alternative based on the assumption that available means are given, and ends are functions of these means (Sarasvathy 2001, Dew and Sarasvathy 2002, Wiltbank et al. 2006). Effectual reasoning is relevant in situations in which outcomes can not be predicted or estimated, and the future positively unknowable. The key driver of the decision making process is the decision maker(s), who, in the realm of who/what the organization is, what the organization knows, and whom the organization knows, experiments and navigates through uncertainty by focusing on what can be achieved through creativity, imagination and action, using the resources available (Sarasvathy 2001).

Figure 4.2 below illustrates the basic principles of causal – and effectual reasoning.

Figure 4.3: Causal – and Effectual reasoning (Adapted from Dew and Sarasvathy 2002, p 18)



Causal and effectual reasoning are theoretically distinct approaches, which are applicable to all variations of human behavior and decision making in an individual or organizational context. The key contribution of effectual reasoning is its ability leverage risk in an uncertain situation without resorting to irrationality, randomness and decisions based on chance or luck, but by shaping and creating outcomes rather than predicting results (Wiltbank et al. 2006).

The application of effectual reasoning to internationalization does not imply that the learning perspective is superfluous, as internationalization as a dynamic process remains influenced by the tension between explorative and exploitive learning, and although it is too simplistic to uncritically equal exploitive learning with causal reasoning, and explorative learning with effectual reasoning, there are common characteristics in the underlying logics which suggest and support the integration of causal/effectual reasoning in the discussion of learning and decision making in internationalization (Sarasvathy 2001, Dew and Sarasvathy 2002). As outlined above, exploitive learning is focused on the utilization of existing knowledge about pre-identified opportunities similar to causal reasoning. In contrast, the aim of explorative learning is to imagine and explore new combinations of knowledge and existing resources, founded on a logic of control, resembling principles of effectual decision making (Dew and Sarasvathy 2002).

Taking a birds-eye perspective, organizations are generally assumed to engage in international activities in order to build or secure their competitive position, and thereby fulfill an aspiration for growth and/or success (Bartlett et al. 2003). As such it can be argued that internationalization is not a goal in its own right, but a stepping stone, i.e. a possible end, towards the predetermined goal of survival, success and/or profitability. In other words, organizations may not initially internationalize for the sake of internationalization, which may suggest a process to which effectual reasoning is applicable.

The main effect of the introduction of effectual reasoning on the base line learning cycle is that the focus on who/what the organization is, what the organization knows, and whom the organization knows result in a highly integrated and coherent process, which furthermore potentially leverages the key issue of balancing explorative and exploitive learning. When applying a logic of control, i.e. effectuation, uncertainties, which potentially inhibit exploitive learning, become opportunities rather than threats, thereby making exploitive learning more appealing than when relying on causal reasoning. Or in other words: *“Whereas the logic of prediction underpins the exploitation process, the logic of control (effectuation) underpins the exploration process, making uncertainty irrelevant through the affordable loss principle, destroying uncertainty through pre-commitments from key stakeholders, and leveraging uncertainty in its key processes.”* (Dew and Sarasvathy 2003, p 13).

The match between explorative learning and effectual reasoning on the one hand, and exploitive learning and causal reasoning on the other is a somewhat simplistic presentation of the dynamics of learning and decision making, but it serves to position effectuation within a framework that is very well accepted in entrepreneurship research as well as in organizational learning research, and thereby facilitate initial understanding of the relevance of effectual reasoning the issues of learning (Dew and Sarasvathy 2003, Sarasvathy 2001, Politis 2005).

4.7 Concluding Remarks

The cyclical illustration of figure 4.1 represents the path-dependent and cumulative nature of organizational learning in accordance with the conceptualizations of learning presented in chapter three. The organization and its members continuously use existing knowledge, positive and negative, in forward processes. The illustration does however not mean to imply that knowledge application is followed immediately by a new learning trigger, but simply that a learning trigger will always, to some extent, be influenced by the outcomes of previous learning cycles (Blomstermo and Deo-Sharma 2003). A time lag between phase 3 in one cycle and phase 0 in the subsequent cycle is very likely, as the learning and growth phases of organizations are as likely to be discontinuous and nonlinear as the opposite (Deakins and Freel 1998, Cope 2005). Learning does however remain path-dependent as the learning trigger and acquisition of knowledge are related to the overall position and status of the organization, a profile which is shaped by previous learning, decisions and actions (Minnti and Bygrave 2001, Cohen and Levinthal 1990).

In addition to the importance of path-dependence, the multilevel characteristic of the integration between organizational levels is critical in understanding learning and decision making in the process of internationalization. Initial acquisition of information and experience takes place at the individual level, while the final phase of knowledge application directly influences organizational level behaviors and outcomes.

The final point raised by the model framework, is the potential advantage in applying effectual reasoning to the learning and decision making process in internationalization, in order to leverage inherent uncertainty, and facilitate a balancing of explorative and exploitive leaning processes.

The model framework incorporates elements of both cognitive and behavioral learning as the ability to acquire and recognize knowledge and information is mainly a cognitive process, whereas the application of that same knowledge is a more behaviorally oriented through potential change in organizational behavior.

In addition to highlighting key elements of the learning and decision making process in internationalization, the model is developed for the purpose of acting as a generic framework to structure the comparative analysis of organizational- and entrepreneurial learning perspectives in the process of internationalization, which is the aim of the following chapter.

5. Learning and decision making: Comparative analysis of organizational- and entrepreneurial learning

In the following, two approaches to learning in an organizational context in the process of internationalization are compared. The Uppsala internationalization model is introduced as a classic starting point for the discussion of organizational learning theory, while entrepreneurial learning represents an alternative to the organizational learning perspective with its emphasis on learning at the individual level as the main determinant of internationalization. The two learning perspectives are briefly introduced, followed by a comparative analysis structured according to the model framework developed in chapter four

5.1 Organizational learning approach to internationalization: The Uppsala model

The Uppsala model of internationalization, which has played a significant role in the development in the field of internationalization, was developed on the basis of a case study of the internationalization process of large Swedish manufacturing companies in the 1970s, with an interest in determining why and how decisions were made. The model explains how internationalization takes place through a sequential establishment chain, which is described as a process of slow, incremental learning and decision making, in which increases in market knowledge generates increased market commitment (Johanson and Vahlne 1977, 2003a, Andersen 1993, Andersson 2000). The key element in driving the internationalization process forward is the acquisition, integration and application of knowledge related to international markets and operations within these markets (Johanson and Vahlne 1977).

The main focus of the model is on the learning process of the organizational system as an entity, with limited attention to how individual and group learning contribute to achieving organizational level outcomes, and with little account of market and competition variables, which reveals the close ties to behavioral learning theory. According to the model, decisions are made largely independent of analyses and interpretation by individuals and groups, and decisions are perceived as being “dictated” by the learning process (Johanson and Vahlne 1977, Lundberg 1995, Andersson 2000, Blomstermo and Deo-Sharma 2003).

The Uppsala model has received criticism for not including the individual element, in spite of the fact that empirical findings strongly suggest that single individuals may play a critical role in catalyzing strategic processes, such as internationalization, in large as well as smaller organizations (Lloyd-Reason and Mughan 2002, Andersson 2000). The model has also been characterized as being deterministic, simplistic and redundant, as well as applying a narrow

understanding of knowledge, all which has been argued to compromise its explanatory power at various levels. As the Uppsala modelers themselves acknowledge the limitations of the model as a consequence of assuming market specific experiential knowledge to be the main driver of internationalization, it can be argued that it was a conscious decision to develop a partial model (Andersson 2000, Petersen et al. 2003, Deakins and Freel 1998, Blomstermo and Deo Sharma 2003, Forsgren 2002).

The main strength as well as main weakness of the Uppsala model is that it is simple and that the model maintains high generalizability compared to other process models, as it is applicable to both smaller and larger organizations. Even with its limited number of variables, and rather extensive critique the Uppsala internationalization model has been one of the most influential process models of internationalization, and later models and discussions in many cases, explicitly or implicitly, use the Uppsala model as a point of reference or benchmark (Andersson 2000, Andersen 1993, Forsgren 2002).

5.2. Individual level learning approach to internationalization: Entrepreneurial learning

Entrepreneurship literature predominantly depicts learning as a process driven by individual reflection and interpretation: The entrepreneur acts at a high level of innovation, is assumed to be somewhat tolerant of risk and demonstrates proactive behavior. When the entrepreneur acts or makes decisions, it is assumed that the entire organization is affected through a direct link between individual level learning and organizational behavior (Oviatt and McDougall 2005a, Acedo and Florin 2006). Entrepreneurship is widely understood as a learning process, which suggests that the entrepreneurial learning perspective may contribute to the internationalization discourse (Minniti and Bygrave 2001, Cope 2005, Rae and Carswell, 2001). The research field of entrepreneurship is however characterized by fragmentation and there is no general consensus about what entrepreneurship is, or what defines entrepreneurial learning, which impede the integration of the entrepreneurial perspective into the internationalization discourse (Gartner 2001, McDougall and Oviatt 2000, Shane and Venkataraman 2000, Rae and Carswell 2001, Allinson et al. 2000). Table 5.1 below presents different definitions of entrepreneurial learning.

Table 5.1: Entrepreneurial Learning

1. <i>"..learning experienced by entrepreneurs during the management of a small enterprise"</i> (Cope 2003, p 429)
2. <i>"Entrepreneurial learning is...a continuous process that facilitates the development of necessary knowledge for being effective in starting up and managing new ventures"</i> (Politis 2005, p 401)
3. <i>"Entrepreneurial learning is concerned with how people construct new meaning in the process of recognising and acting on opportunities, and of organising and managing ventures"</i> (Rae and Carswell 2001, p 150)

The term "entrepreneurship" is often used to describe the start-up of an enterprise, which is reflected in the first two classifications of entrepreneurial learning above, but at the same time it has become widely acknowledged that entrepreneurship is not restricted to the start-up of new organizations. The key element in entrepreneurship is opportunity, and more specifically how opportunities are recognized and how obstacles related to the exploitation of the opportunities are managed, and as such the entrepreneurial behavior or action is more interesting than the entrepreneurial actor (Andersson 2000, Shane and Venkataraman 2000, Eckhart and Shane 2003, Cope 2005). This view entails that entrepreneurship may also take place in an established organization, as long as lucrative opportunities and enterprising individuals are present (Shane and Venkataraman 2000, Styles and Gray 2006). This explanation is reflected in Rae and Carswell's (2001) definition above, and suggests that entrepreneurial learning is a process by which individuals, and thereby organizations, learn to recognize, manage and exploit lucrative opportunities in an organizational context.

Entrepreneurial learning is rooted in individual learning theory and the principles of experiential learning play a prominent role, but the complexity of entrepreneurial learning exceeds that of Kolb's four phase learning cycle, cf. figure 3.1 (Rae and Carswell 2000, 2001, Politis 2005). According to the experiential school of thought, previous experiences are critical in the process of identifying and exploiting opportunities, and past experiences, positive and negative, make up a stock of information which provides a frame of reference for the individual. This body of experience affects the entrepreneur's interpretation of new and existing information in or of relevance to the organization, and thereby help the entrepreneur create new means-end relationships (Minniti and Bygrave 2001). Ultimately the application of previously acquired knowledge facilitates an informed decision making process. Experience and the knowledge derived from it are subjective factors, and as random impulses, such as luck and intuition, are argued play a

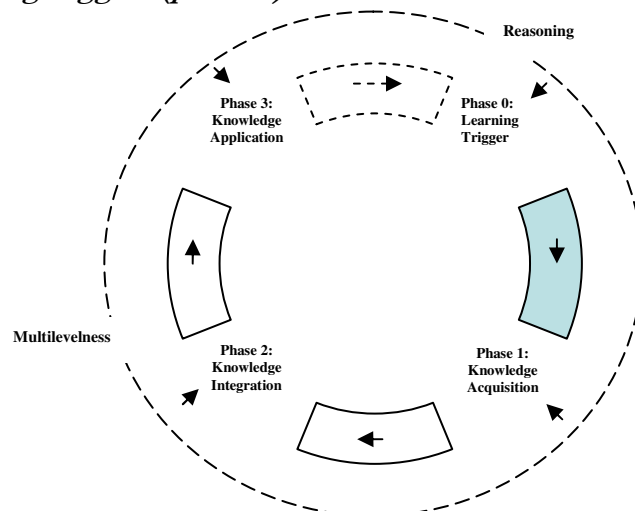
part in entrepreneurial decision making decision making in general is characterized by uncertainty (Politis 2005, Minniti and Bygrave 2001, McMullen and Shepherd 2006).

Entrepreneurial learning is most often described as a single level process at the individual level with direct effects on organizational behavior, and this limited scope has set off criticism of entrepreneurial learning for neglecting important processes beyond the individual level. By largely disregarding group and organizational level influences, entrepreneurial learning literature is argued to underestimate the importance of distributing and exchanging knowledge throughout the organization with the purpose of achieving better learning outcomes (Zhang et al. 2006, Jones and Macpherson 2006). The inclusion of entrepreneurial learning in this thesis is however vindicated by the fact that there is increasing agreement among scholars that business activities and organizational development cannot be isolated from elements of human capital such as observations, experience, goals, expectations and interpretations of decision makers. These subjective parameters are central elements in entrepreneurial learning perspectives, which thereby complements organizational learning perspectives by focusing on individual level processes, which are somewhat neglected by organizational learning studies (Cope 2003, Eriksson et al 1997, Zhang, Macpherson and Jones 2006, Lloyd-Reason and Mughan 2002).

5.3 Comparative analysis of learning perspectives

The comparison of the organizational learning perspective, represented by the Uppsala internationalization model, and entrepreneurial learning perspectives in relation to decision making in the process of internationalization is structured according to the base line learning cycle presented in figure 4.1.

5.3.1 Learning triggers (phase 0)



Learning in an organizational context is not necessarily conscious or intentional, but even so learning must be motivated. Important elements in catalyzing the learning process are opportunities and crises, as well as desired learning outcomes.

Opportunities and crises

In entrepreneurial learning the concept of “critical events” is identified as an important learning stimulus of learning. Critical events are opportunities or problems caused by internal and/or external changes, e.g. competition or market conditions. Positive as well as negative incidents are potential learning events, but challenges, failures or immediate risk of failure are often classified as being most effective learning triggers (Cope 2003, 2005, Cope and Watts 2000, Deakins and Freel 1998, Rae and Carswell 2000, Minniti and Bygrave 2001, Zhang et al. 2006).

Opportunities and/or problems, more specifically knowledge gaps, are also seen as a main learning trigger in the Uppsala model (Johanson and Vahlne 1977, Lyles et al. 2005). A knowledge gap exists when there is discrepancy between the existing stock of knowledge within the organization on the one hand, and knowledge and/or capabilities required in order to sustain satisfactory performance under specific circumstances on the other. When a knowledge gap exists, the perception of risk is high, which limits the commitment to the internationalization process. In order to sustain or improve long-term performance and profits, organizations will accordingly try to close or bridge existing knowledge gaps by initiating a learning process (Johanson and Vahlne 1977, Lyles et al. 2005)

Desired learning outcome

The desired learning outcome is what the organization ultimately seeks to gain from the learning process, and as such the desired outcome acts as a motivating factor in the learning and decision making process. According to the text book definition, organizations engage in international activities because they seek resources or markets with the purpose of creating, consolidating or improving their competitive position (Bartlett et al. 2003). A favorable competitive position and return on investments are important goals for all profit organizations, but the organizational and entrepreneurial learning approaches respectively, emphasize sub-goals.

According to the Uppsala model, the primary aim of learning is to reduce risk and thereby enable international growth. By acquiring and applying knowledge, the organization bridges the knowledge gap(s), which catalyze the learning process, and the organization thereby

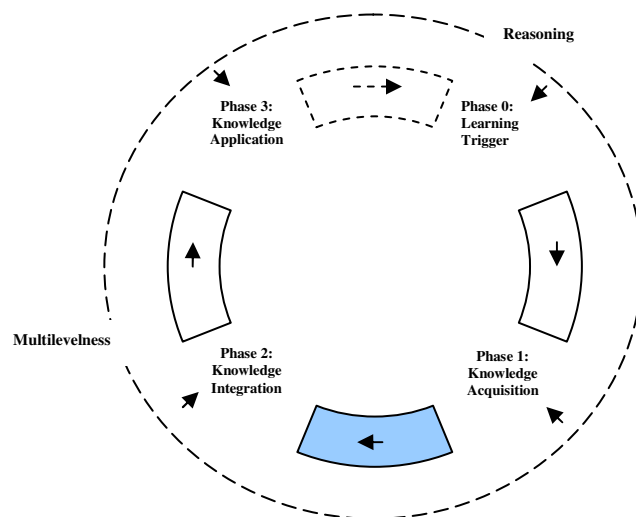
reduces the perception of risk which in turn facilitates increased international commitment (Johanson and Vahlne 1977).

In terms of entrepreneurial learning the desired outcomes of learning are to improve (1) the ability to recognize and act on opportunities, and (2) the effectiveness in the handling of liability of newness, which is a constantly present factor in the process of internationalization (Politis 2005). The liability of newness, or liability of foreignness, is the lack of local market knowledge, reputation and resources which disadvantages an organization doing business in a foreign market, compared to companies to which the market in question is domestic (Autio et al. 2000, Oviatt and Mcdougall 2005b). By managing this liability as well as improving the ability to identify and act on opportunities, the organization hence supports the process of internationalization.

The learning process, as conceptualized by organizational- and entrepreneurial learning perspectives respectively, are triggered by largely similar mechanisms, but the entrepreneurial learning perspective is comparatively more proactive in its desired learning outcomes by focusing on how to enable gains rather than on how to prevent losses.

5.3.2 Knowledge acquisition (phase 1)

Phase 1 of the learning cycle consists of two main elements, which indirectly influence the balance between explorative - and exploitive learning. The first is concerned with who initially obtain the information from which knowledge is developed, while the second element concerns the method used to obtain and develop knowledge.



Point of knowledge acquisition

The learning perspectives have similar views on knowledge acquisition, as both recognize individuals as the point of initial knowledge acquisition (Johanson and Vahlne 1977,

Minniti and Bygrave 2001). The fact that individuals are acknowledged as the point of knowledge acquisition by the Uppsala model, which is mainly focused on the organizational level outcomes, illustrates the multilevel nature of the model; the model assigns no particular importance to the influence of individuals, but still remains dependent on them. Organizations are hence capable of learning without any specific individual, but not without all individuals, which is a general characteristic of organizational learning (Kim 1993, Crossan et al. 1999). According to the Uppsala model, it is primarily employees with close contact to the foreign market of interest and a relevant knowledge base to build on, e.g. front line managers, who constitute the initial point of knowledge acquisition (Forsgren 2002).

From the perspective of entrepreneurial learning, the entrepreneur, who initially acquires knowledge, has a central position within the organization, and the entrepreneur is instrumental in the internationalization process. In smaller organizations knowledge tends to be individualized to the entrepreneur or concentrated in a small group of people, who are close to the decision making process (Oviatt and McDougall 2005a). It is important to note, that much entrepreneurship research focus on the entrepreneurial action as opposed to the entrepreneurial actor as the driver decision making, but a limited number of individuals remain the point of knowledge acquisition (Andersson 2000).

Type of knowledge and Method of acquisition

As outlined above, learning literature distinguishes between objective and experiential knowledge. The Uppsala model and the entrepreneurial perspective both place strong emphasis on the importance of experiential knowledge and the “learning-by-doing”- method in acquiring knowledge (Cope and Watts 2000, Cope 2005, Forsgren 2002).

The Uppsala model focuses on market related experience from current business activities as well as experiential knowledge about the organization and its activities, as the general approach of knowledge acquisition. In addition to drawing attention to the partiality of the model, with its focus on experiential knowledge, critics have argued that the model does not make adequate distinction between experience and the knowledge generated from experience, and consequently equals knowledge acquisition with learning (Andersen 1993, Forsgren 2002, Petersen et al. 2003, Eriksson et al. 1997).

The entrepreneurial learning perspective recognizes the importance of experience over a wider range and experience obtained from alternative sources than current business activities. In accordance with the development in the field of organizational learning, as clarified in the development of the baseline learning cycle, entrepreneurship research draws attention to the

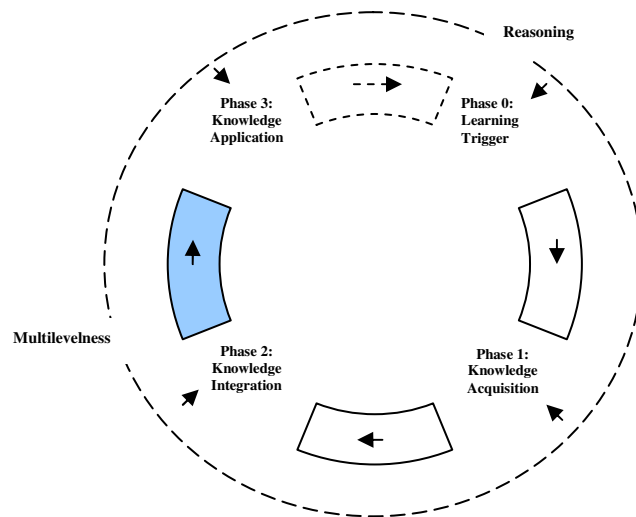
importance of a wider knowledge base, including general knowledge about how to be entrepreneurial, industry experience, management experience as well as experience from involvement in previous organizations (Politis 2005, Cope 2005, Rae and Carswell 2000, Cope and Watts 2000). Much of this knowledge is acquired and developed prior to the legal birth of the organization, and, according to the entrepreneurial perspective, this knowledge is critical in a successful internationalization process (Cope 2005, Weerawardena et al. 2007).

Developments within the field of learning in an organizational context, including entrepreneurial perspectives, also recognize that knowledge may be effectively acquired from second hand sources such as customers, suppliers, competitors and fellow entrepreneurs, as for example illustrated by Huber's conceptualization of learning by information processing, which in this aspect can be argued to have been a pioneer model in this respect (Jones and Macpherson 2006). Second-hand information is in some cases acquired by chance, but organizations also deliberately use external, second hand sources, as information and knowledge from such sources are usually available at a lower cost and faster than experience based knowledge. The speed of knowledge acquisition is a relevant parameter as many industries are becoming increasingly dynamic. In many cases the window of opportunity will be closed by the time the organization has collected information first hand and processed it into knowledge, in which case second hand sources are of critical importance in the general development of the organization (Autio et al. 2000).

When comparing the two approaches in terms of knowledge acquisition methods and types of knowledge, it is apparent that experientially based knowledge is central in both perspectives. The main distinction, or perhaps development from the Uppsala model to more recent explanations of learning, including entrepreneurial learning, is that the latter embrace a broader perspective of what constitutes relevant knowledge and takes a more pragmatic and proactive approach to learning, which initially suggest a prominent role of exploitive learning in the entrepreneurial approach. Based on the initial observations related to the learning trigger and the acquisition of knowledge, indicators of the balance between explorative and exploitive learning are only indicative, and the discussion is resumed later in the study.

5.3.3 Knowledge integration (phase 2)

The third phase of the learning cycle, following learning triggers and knowledge acquisition, concerns how knowledge is processed and internalized in the organization after initial acquisition. The extent to which knowledge is shared within the organization and how and where knowledge is stored are central elements of this phase.



Sharing and storing knowledge

The baseline learning cycle points to the importance of multiple people being involved in the learning process as multiple and diverse interpretation of acquired information benefits the learning process. The distribution and institutionalization of individual knowledge is a critical factor in obtaining organizational level learning, and distinguishes organizational learning as a multilevel process from single level learning.

As outlined above, the Uppsala model assumes that individuals acquire experiential knowledge, but the model does not consider strategic choice by individuals. The model assumes an incremental decision making and internationalization process, with a direct link between knowledge and action; knowledge is acquired, e.g. by front line managers, and stored at the individual level, while actions take place at the organizational level. This link reveals an implicit assumption of knowledge being transferred from individuals to the organizational level, but the model makes no specifications of how this transfer takes place (Johanson and Vahlne 1977, Forsgren 2002, Petersen et al. 2003).

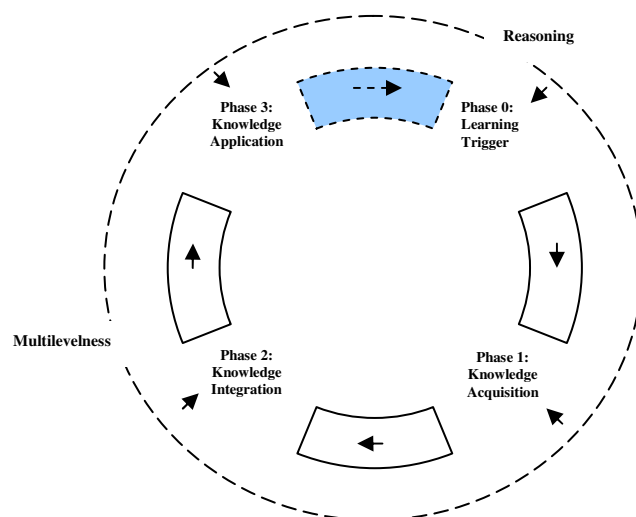
Within entrepreneurial learning, diffusion of knowledge has generally received limited attention. In small and simple structures, which have traditionally been the focal area of entrepreneurship research, individual learning closely resembles organizational learning, as the organization to a large extent *is* the entrepreneur (Zhang et al. 2006, Kim 1993). The result is that the entrepreneurial perspective largely neglects the importance of distributing and institutionalizing knowledge to organizational members and units beyond the individual(s) who initially acquires the knowledge (Jones and Macpherson 2006). In early stages of growth, it is not unlikely that diffusion takes place on an ad-hoc basis, but as the organization grows and becomes more complex, the lack of a structure for knowledge sharing potentially becomes increasingly problematic. If knowledge

remains restricted to the entrepreneur or a small group of individuals it may impede optimal learning outcomes, as the benefits of knowledge distribution and broad and diverse knowledge interpretation are not realized (Oviatt and McDougall 2005a).

Organizational and entrepreneurial learning perspectives hence differ in terms of knowledge sharing and distribution. The Uppsala model only provides implicit information about how individual level knowledge is 'translated' into action at the organizational level, whereas the entrepreneurial perspective assumes a direct link between individual learning and organizational behavior. Both perspectives recognizes learning in the organization as a multi-level process, which is an important distinction in the discussion of the appropriate level of decision making, but each perspective apply the multilevel perspective in a fragmented and inconsistent manner. This observation is central in the discussion of the appropriate level of decision making, and is elaborated later in this chapter.

5.3.4 Knowledge application (phase 3)

Knowledge is acquired and integrated in phases 1 and 2, and in phase 3 the knowledge is applied in the shaping of decisions and actions. Knowledge application takes place through decision making, in which the perception of risk is an important element. Decisions shape the internationalization process by determining issues such as the timing of internationalization and choice of market and level of commitment, and as knowledge application is the final stage in the process of learning and decision making, it is a manifestation of the previous phases.



Decision making characteristics

According to the Uppsala model, learning and decision making is an incremental process, characterized by deterministic and reactive procedures. The main reason behind

incremental decision making is that the model is built on the assumption that organizations are risk averse by nature, and hence strive to avoid uncertainty through a high level of experiential knowledge which supports confident decision making under uncertain conditions (Madsen 2005, Blomstermo and Deo Sharma 2003, Forsgren 2002). The incremental process “dictates” the step-by-step process of internationalization, and individuals are not explicitly considered to make strategic decisions or to play a major role in strategy development (Johanson and Vahlne 1977, Andersson 2000). Nevertheless, the learning and decision making process is strongly influenced by peripheral units – the domain of the front-line managers who acquire knowledge - in “*a relatively extreme ‘bottom-up’ perspective, where the ‘bottom’ plays the leading part and the headquarters play walk-on parts*” (Forsgren 2002, p 268).

The entrepreneurial learning approach has a different view on decision making, as opportunity recognition and individual interpretation of knowledge are emphasized. Each decision maker founds decisions on what has previously been learned and experienced, positively as well as negatively, and as a result entrepreneurs and their organizations will follow different patterns of decision making, depending on individual experience and interpretation of the decision maker(s) (Minniti and Bygrave 2001, Politis 2005, Andersson 2000, Acedo and Florin 2006). In terms of the influence of uncertainty and risk perception, risk reduction is not a motivating factor to the same extent as in the Uppsala model. In early entrepreneurial research, entrepreneurs were suggested to have personal characteristics which induced them to tolerate, or even prefer, high levels of uncertainty, but these arguments are highly disputed and recent developments point to the possibility of effectual reasoning, and the inherent focus on acceptable loss as a reason for the limited focus on risk avoidance (Minniti and Bygrave 2001, Acedo and Florin 2006, Sarasvathy 2001, McMullen and Shepherd 2006).

In terms of the link between exploitive and explorative learning on the one hand, and decision making on the other, the entrepreneurial perspective sees the learning as a proactive and innovative process, which suggests that exploration is the dominant mode for making decisions in the internationalization process. In contrast, the incremental learning and decision making process of the Uppsala model, with emphasis on risk avoidance, indicate that the model assumes exploitation to be the dominant mode of decision making, as previously suggested (Politis 2005)

Internationalization characteristics

The Uppsala model and the entrepreneurial learning perspective differ significantly in respect of decision making characteristics, and these differences manifest in the characteristics

of the internationalization in terms of timing of internationalization, choice of market(s) and level of commitment.

According to the Uppsala model an organization will expand to a foreign market once it has built a base of resources and experience in the domestic market, in which the company is assumed to have a strong position (Johanson and Vahlne 1977). Time is a critical factor in absorbing the knowledge which facilitates handling the challenges of operating in a foreign market at an acceptable level of risk, and consequently physical internationalization is only possible when the organization has reached a certain age and thereby obtained a high level of knowledge intensity (Johanson and Vahlne 1977). A defining characteristic of the Uppsala model is furthermore that organizations are assumed to initially expand into markets with short psychic, and subsequently approach more distant markets. Psychic distance represents factors that inhibit or disrupts the information flow between the organization and potential international markets, and dissimilarities in languages, cultures, political systems, level of industrial development etc. discourages involvement (Johanson and Vahlne 1977, Anderson 1993, Blomstermo and Deo Sharma 2003, Liesch and Knight 1999)

In addition to the timing of internationalization and choice of market, the level of commitment is a significant characteristic of internationalization. Market commitment can be high or low, depending on the resources committed, and while a high-commitment strategy equals high resource commitment which yields high control of the operation, a limited amount of resources committed result in limited control of the foreign operations (Blomstermo and Deo Sharma 2003). The Uppsala model prescribes that an organization enters a foreign market with a low commitment strategy followed by a step-by-step increase, which is irreversible once initiated (Johanson and Vahlne 1977, 2003a).

In general, the entrepreneurial perspective is less restricting on the characteristics of internationalization, as there are no constraints in timing of internationalization, choice of market or level of commitment. The critical element in all decisions is whether an attractive opportunity is recognized, and that the organization has the resources to exploit the opportunity (Corbett 2005, Eckhardt and Shane 2003). Internationalization is possible from inception, and may be advantageous because it overcomes the problem of unlearning practices and assumptions from the domestic market which may be restricting in the new international context, as well as presenting "learning advantages of newness" which are suggested to work counter to the liability of newness, thereby making early internationalization an advantage. High commitment/high control strategies are also feasible from inception, and in contrast to the perspective of the Uppsala model, the process remains reversible which entails that international commitment may subsequently increase

or decrease depending on whether new learning is positive or negative. Lastly, the only restriction in terms of choice of market is that an opportunity is identified (Autio et al. 2000, Wright et al. 2007, Oviatt and McDougall 2005b).

The learning and decision making process according to the Uppsala model and entrepreneurial learning respectively, is catalyzed and driven by similar mechanisms and motivations, but throughout the process the two perspectives develop in different directions, and ultimately manifest in two distinct patterns of internationalization.

5.3.5 Multilevelness

The conceptualization of nested arrangements fits well with the understanding of the learning process taking place in an organizational context, as outlined and discussed in previous chapters. The basic characteristics of organizational – and entrepreneurial learning, respectively, furthermore matches the tension between micro or macro perspectives which are key elements driving the development of multilevel approaches. Organizational learning, as represented by the Uppsala model, show similarities with the characteristics of a macro approach, with a focus on understanding organizations as collectives. Individual differences are perceived as inferior to regularities and commonalities of social behavior, and macro perspectives generally disregard the influence of behavior, observations and interactions of individuals on higher-level outcomes. This prioritization implies that the human factor is ignored, although organizations are dependent on people to think and act in order for the organization to “behave” in one way or another (Kozlowski and Klein 2000, Hitt et. al. 2007).

In contrast, the micro level approach, which has parallels to the entrepreneurial learning perspective, focus on understanding variations among individual actors in terms of thoughts, feelings and actions, as an emphasis on collective accumulations is perceived as concealing important variations among individuals. The flaw generally preventing micro perspectives from providing adequate explanations of organizational phenomena is that micro perspectives neglect the fact that individual idiosyncrasies are influenced by higher-level contextual factors, and as such individual processes and outcomes can not be extended to equal organizational level behaviors and events (Kozlowski and Klein 2000, Hitt et.al. 2007). Few organizational processes are autonomous at a single level, learning included, and when research is carried out at the micro level *or* the macro level, important interdependencies are neglected (Hitt et al. 2007, Kozlowski and Klein 2000). Entrepreneurial learning and organizational learning however both in part recognize the existence of multiple levels, and as such entrepreneurial – and organizational learning perspectives is not a clear case of micro versus macro

perspectives, but neither perspective represent an adequate multilevel approach, which is a general flaw in theories revolving around learning in an organizational context (Inkpen and Crossan 1995). Entrepreneurial learning hence sees individual initiatives as determining organizational activities and outcomes, and thereby assumes uncritical aggregation of individual-level procedures and decisions to represent the organizational level construct of internationalization. Organizational learning theories, as exemplified by the Uppsala internationalization model, often use the unit-level constructs and behaviors to deduce processes taking place at lower levels. These common cases of misalignment potentially “*degrade construct validity and create concerns about generalizability*”, which is unfortunate for the explanatory abilities of the theories (Kozlowski and Klein 2000, p 26, Hitt et al. 2007). When applying a multilevel approach the problems commonly associated with discrete micro or macro perspectives are leveraged by recognizing the importance of top-down cross-level contextual effects on lower-level phenomena, as well as the importance of bottom-up emergent processes that generate higher-level phenomena, and thereby creating comprehensive modeling of organizational processes and behavior (Kozlowski and Klein 2000). The appropriate level of analysis for decision making in the process of internationalization is hence not to be perceived as a choice between the alternative approaches of entrepreneurial or organizational learning and their different foci in terms of levels of learning and decision making. Decision making is ultimately a multilevel process integrating elements from both perspectives, and a multilevel approach in theoretical and empirical research provides a more comprehensive understanding of the organizational process of decision making.

5.3.6 Reasoning

It has previously been suggested that effectual reasoning may not only be applicable to internationalization, but also highly relevant to the study of internationalization due to the ability of effectuation to leverage risk, under the uncertain conditions of internationalization.

Effectuation is often associated with innovative behavior, and there are obvious similarities between entrepreneurial learning and effectual reasoning. Effectuation is first of all entrepreneurial in the sense that new ends are envisioned and created as the result of a new combination of existing resources. The principles of effectuation furthermore suggest that entrepreneurial outcomes are results of a negotiating process, in which strategies are developed and selected based on existing network and experience, rather than as results of distinct personality traits and individual characteristics. As such, effectuation makes it possible to explain entrepreneurial action as a valid and rational alternative to causal decision making, in situations in

which it is unfruitful to attempt to make predictions and apply causal reasoning (Steyaert 2007, Dew and Sarasvathy 2002).

Principles of effectual reasoning are however also applicable to the organizational learning perspective in general, and the Uppsala model in particular. According to the modelers, the Uppsala model *“..shows that the firm’s internationalisation is a knowledge development process. The firm starts on a journey on which it will discover business opportunities that no one could have thought of beforehand. This means that the supposed rational action, comprising extensive data collection, the specification of alternative actions and careful planning, would rarely be the most rational action in practice. Rather, it is through action that it becomes possible to see and learn something about customers and the way markets work”* (Johanson and Vahlne 2003a, p 13). These initial thoughts behind the Uppsala model suggest non-predictive strategy, and the possibility of effectuation as the driver of internationalization. The creation of new innovative ends is perhaps not the first thing springing to mind when characterizing the Uppsala model, but a key mechanism of the model is that decisions are made based on the knowledge the organization has, which implies that existing means drives the decision making process. At the same time, the Uppsala model gives the impression that knowledge and resources the organization has at a given point in time are not sufficient for making decisions at an acceptable level of uncertainty. Consequently, the decision making process in the Uppsala model is most appropriately understood as a two-stage process of reasoning: The organization starts with a given pool of means, from which it imagines different ends, and subsequently one or several of these ends are selected and becomes given goal(s), which the organization work towards using a combination of existing resources *and* new experiential market specific knowledge.

5.4 Concluding remarks

In summarizing the findings of the comparative analysis above, the first observation is that the Uppsala model as well as the entrepreneurial perspective follows similar paths of learning and decision making, resembling the baseline learning cycle presented in chapter four. When moving through the learning cycle and looking more closely at the individual phases and their integration, there are however several noticeable differences between the learning perspectives which ultimately result in two approaches to decision making exhibiting few matching traits. Key differences contributing to the gap between the two learning perspectives, which inhibit the understanding of decision making in the process of internationalization include (1) the type of knowledge and method of acquisition emphasized, (2) the influence of risk perception, and (3) the focus on the interdependencies among various organizational levels.

In relation to the type of knowledge and the method of acquisition emphasized by the two learning perspectives, an effectual approach makes it irrelevant to discuss whether market specific experiential knowledge or more broadly defined experiential knowledge drives the decision making process. Rather than focusing exclusively on knowledge, the effectual perspective suggests that decision making is driven by knowledge as well as by organizational identity and networks. The effectual approach is in some ways broader and less defined than knowledge acquisition depicted by the organizational and entrepreneurial learning perspectives, but at the same time effectuation provides a more holistic approach to decision making, enabling decisions tailor-made to the organization and exploiting *all* its resources. In a similar manner, an emphasis on the importance of existing resources and knowledge, as suggested by effectual reasoning, cancels the potential restricting influence of risk perception. When applying effectual reasoning, risk perception is leveraged by replacing a logic of prediction with a logic of control, including an inherent principle of acceptable loss. In short it appears that the application of an effectual approach to reasoning bridges two main gaps between the organizational – and entrepreneurial learning perspectives on internationalization, and thereby contributes to the understanding of learning and decision making in the process of internationalization.

The integration between the different phases of the learning cycle and the organizational levels at which each take place is the last, and highly relevant, gap between the organizational- and entrepreneurial learning perspectives. As emphasized in chapter four, the phases of the learning cycle are interdependent, and if of one of the levels/phases were to be omitted from the analysis the remaining cycle would be fragmented. Consequently it is misleading to focus on one organizational level as the appropriate level of decision making: Learning and decision making in the process of internationalization is a multilevel process and should be approached as such. The Uppsala model as well as the entrepreneurial learning perspective to some extent recognize the multilevel nature of the learning and decision making process in internationalization, but both perspectives also fail to emphasize the dynamics between and among organizational levels, which is instrumental in understanding of the complex dynamics of learning and decision making in an organizational context.

6. Understanding decision making in the process of internationalization

Based on the analyses of this study and the understanding of learning in an organizational context developed throughout this thesis, it is apparent that there are significant discrepancies between organizational learning perspectives, as represented by the Uppsala model of internationalization, and entrepreneurial learning perspectives, which inhibits the development of an integrated perspective on learning and decision making in the process of internationalization. Furthermore, neither of the perspectives adequately account for key mechanisms inherent in the discussion of the level of decision making in the process of internationalization. This paragraph presents five propositions, which are argued to enhance the understanding of learning and decision making in internationalization, by integrating elements from the perspectives of organizational- and entrepreneurial learning with principles of effectual reasoning and multilevel analysis, thereby supplementing and/or challenging existing theoretical perspectives.

6.1 Propositions

6.1.1 Learning as a multilevel process

Learning and decision making in a context of internationalization is dependent on a balance and integration between mechanisms taking place at individual, group and organizational levels, but existing conceptualizations of learning in many cases tend to emphasize the individual level (entrepreneurial learning) or the organizational level (organizational learning), each failing to recognize the importance of the integration and interdependence among organizational levels.

Initial acquisition and development of knowledge and insights is dependent on individuals, but the sum of individual knowledge is an insufficient determinant of organizational level outcomes. Rather, knowledge is developed and integrated across levels, which result in organizational level applications and outcomes.

P₁: Decision making in the process of internationalization is a multilevel process.

Interdependences among organizational levels is central in multilevel studies, and the dominant logic in management research is that downward influence of higher level phenomena is stronger than the upward influence of lower level variables (Hitt et al. 2007). A top-down relationship between phenomena at different levels may however become bottom-up over time or vice versa, and linkages between higher and lower level phenomena may change over time, due to development and the generally dynamic nature of organizational processes (Kozlowski and Klein

2000). It is evident from the above analysis that in the learning and decision making process of internationalization, organizational levels are linked by top-down as well as by bottom-up processes. Knowledge acquisition however inevitably starts with individual level cognition which subsequently shapes collective insights and organizational level outcomes, and the phenomenon is consequently dominated by a bottom-up emergent process:

P₂: Decision making in the process of internationalization is driven by bottom-up cross level effects.

The bottom-up processes, which link individual processes and organizational level outcomes, can be characterized as processes of composition or compilation, and the distinction is relevant because it helps characterize, and ultimately analyze, the specific process (Kozlowski and Klein 2000). Phenomena which remain unaltered though the emergent process from lower- to higher levels, making the higher level outcome a sum of the lower level elements, are characterized as a process of composition. In contrast, when higher level phenomena are the result of a combination of different lower level contributions, the emergent process is one of compilation, which is characterized by organizational level outcome being a complex function of individual and group contributions. It is generally assumed that organizational learning is dependent on individual level mechanisms, but at the same time organizational learning is more than and different from the sum of learning of individual organizational members, which makes the process one of compilation:

P₃: Bottom-up emergent processes of learning and decision making in the process of internationalization are characterized by compilation.

6.1.2 Effectual Reasoning

Decision making in the process of internationalization is characterized by uncertainty, and organizations are generally assumed to use knowledge and learning to leverage this uncertainty in order to substantiate decision making at an acceptable level of risk. Although rarely specified, the underlying assumption is that predictive strategy and causality drives organizational decision making, and the inherent uncertainty and the perception of it, inhibits internationalization. An alternative to causal decision making is the use of effectual reasoning, which makes risk perception irrelevant as learning and decision making is driven by a logic of control. This implies that the organization bases decisions on existing means, i.e. identity, knowledge and network, and rather than attempting to avoid predicted risks the organization is able to control uncertainty by making decisions based on acceptable loss. When applying effectual

reasoning, uncertainties become opportunities rather than threats, and decision making in the internationalization process is not restricted by risk perceptions:

P₄: The use of effectual reasoning in the decision making process of internationalization reduces the negative effects of risk perception.

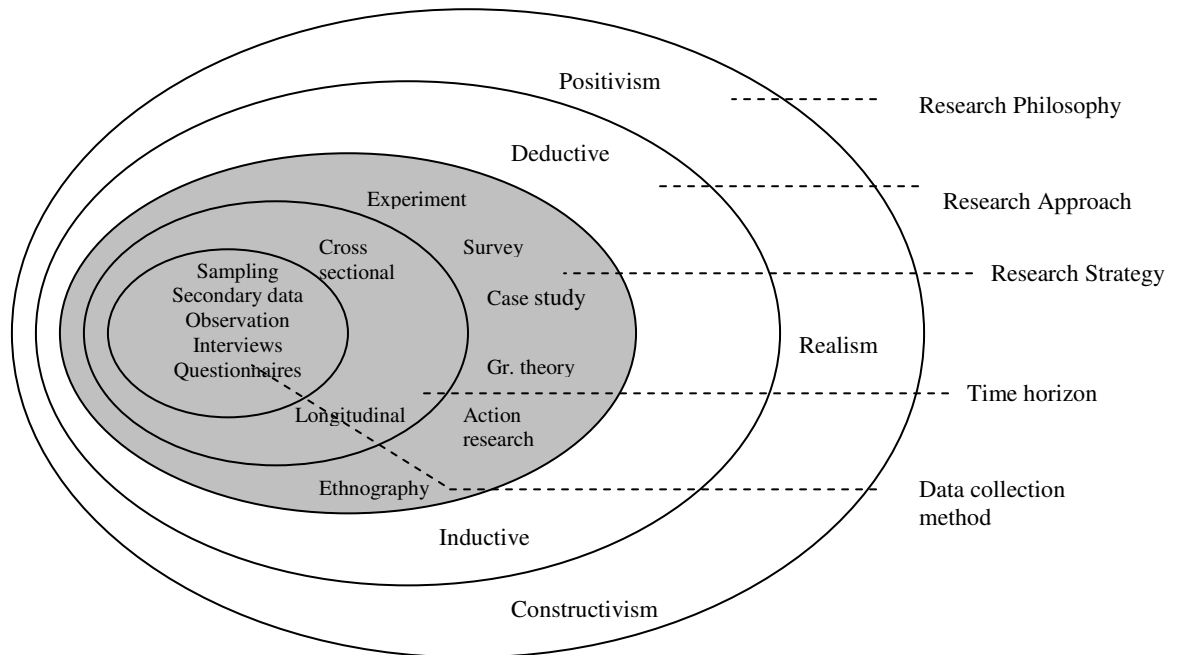
The tension between explorative - and exploitive learning is central in learning in an organizational context as it allows the organization to maintain a balance between utilizing existing knowledge and developing new insights and outcomes. Effectual reasoning exhibits similarities with exploitive learning in creating new outcomes, but as an effectual approach leverages the negative influence of risk perception, which inhibits the use of explorative learning in uncertain situations, effectual reasoning also supports the organization in its attempt to balance explorative- and exploitive learning. The key contribution of the effectual approach in this respect is that organizations can avoid unacceptable levels of risk by focusing on what can be achieved with new combinations of existing resources, thereby enabling the organization to a high extent to control outcomes and eliminating uncertainties of exploitive learning:

P₅: The use of effectual reasoning in organizational learning and decision making has a positive influence on the organization's ability to balance exploitive and explorative learning.

6.2 Research design

The research design of a study is the 'formula' as how to approach and resolve the issue or problem under investigation, and the appropriateness of a specific design is dependent on how well it handles the research question. There are no objective criteria for determining if a question is answered correctly, but a well constructed research design enhances the possibility of creating valid and reliable results (Fisker 2004, Kragh 2007). A research design is focused on the practical execution of empirical studies, and revolves around the inner circles of the research process onion, which was introduced in chapter two, and the strategy must consequently correspond with the outer rings, i.e. research philosophy and approach of the study.

Figure 6.1: The research process onion (II)



(Source: Saunders et al. 2003, Perry et al. 1998, Olsen and Pedersen 1999)

A research strategy is an operational plan of how to answer the research question, and the appropriateness of a certain strategy depends on its ability to provide reliable data on which to draw valid conclusions (Saunders et al. 2003). The issue under investigation in this thesis is the level of decision making in the process of internationalization, which, based on analyses and propositions of the thesis, is most appropriately addressed through a bottom-up cross-level approach, as tests of multilevel issues usually require multilevel design (Hitt et al. 2007). Bottom-up cross-level modeling is rare in empirical literature due to inherent analytical limitations, but as internationalization of the organization as an entity is driven by mechanisms at individual and group levels, this approach provides the best results (Kozlowski and Klein 2000, Hitt et al. 2007).

A case study approach, which generally facilitates a comprehensive understanding of the context and processes of complex interdependencies between and among various elements is suggested (Saunders et al. 2003). The, at this point, hypothetical empirical investigation related to the research question of this thesis is primarily of an explanatory nature, and a pragmatic and holistic view is advantageous in order to unravel the complex dynamics of learning and decision making in internationalization. With reference to table 2.1 which outlines the characteristics commonly associated with main analytical paradigms, a case study approach, possibly supplemented by quantitative data, falls within the boundaries of a Post-positivistic approach, which guides this thesis at an overall level.

Following this paradigmatic position of the thesis, generalization is not a criterion for or ultimate goal of research, and the limited generalizability of case studies, which is argued to be its major weakness, is outweighed by the strengths of the strategy. The suggested case study approach provides comprehensive information facilitating an analysis of the organizational nesting arrangements and the dynamics between different organizational levels and their influence on the learning and decision making process (Saunders et al. 2003). A qualitative presentation of multilevel issues additionally has the advantage of producing broadly accessible results, which speaks in favor of a case study approach (Klein et al. 2004).

A case study approach allows for a variety of methods, including a combination of qualitative and quantitative methods, which potentially limits the negative effects of the omnipresent trade-off between detailed precision and generalizability. Qualitative methods, e.g. interviews and observations, provide detail and depth, while quantitative methods such as surveys and questionnaires provide breadth through comparatively large sample sizes (Saunders et al. 2003).

In terms of time horizons, emergent processes, which are argued to characterize learning and decision making in the process of internationalization, generally requires long periods of “incubation” time, in order for the emergent effects to manifest (Koslowski and Klein 2000). This situation suggests a longitudinal study, which also has the potential to determine whether the suggested emergent processes of compilation remain stable over time.

7. Conclusion

The aim of this thesis has been to obtain a comprehensive understanding of the learning and decision making process of internationalization through an examination of the perspectives of organizational - and entrepreneurial learning. Emphasis has been on clarifying the appropriate level of analysis for decision making in internationalization.

This final chapter of the thesis presents the main findings of the study, as well as discusses the contributions of the study and the implication for future research.

7.1 Main findings

This thesis is based on the commonly held assumption that internationalization is a process of knowledge development. Based on a descriptive analysis of influential conceptualizations of learning in and by organizations, learning and decision making is modeled as a path-dependent process consisting of four integrated phases, which are dependent on the integration of multiple organizational levels, as well as influenced by the dominant approach to reasoning.

The comparative analysis of the organizational learning perspective, represented by the Uppsala internationalization model, and the entrepreneurial learning perspective demonstrates similar overall structures in accordance with the model framework, but with significant differences within the phases, which effectively result in a gap between the organizational - and the entrepreneurial learning perspective. The main differences identified between the perspectives are (1) the extent to which the perspectives explain and emphasize the integration of organizational levels and entities, (2) the influence of risk perception, and (3) the type of learning emphasized. In an attempt to reconcile these differences with a purpose of obtaining an enhanced understanding of the learning and decision making process in internationalization in general, five propositions are developed.

The Uppsala model as well as the entrepreneurial learning perspective implicitly recognize the multilevel nature of learning and decision making, but fail to specify the dynamics between the organizational levels. The entrepreneurial learning perspective use individual level individual learning as determining organizational activities and outcomes, and thereby assumes uncritical aggregation of individual-level procedures to represent the organizational level construct of internationalization. In contrast, the Uppsala model use the unit-level construct of internationalization to deduce processes taking place at lower levels, which result in a fragmented understanding of the learning and decision making process which drives internationalization.

Consequently, neither perspective captures the multilevel dynamics of learning and decision making in an organizational context. As the multilevel nature of the learning and decision making process is emphasized as a key characteristic of the learning and decision making process, it is argued that decision making in internationalization is a multilevel process of emergence, characterized by compilation, which should be reflected in theoretical as well as empirical research.

In terms of risk perception and the difficulties of balancing explorative and exploitive learning, it is suggested that the application of effectual reasoning leverages these issues. Effectual reasoning is founded on a logic of control, which undermines the restricting effects of risk perception, as outcomes are created and decisions made based on the resources available to the organization, effectively transforming uncertainties, with a negative connotation, into opportunities to be pursued based on a principle of acceptable loss.

It is furthermore suggested that effectual reasoning supports the organization in its attempt to balance explorative- and exploitive learning, as the uncertainties generally associated with exploitive learning are reduced significantly as a result of the organization focusing on what can be achieved with new combinations of existing resources, rather than depending on the prediction of future events, which is often not possible during internationalization processes. The core of effectuation is that reasoning in general, and decision making in particular, is driven by the knowledge the organization has, as well as by organizational identity and networks. Consequently, decisions are pragmatic reflections of the current position the organization and the resources which are available. The findings of study, manifested in the five propositions, supplement and challenges existing learning perspectives by emphasizing the multilevel mechanisms in the learning and decision making, as well as suggesting the integration of the perspective of effectuation into internationalization research.

Internationalization is a complex phenomenon of integrated and multilevel mechanisms of learning, and it is imperative that an analysis of decision making under these circumstances reflects this multilevel character. Consequently there is no one appropriate level of analysis for decision making in the process of internationalization, as the phenomena is appropriately analyzed with a multilevel approach. This being said, this study and the presented propositions are not intended as a complete mapping of the mechanisms driving learning and decision making in internationalization, but rather as support to the importance of a “true” multilevel approach, and as a starting point for drawing attention the potential in incorporating principles of effectual reasoning in research of learning and decision making in internationalization.

7.2 Implications and further research

The findings of this thesis suggest that the understanding of learning and decision making in the process of internationalization is enhanced by emphasizing the multilevel nature of the phenomena in theoretical and empirical research. It is furthermore argued that effectuation contributes to the reconciliation of organizational and entrepreneurial learning perspectives and an enhanced understanding of learning and decision making in the process of internationalization. These results are however indicative, and must be tested empirically.

The emphasis on the integration and interdependencies between organizational levels in learning and decision making processes is by no means revolutionary, but nevertheless calls for multilevel perspectives in theoretical as well as empirical research revolving around internationalization.

A central element in this study is the concept of effectuation, which although not an entirely new idea, remains somewhat unexplored. Effectuation is argued to be a generic approach for solving problems, which is applicable to “*all the sciences of human action*” (Dew and Sarasvathy 2002, p 11). Effectuation has received increased and noteworthy attention in the past decade, with strong advocates in Saras Sarasvathy and colleagues, but it is important at this point of development to critically evaluate the principles of effectuation in specific contexts, e.g. internationalization, in order to ascertain or question the potential contributions of effectuation in a wider frame of business and management studies.

As a final, and potentially central contribution, the potential reconciliation of organizational and entrepreneurial learning perspectives suggested by this study, paves the way for the development of an integrated perspective of learning and decision making, transcending the divide between the research fields, which may serve to reduce or eliminate the ambiguities currently inhibiting the accessibility of research of learning and decision making in an organizational context in general, and in the context of internationalization in particular.

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