The Internationalization Process of the Firm: Progressing through Institutionalization, Exploitation and Exploratory Learning

The internationalization process of the firm: Progression through institutionalization, exploitative and exploratory learning

Pieter Pauwels[1]

Tinne Lommelen[2]

Paul Matthyssens[3]

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Abstract

This paper presents a typology of six scenarios of progression in internationalization. The analysis builds upon experiential learning and the presumption of stress-reducing behavior to theorize on the dynamic character of internationalization. A multiple case study of 20 internationalization episodes results in six ideal-typical scenarios of progression. Each scenario represents a longitudinal interaction between four constructs: market knowledge, internationalization knowledge, attitudinal and behavioral commitment. To capture progression in internationalization, two scenarios build upon institutionalization, two on exploitative learning and two on explorative learning. In only two of the six scenarios a change in market knowledge is directly linked with a change in behavioral commitment. Eventually, these scenarios are designed as building bricks for the description and explanation of internationalization episodes.

Key words: internationalization theory, exploitative/explorative learning, scenario-analysis

1 : Dr. P. Pauwels, Maastricht University (Netherlands), Department of Marketing. p.pauwels@mw.unimaas.nl
2 : Dr. T. Lommelen, Limburgs Universitair Centrum (Belgium), Fac. of BA, tinne.lommelen@luc.ac.be
3 : Prof. Dr. P. Matthyssens, Limburgs Universitair Centrum, Fac. of BA and Erasmus University (Netherlands)
paul.matthyssens@luc.ac.be

Introduction

Internationalization process theory (Johanson and Vahlne 1977; 1990) builds upon the incremental process of a firm's experiential learning in foreign markets to explain incremental accumulation of commitment to foreign markets. Despite its intuitive elegance and enduring prominance in the international business literature, this knowledge-based process theory – or so-called Uppsala Model – has been challenged theoretically as well as empirically. While the Uppsala Model proposes a direct and non-moderated relationship between experiential knowledge and market commitment, variation in the accumulation of commitment seems insufficiently explained by the variation in the accumulation of knowledge, as if structural explanatory factors are missing (e.g., Andersen 1993; Pedersen and Petersen 1998).

International business literature remains frustrated by the fact that the internationalization process theory does not (aim to) explain internationalization progression in the short run. Indeed, a significant number of case studies has reported on episodes of internationalization that clearly do not reflect a linear and direct relationship between experiential learning and accumulating market commitment. For instance, observed internationalization processes that leapfrog in the expected sequence of entry strategies (e.g., from indirect export to foreign direct investment) may illustrate accelerating accumulation of commitment that outpaces the accumulation of experiential knowledge (e.g., Hedlund and Kverneland 1985). More recently, empirical work on de-internationalization and withdrawal from foreign markets has shown a temporal inverse relation between experiential learning and accumulating market commitment (e.g., Benito and Welch 1997; Matthyssens and Pauwels 2000). These observations point at substantial flexibility during the internationalization process, apparently not acknowledged for in the original Uppsala Model. Internationalization process theory has to be amended in order to embed these short-term fluctuations.

In this respect, empirical findings so far as well as critical conceptual papers (e.g., Turnbull 1987; Andersen 1993; Björkman and Forsgren 2000) have motivated scholars to upgrade the theory's explanatory power. Apart from the search for an alternative or complementary explanatory logic (e.g., the resource based view in Andersen and Kheam 1998 or industrial network theory in Coviello and Martin 1999), scholars have followed two routes to deal with this challenge. A first and dominant route focuses on the market knowledge construct and the underlying learning process (e.g., Eriksson, Johanson, Majkgård and Sharma 1997; 2000b; Forsgren 2002; Blomstermo and Sharma 2003). A second and less-developed route centers upon the theory's other construct – market commitment (Hadjikhani 1997; Pauwels et al. 2003).

We offer a third route, which builds upon the two aforementioned routes. The current paper aims to upgrade the dynamic logic and flexibility of internationalization process theory by integrating the theoretical progress made on market knowledge, market commitment and learning in the context of internationalization. Building upon a multiple case study of 20 internationalization episodes, we develop a scenario-analysis, which explicates longitudinal interaction effects between market knowledge and market commitment. Eventually, a typology of six scenarios is identified. The emerging perspective on these interaction effects as well as the six scenarios hold potential to enhance the explanatory power of internationalization process theory significantly.

The paper is structured as follows. First, we give a contemporary perspective on market knowledge and market commitment, the conceptual pillars of internationalization process theory. Next, we scrutinize experiential learning as the generative mechanism of internationalization. The following section presents the result of the scenario-analysis and discusses the six ideal-typical scenarios. The paper finishes with a critical perspective on its findings and specific suggestions for future research.

The Conceptual Foundation of Internationalization Process Theory

Building upon a behavioral theory of the firm (Cyert and March 1963) and Penrose's (1959) knowledge-based theory of the growth of the firm, the basic logic of the internationalization process theory (Johanson and Vahlne 1977; 1990) is quite straightforward: The allocation of resources to foreign activities holds a certain risk but induces experiential learning (learning-by-doing), which results in market-specific knowledge. The increased stock of market-specific knowledge reduces the risk in this particular foreign market and stimulates additional allocation of resources (Eriksson et al. 1997).

Johanson and Vahlne's (1977; 1990) internationalization process theory relies upon four related assumptions. First, firms maximize the expected future rent of their resources by allocating these to markets where doing business is judged to be least risky (Andersen 1993). Second, risk is reduced only through increasing market knowledge. Third, market knowledge is acquired through experiential learning. Finally, experiential learning is assumed to be an efficient process. The latter assumption is a necessary prerequisite for the internationalization process to embark and/or continue. In sum, experiential learning is a time-consuming incremental process that is paced by the occurrence of events in the foreign market (Huber 1991). Consequently, the internationalization process, i.e., the accumulation of market commitment, is expected to be an incremental process alike as it is solely driven by experiential learning (Johanson and Vahlne 1977; 1990; Pedersen and Petersen 1998).

Since its conception in the mid 1970s, many scholars have developed and refined the theory's two core concepts – market knowledge and market commitment – within and outside the context of internationalization process theory. Next, a contemporary understanding of both concepts is presented.

Market Commitment

In Johanson and Vahlne's (1977) original model, market commitment is composed of two factors – the amount of resources committed and the degree of commitment. The amount of resources points at the economic factors allocated to a particular market. Market commitment increases when a firm allocates more inputs to manage and support foreign operations. The degree of commitment represents the difficulty of finding alternative uses for these resources (Johanson and Vahlne 1990). Along Meyer and Allen (1991) and Gundlach, Achrol and Mentzer (1995), we argue that market commitment as put forward initially by Johanson and Vahlne (1977) is behavioral or instrumental per se. This is problematic since the unmediated relationship between experiential market knowledge and (behavioral) market commitment in the original model (Johanson and Vahlne 1977) is symptomatic of the incremental character of internationalization process theory.

Hadjikhani (1997) extends the conceptualization of market commitment. He argues that the amount of commitment points at the short term tangible (i.e., financial and institutional) forms of commitment, whereas the degree of commitment captures more the intangible long term elements of commitment. Focusing on tangible and intangible commitment as separate constructs does not refute the Uppsala Model's logic yet promises a more dynamic perspective. For instance, it could help explaining market withdrawal (decreasing tangible commitment) as a decision of product/market portfolio optimization in the context of a progressing (increasing intangible commitment) internationalization process (Pauwels and Matthyssens 1999).

Hadjikhani's (1997) conceptualization of tangible and intangible commitment concurs with a contemporary understanding of behavioral and attitudinal commitment. Whereas behavioral commitment is basically instrumental, the management literature has now commonly conceptualized attitudinal commitment as a cognitive-affective state composed of an affective, a continuance and a normative dimension (Meyer and Allen 1991; Meyer, Allen and Smith 1993; Gundlach et al. 1995; Skarmeas, Katsikeas, and Schlegelmilch 2002). The affective dimension of market commitment refers to the emotional attachment to a market. Firms with a strong affective commitment towards a particular market continue their commitment because they really *want* to be in that market. The continuance dimension refers to an awareness of the costs associated with leaving the market. As such, this dimension comes close to the degree of commitment as defined in Johanson and Vahlne (1977). Firms with a strong continuance commitment towards a particular market continue their commitment because they *need* to be/stay in that market. Normative commitment reflects a feeling of obligation to remain committed to that market. Firms with a strong normative commitment towards a particular market continue their commitment because they *ought* to be/stay in that market (Meyer and Allen 1991).

We suggest to explicitly adopt attitudinal (or intangible) commitment in internationalization process theory to mediate the relationship between experiential market knowledge and (behavioral or tangible) market commitment. To explicitly integrate attitudinal commitment in the internationalization theory, its relationship with behavioral commitment has to be made explicit. Following Meyer and Allen (1991) and Mowday, Porter and Steers (1982) we suggest an ongoing reciprocal influencing process. Actual behavior is instrumental to shaping attitudes, which, on their turn, act as inputs for decisions to deploy resources (i.e., behavioral commitment).

Experiential Knowledge

In the internationalization process market knowledge is crucial for two reasons (Johanson and Vahlne 1977). First, knowledge of opportunities and problems initiates decisions. Second, knowledge allows for an evaluation of alternatives to respond to the perceived opportunities or problems. While different types of market knowledge are distinguished in the literature (cf. Huber 1991) internationalization process theory typically builds upon experiential market knowledge, i.e., knowledge learned through personal experience in a foreign market (Johanson and Vahlne 1977; 1990).

Only recently, Eriksson and his colleagues (1997; 2000a; 2000b; 2001) have argued that this market perspective on experiential knowledge is too limited a conceptualization and that it forgoes the broader explanatory character of experiential knowledge, as discussed in Johanson and Vahlne (1977). Eriksson et al. (1997) explicitly acknowledges the explanatory power of experiential firm knowledge – or what they call internationalization knowledge – next to experiential market knowledge. This way, the original bifocal meaning of experiential knowledge is restored (Eriksson et al. 1997; Johanson and Vahlne 1977; 2003).

We adopt this bifocal perspective. Experiential market knowledge consists of foreign business knowledge and foreign institutional knowledge (Eriksson et al. 1997). Foreign business knowledge is experiential knowledge of clients, the market and competitors whereas foreign institutional knowledge concerns experiential knowledge of the government, the institutional framework, rules, norms, and values. Internationalization knowledge is defined as experiential knowledge of the firm's capability and resources to engage in international operations. It is procedural knowledge that is firm specific and relevant to all markets. It is the firm's platform for the creation of absorptive capacity with regard to internationalization (Eriksson et al. 1997; 2001; Cohen and Levinthal 1990).

Building upon Eriksson et al. (2000b; 2001) the explanatory power of these two types of knowledge can now be specified. Basically, it has been argued and observed that experiential market knowledge accumulates gradually through daily operations. To the contrary, internationalization knowledge is expected to develop discontinuously. In line with Eriksson et al. (2000b; 2001), it can be argued that episodes of gradual accumulation of market commitment are mainly steered by accumulating experiential market knowledge, which is incremental per se. Apparent discontinuities in the internationalization process of a firm may be better explained by more abrupt changes in the stock of internationalization knowledge.

The explicit integration of internationalization knowledge next to experiential market knowledge may yield a significant gain in the explanatory power of the current theory. Moreover, a bifocal perspective on knowledge allows for a more advanced perspective on learning, the generative mechanism of the internationalization process theory.

Experiential Learning as Generative Mechanism

The progression of the internationalization process of the firm is explained through the longitudinal interaction of market commitment and market knowledge. Basically, this interaction is driven by an organization's willingness to learn in order to reduce uncertainty. Focusing on experiential learning, Johanson and Vahlne's (1977) original model explained a simple recursive causal relationship (see upper part of Figure 1). The aforementioned enhanced conceptualization of market commitment and market knowledge allows for more advanced interaction effects among four central constructs (see lower part of Figure 1). To model these advanced interaction effects in a process perspective, an up to date perspective on learning is required.

Figure 1: Constructs and possible interaction effects in internationalization process theory

About here

We concur with Eriksson et al. (2001) that the learning process in the original Uppsala Model basically refers to what is called exploitative or single-loop learning. This type of learning is defined as a process of information acquisition, exchange, and utilization of knowledge within the limits of existing organizational routines or the 'theory-in-use' (Argyris and Schön 1978; March 1991). The original internationalization process theory assumed new market knowledge to comply with the firm's current internationalization knowledge. In terms of the initial theory, experiential learning creates market knowledge that confirms and, as a consequence, deepens out internationalization knowledge. Particular opportunities and problems are accommodated for by a search for market knowledge within the frame of the current internationalization knowledge.

Sooner or later, the key success factors of an industry change. This process may evolve smoothly or more dramatically, for instance due to a major technological breakthrough. What happens if a firm's internationalization knowledge fails to match changing reality? Since the Uppsala Model implicitly models a firm's internationalization knowledge to remain fairly stable with respect to its embedded routines (Johanson and Vahlne 1977; 1990), it might be expected that many international players reach a point at which their internationalization process embeds inappropriate recipes for internationalization and the firm's internationalization process begins to fail.

At this stage, learning and organizational behavior theory expects that some organizations turn into a different mode: explorative learning (Argyris and Schön 1978; March 1991). This implies that the internationalization knowledge, which consists of organizational routines and standard procedures, is fundamentally reorganized or even redefined. Yet, it remains unexplored in the literature what pulls the trigger for this radical change and how firms change their internationalization knowledge. Neither has it been studied how the internationalization process re-stabilizes after this radical change. In line with learning theory (e.g., Nonaka 1994) and organizational process theory (e.g., Romanelli and Tushman 1994), it is expected that explorative learning, which leads to a fundamental change in a firm's internationalization knowledge, is a relatively short yet radical episode in the internationalization process of the firm. As exploitative learning is expected to alternate with short outbursts of explorative learning, we hypothesize – in line with Johanson and Vahlne's (1977) original theory – that internationalization knowledge remains fairly stable over a relatively long term. However, given environmental dynamics, the internationalization knowledge becomes increasingly inappropriate until a point at which the organization restructures its internationalization knowledge instantly and dramatically to re-match it to the 'rules of the game' dictated by the (new) market and competitive environment.

Although this hypothetical logic has not been tested in the context of internationalization, it is consistent with and relies upon the so-called punctuated equilibrium model (or PEM) of organizational evolution (e.g., Tushman and Romanelli 1985). PEM builds upon the idea of dominant homeostasis punctuated by short outbursts of homeorhesis (e.g., Sahal 1979; Kay 1984). On the one hand, homeostasis points at the tendency of a system to maintain internal stability owing to the coordinated response of its parts to any situation tending to disturb its normal condition or function. In a managerial perspective, homeostasis confirms the present organizational and strategic status quo (Selznick 1957; Barr, Stimpert and Huff 1992; Rajagopalan and Spreitzer 1996). Homeostasis is the dominant mode of progression. Managers give preferential treatment to alternatives that represent a continuation of the present programs over those that represent a change in the dominant logic (i.e., the current internationalization knowledge) (March and Simon 1958; Nelson and Winter 1982). On the other hand, homeorhesis is a self-organizing system's ability to seek out new developmental pathways (Kay 1984). During short outburst of homeorhesis, organizations fundamentally reshape their competencies (i.e., internationalization knowledge). The strategic status quo is refuted and to a more or lesser extend replaced by a new logic (Tushman and Romanelli 1985; Gersick 1991).

When a relative fit between the environment and the firm's strategy exists, a homeostatic process of logical incrementalism is effective and learning is mainly exploitative and remains within the limits of the current dominant logic (Quinn 1980; and Johnson 1988). Nevertheless, environmental dynamics may be dramatic to such an extent that they undermine the relevance of the present resources and competencies (i.e., the internationalization knowledge) in the new situation. In that case, the dominant logic becomes irrelevant and a new strategic path is to be constructed (Tushman and Romanelli 1985; Romanelli and Tushman 1994). PEM has proven to be a strong explanatory framework for organizational progression. We build on it to demonstrate the existence and dichotomy of exploitative and explorative learning during the internationalization.

Critical for the validity of the underlying logic is the understanding of why and how an internationalization process switches from exploitative learning to explorative learning. Therefore, this generative mechanism requires a driver (Van de Ven and Poole 1995). In a first effort to capture this switch, we define 'stress' as driver and fifth central construct of internationalization process theory.

Stress

To allow for a truly 'processual' theory a generative mechanism as well as its driver(s) are to be acknowledged explicitly (Van de Ven and Poole 1995; Pettigrew 1997). Typically, managerial research has modeled discretionary change as following from a perceived discrepancy between the level of aspiration and the perceived level of achievement. This discrepancy is labeled stress (Ocasio 1995). We presume stress to be the driver of organizational learning that generates the internationalization process. Stress is a summarizing concept expressing ways in which current behavior is not satisfactory. It reflects dissatisfaction of individuals and imperfections in the fit between the organizational systems and its environment (Huff, Huff and Thomas 1992). Stress induces agents to search for causes and solutions to reduce stress and to restore the undesired perceived disequilibrium between an organizational system and its environment (Huff and Clark 1978). The more stress the more the system is away from an economic optimum and/or a satisficing position. However, the events that cause stress and the actions needed to reduce stress are typically not easily identified. Therefore, stress many persist over a shorter or longer time dependent, among others, on the degree of causal ambiguity in the organizational system (Reed and DeFilippi 1990).

The Dynamics of Internationalization – A Scenario-Analysis

This section presents the results of a scenario-analysis in which we investigated how the five aforementioned constructs – intangible commitment, tangible commitment, market knowledge, internationalization knowledge and stress – interact longitudinally. The outcome of this scenario-analysis is set of six ideal-typical scenarios of internationalization progression. It is presumed that (complex) longitudinal combinations of (a selection of) these six scenarios describe and eventually explain episodes of internationalization.

The scenario-analysis builds upon a multiple case study of 20 internationalization episodes in 16 middle-sized or large, product and service firms. This study has been set up and executed following methodological guidelines for qualitative research in general and multiple case study research more in particular (Yin 2003; Eisenhardt 1989; Pauwels and Matthyssens 2004). The prime analytical strategy was pattern-matching on the basis of retrospective triangulated data (Miles and Huberman 1994). One case captures the internationalization process of a firm or business unit in one particular country within the limits of a particular time frame. The episodes (from 1 to 9 years with an average of 3.2 years) were initially characterized by and selected because of an above average change (both increases and decreases) in tangible market commitment of the firm in that particular market. In this paper, we refrain from an elaborate description of the cases (cf. Appendix for an introduction) yet discuss the result of the scenario-analysis, graphically represented in a flow chart (Figure 2).

As presented in Figure 2, the scenario-analysis makes abstraction of moderating and mediating context variables (e.g., industry, firm size, competition, etc.). Although these context variables may affect progression significantly at various stages, it is assumed that they do not undermine or refute the central logic that builds upon the conceptual framework as presented above. Next, we discuss Figure 2 in detail.

Figure 2: A scenario typology of internationalization progression

About here

In its initial and stable equilibrium position the internationalization process is characterized by an unspecified level of intangible (IC) and tangible commitment (TC), with TC equal to IC. As a consequence no stress exists (S = 0). The organization has a certain level of market knowledge (MK) and internationalization knowledge (IK). The flow chart captures six theoretically possible and mutually exclusive ideal-typical episodes or process scenarios.

The prevalence or even relevance of a particular scenario depends on the initial levels of intangible and tangible commitment, and market and internationalization knowledge perceived both by the individual manager who picks up the stimulus and by the organization in general. Next, the result of the scenario-analysis is presented in two phases. The first phase discusses how stress emerges in the internationalization process. The second phase describes how the organization deals with this stress in different ways.

Phase 1: Increasing Stress

Each scenario starts with the perception of a new stimulus by an individual manager or agent. Although it is beyond the purpose of this study, we found that an agent has more chance of picking up this stimulus: (1) the more highly s/he is involved in the operationalization of the internationalization strategy, (2) the newer s/he is to the organization, (3) the more s/he is involved in boundary-spanning activities, and (4) the more s/he operates in an independent division of the firm. These findings are in line with literature that argues that pioneers of strategic change are to be found relatively far from the organization's current strategic recipe (e.g., Huff, Huff and Thomas 1992).

The stimulus contains data that can be very diverse in nature and may emerge from within or from outside the organization. To be considered as a relevant stimulus, the agent assesses two conditions. First, he assesses whether the stimulus brings market knowledge that is relevant (perceived fit or misfit) in the frame of the perceived internationalization knowledge (first diamond in Figure 2: $\Delta MK_i|IK_i?$). Next, he evaluates the stimulus as a potential challenge for the organization's current internationalization process, again in the context of the perceived internationalization knowledge ($\Delta IC_i|IK_i$?). This two-staged validation process mainly builds upon the agent's perception of the current stock of internationalization knowledge. In line with Eriksson et al. (2001) and Crossan et al. (1999), we argue that the agent assesses the relevance of changing his perception of the organizational intangible commitment relative to what he perceives as the most relevant frame of reference. In other words, the agent may or may not adapt his perception of what the organization's attitude towards internationalization should/could be. Although this validation process enhances the search for more information by the agent, the cases confirm that this information is searched and found in the context of the current internationalization knowledge.

As the agent finds more evidence to validate the importance of the initial stimulus, two situations can be distinguished. In the first case, the agent judges the stimulus to be relevant and challenging. As a consequence, he concludes that the organization's intangible commitment should change. He starts to believe that the organization should act to take the opportunity or to counter the problem. This process increases the agent's stress level ($S_i > 0$), which is the difference between intangible and tangible commitment of the organization as perceived by agent i. An increased level of stress is a necessary and sufficient prerequisite for ongoing problem solving behavior (Fiol and Lyles, 1985). In the second case, the stimulus is rejected as a relevant and/or challenging impulse. The agent's perception of the organization's intangible commitment does not change and no need for further action is experienced ($S_i = 0$).

Given a change in the agent's perception of intangible commitment in the organization and assuming that the agent does not hold power over the internationalization strategy, the organization has to be persuaded before stress (S_i) can be reduced. In particular, the agent has to incite other people involved in the organization's internationalization about the value of the perceived stimulus (Crossan et al. 1999). As such, the learning process disseminates into the organization. Similar to the individual assessment, the organization goes through a two-phased assessment process. It searches for additional market information to assess the relevance and challenging value of the stimulus. For this search, the organization relies on current internationalization knowledge (IK) as major benchmark. The aim of this evaluation at the organizational level is to come to a shared understanding (Nonaka 1994). Again, two outcomes are possible: the organization can adopt the perspective of the agent or not.

In scenario 1 (see Figure 2), the organization concludes that the stimulus is irrelevant, in disregard of the agent's impulse. Although the agent may remain frustrated, the organization sees no reason for a further assessment of the stimulus and the process stops. There is no reason to change the organization's intangible or tangible commitment towards internationalization and stress at organizational level does not increase (S=0). In scenario 2, the organization may conclude that the stimulus is relevant, yet that it only confirms the current stock of internationalization knowledge and no further action is required because no mismatch is perceived between what is done (tangible commitment) and what should/could be done (intangible commitment). In both scenarios the learning process that was started at the level of the agent does not get engrained at the organizational level. As the stimulus does not refute or merely confirms the current stock of internationalization knowledge, scenarios 1 and 2 both represent an institutionalization process that confirms the current internationalization knowledge (Nelson and Winter 1982).

Only if the organization assesses the stimulus as both relevant and challenging, the learning process continues and the organization's intangible commitment may change. Given a stable tangible commitment, the changing intangible commitment makes stress to increase (S>0), as such creating a necessary and sufficient condition for ongoing organizational learning (Fiol and Lyles, 1985).

Phase 2: Exploitative vs. Explorative Action

The cases illustrate that in response to the created stress, the organization's first reaction is to consider whether a mere adaptation of its tangible commitment is possible to regain a match with the changed intangible commitment. This consideration is done within the context of what is known – the current stock of internationalization knowledge (ΔTC|IK? in Figure 2). Two mutually exclusive paths may emerge at this stage. First, a routine measure is indeed available within current internationalization knowledge to deal with the perceived opportunity/problem. Tangible commitment is adapted in the direction of the changed intangible commitment, thereby reducing stress. In this way, the organization exploits its current stock of internationalization knowledge to answer the challenge of a perceived opportunity or problem (Eriksson et al. 1997; Anderson and Skinner 1999). This captures scenario 3 as specified in Figure 2. Stress provoked by the initial stimulus is reduced by reacting to that stimulus through a process of exploitative learning, thereby eliminating stress.

Alternatively, the organization may conclude that the current internationalization knowledge is inadequate to provide a measure to react to the challenging opportunity/problem, i.e., to relief stress. Current routines and familiar strategic or tactic approaches, embedded in the current stock of internationalization knowledge, are all considered inappropriate to tackle this particular opportunity/problem. At this point, the organization's reaction is to assess whether the experienced stress is high enough for the organization to challenge its current norms and routines of internationalization, i.e., its internationalization knowledge (ΔIK|S? in Figure 2).

This is a critical point since the exploration beyond the current norms and routines of internationalization (i.e., a change in internationalization knowledge) is considered revolutionary. An exploration strategy may dramatically increase perceived risk and instability of the internationalization process. Hence, before this path is chosen, the organization elaborately assesses whether the current stress level 'deserves' the increased level of risk. Put differently, at this stage the increased stress has to outweigh inertia that emerges from the institutionalized internationalization knowledge. The nature of this assessment can be strategic, economic and/or political. Fundamentally, the organization weighs its changed ambitions against the perceived cost of changing the current internationalization knowledge. In case its ambitions overrule these perceived costs, the organization basically acknowledges the inadequacy of its own absorptive capacity to deal with this relevant opportunity/problem (Eriksson et al. 1997).

Scenario 4 concludes when the organization rejects a risk increasing exploration strategy for strategic, economic and/or political reasons. Consequently, no option remains but to undo the changed intangible commitment and no further action is taken. Undoing the change in intangible knowledge occurs in the frame of the confirmed original internationalization knowledge. In the field, we have observed that before deciding to undo the changed intangible commitment organizations reassess or even test alternative options within the boundaries of the internationalization knowledge. However, over and over again these options cannot relief stress as they bring inappropriate measures. Eventually, no other option remains but to undo the change in intangible commitment ($\Delta IC|IK$) (see scenario 4 in Figure 2).

Contrary to scenario 4, organizations may acknowledge the inadequacy of the current internationalization knowledge and engage in a short yet dramatic period of exploration and experimentation that eventually results in a change of the internationalization knowledge (ΔIK). However, an exploration strategy as such does not eliminate the perceived stress. In analogy with previous stages, the organization considers whether an adaptation of its tangible commitment is possible to regain a match with the changed intangible commitment. This time, the consideration is made within the context of the changing internationalization knowledge (ΔTC?). Again two mutually exclusive paths emerge. First, after a thorough analysis of the problem/opportunity within the boundaries of the changing internationalization knowledge, the organization concludes that creating a suitable behavioral response is possible and advantageous. A strategic, economic, and/or politic assessment reveals that action can be taken to relief the stress. As such, a behavioral measure capable of coping with the changed intangible commitment is taken. This concludes scenario 5 in which an episode of action through explorative learning eliminates the stress provoked by the initial stimulus (ΔTC & ΔIK in Figure 2). Alternatively, the analysis of the problem/opportunity within the context of the renewing internationalization knowledge can point out that it is too early for the organization to respond and reduce stress. Strategic, economic, and/or politic assessment may reveal that the organization will benefit from postponing reaction. In this way, the new insights in internationalization gained through the exploration strategy provide the organization with arguments to undo the changed intangible commitment (Forsgren 2002). Stress is eliminated in scenario 6 because the renewed internationalization knowledge pleads for reversing the changed intangible commitment instead of creating a new routine to change the tangible commitment (ΔIC & ΔIK in Figure 2).

Discussion

An in-depth analysis of 20 cases of progression in internationalization has resulted in six mutually exclusive ideal-typical process scenarios. It is postulated that episodes and longer epochs of internationalization can be theoretically described and explained by a logical combination of (a selection of) these six scenarios. Each scenario captures a specific longitudinal relationship between market knowledge, internationalization knowledge, intangible and tangible commitment, driven by stress and generated through learning.

This scenario-analysis demonstrates that progression in internationalization may but should not be equal to a change in behavioral market commitment. Indeed, in four of the six scenarios a change in tangible commitment is no direct consequence of a change in market knowledge. In scenario 1 an agent captures the stimulus but no organizational learning process follows. In scenario 2 the stimulus is perceived as relevant yet only confirms the current internationalization knowledge and the organization's commitment. In scenario 4 the stimulus is deemed relevant and challenging. However, the organization cannot change its tangible commitment within the scope of current internationalization knowledge and exploration beyond this stock of knowledge is considered to be infeasible or is unwanted. Alternatively, in scenario 6 the organization postpones a change in tangible commitment although it has revised its internationalization knowledge.

In scenario 3 and 5, a change in market knowledge directly leads to a change in tangible commitment. However, these scenarios significantly differ in their generative mechanism. In scenario 3 the change in market knowledge leads to a measure that is readily available from the current internationalization knowledge. In scenario 5, to the contrary, no strategic or tactic option is available within the current internationalization knowledge. Typically, a short yet intense period of experimentation and exploration results in a revision of the firm's internationalization knowledge and the creation of an adequate measure embedded herein.

Basically, the generative mechanism – experiential learning – is the process characteristic that best distinguishes between the six scenarios. We have observed experiential learning at three levels: institutionalization, exploitative learning and explorative learning. In scenarios 1 and 2, learning is restricted to the individual assessment of a stimulus. At the organizational level the stimulus is considered irrelevant and/or not challenging enough in the context of current internationalization knowledge. In these scenarios, progression in internationalization is limited to the institutionalizing of the current internationalization knowledge (Haveman 1993; Crossan et al. 1999). In scenario 3 and 4, experiential learning is exploitative as solutions are searched solely within the frame of established internationalization knowledge (Argyris and Schön 1978; March 1991). In scenario 3, a solution is found within the current internationalization knowledge and a change in tangible commitment follows. In scenario 4, the current internationalization knowledge does not provide a useful solution and the organization decides to re-adjust the changed intangible commitment and to refrain from any reaction, safeguarding the status quo of the internationalization process. In scenario 5 and 6, stress outweighs inertia of the dominant logic embedded in the current internationalization knowledge (cf. Lant and Mezias 1992). A round of explorative learning leads to renewed/revised internationalization knowledge that embeds a solution to eliminate stress. This implies a change in tangible commitment in scenario 5. In scenario 6 the organization adapts its intangible commitment.

It is presumed that the internationalization process of firms evolves through complex combinations of these scenarios. In some cases, one year of internationalization may harbor dozens of these scenarios. In others, one scenario may take more than a year. Typically, external and internal environmental dynamics create a constant stream of stimuli picked up by various agents. Each of these agents may start up a round of progression in the internationalization process. However, the cases illustrate that the majority of stimuli that are picked up merely confirm the current internationalization knowledge (scenarios 1 and 2). A few stimuli induce reaction within the current logic and a small minority will sooner or later lead to a round of explorative learning. As a consequence, many of these scenarios may co-exist. While a firm may be involved in a dramatic period of explorative learning, for instance with respect to a new entry strategy, new stimuli may confirm or refute other elements (e.g., global sales management) of the internationalization knowledge. As a consequence, various processes of institutionalization, exploitative and explorative learning may co-exist and interfere.

Conclusion and Suggestions for Further Research

Internationalization process theory (Johanson and Vahlne 1977; 1990) builds upon the incremental process of experiential learning in foreign markets to explain incremental accumulation of commitment to foreign markets. Despite its increasing importance in the international business literature, this theory has been challenged for its lack of explanatory power and for its limited flexibility to describe and explain particular episodes of internationalization such as accelerations and withdrawals.

In this paper, the conceptual framework of internationalization process theory is upgraded from two (i.e., market knowledge and market commitment) to four pillars: market knowledge, internationalization knowledge, attitudinal (intangible) and behavioral (tangible) market commitment. Furthermore, we build upon experiential learning and the presumption of stress-reducing behavior to theorize on the dynamic character of internationalization. A multiple case study of 20 internationalization episodes resulted in six ideal-typical scenarios of progression. Each of these six scenarios (cf. Figure 2) builds upon longitudinal interaction between (a selection of) the four aforementioned concepts within a dynamic logic defined by stress-reducing behavior and experiential learning.

Although the logic of the original internationalization process theory is not refuted, the present conceptualization holds some clear advantages. First, the relationship between market knowledge and market commitment is now mediated by intangible commitment and internationalization knowledge. The scenario-analysis demonstrates that this reconceptualization significantly improves the explanatory power of the theory. Indeed, the scenarios allow for changes in intangible commitment without changes in tangible commitment or for an increase in market knowledge without an increase in market commitment. Second, the scenarios explicitly allow for a further analysis of managerial discretion, both at the individual and at the organizational level. Finally, the scenarios are explicitly embedded in a general logic of organizational and strategic change. The punctuated equilibrium model (Romanelli and Tushman 1994) underpins our analysis at the scenario level. It is expected that future analysis at the episode level (i.e., a longitudinal combination of scenarios) may be embedded in a coevolution perspective that captures the joint outcome of managerial intentionality, environment, and institutional effects (Lewin and Volberda 1999).

Some clear limitations of this study have to be acknowledged. First, the six scenarios need further empirical validation with respect to mainstream as well as more extreme internationalization processes. Second, analysis at scenario-level is only an instrument in the study of progression. In this respect, specific attention is needed for the interaction between different internationalization processes with multi-business organizations. Although we expect these organizations' internationalization process to be a complex mix of complementary chain of scenarios, it may be that we miss a super-process as implicitly assumed in Johanson and Vahlne (1977). Third, more theoretical work is needed to investigate the interaction effects between the four basic constructs. Fourth, empirical studies may learn that the impact of some context variables is more dramatic than expected here. This may require the explicit adoption of these variables into the model. Finally, various intermediate steps of these scenarios build upon abstractions or assumption on organization evolution and/or managerial decision-making. It is necessary to zoom in to each of these steps. In this respect, we have defined a number of possible extensions to the model.

A first critical extension concerns the multi-level character of the model. In each scenario we assume that the process smoothly switches from the individual level to the organization level. Most probably, however, this switch is a complex decision-making process on its own. The cases suggest that different organizational parameters including the power of agents, the open-mindedness of subordinates, the communication structures and styles may all significantly impact upon this switch. A second critical extension focuses on phases of experimentation throughout the internationalization process and especially during explorative phases in scenarios 4 and 5. If an organization concludes that the current internationalization knowledge is inadequate it may go into a state of exploration. This phase needs further investigation as the cases illustrate that during exploration the organization as well as individual managers experiment beyond the limits of current internationalization knowledge. It is unclear how these phases of exploration fit within current internationalization process theory.

Building upon an enriched conceptual framework of internationalization theory this paper has defined six scenarios that are building blocks for the theoretical reconstruction and explanation of episodes in the internationalization process of the firm. A next step should validate these building blocks and investigate how they interact in an open system perspective.

Appendix

Table I: Summary of the cases

Case number	Annual Turnover of the Firm	Business Activity	Increasing (I)/ Decreasing (D) market commitment	Foreign Market	Investigated episode
1	€ 9 million	Consumer textiles	D	USA	1994-1995
2	€ 14.3 million	Fair tents	First D, later I	Poland	1994-1996
3	€ 24 million	Modular building systems	D	France	1994-1996
4	€ 51.7 million	Silos for storage of non-liquids	D	France	1994-1996
5	€ 131 million	Trading in trucks and buses	First D, later I	Spain	1988-1990
6			D	Belgium	1993-1996
7	€ 2.4 billion	Engineering and contracting	D	Brunei	1994-1995
8			D	UK	1994-1999
9	€ 4.3 billion	Chemical and electronic imaging	D	Japan	1994-1998
10			First D, later I	Germany	1998
11	€ 22.3 billion	Tele-communication	First D, later I	Turkey	1994-1995
12			First D, later I	Russia	1996-1998
13	€ 9 million	Transport	I	Eastern Germany	2000
14	€ 23 million	Transport	I	Italy	2001
15	€ 46 million	Transport	I	Sweden & UK	1988-1996
16	€ 3 billion	Logistics	I	Germany	1996-1998
17	€ 600 million	Transport	I	France	1985-1989
18	€ 100 million	Transport	I	USA	1999-2001
19	€ 2,5 million	Logistics	I	China	2002-2003
20	€ 12 billion	Logistics	I	Europe	1999-2002

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Figure 1: Constructs and possible interaction effects in internationalization process theory

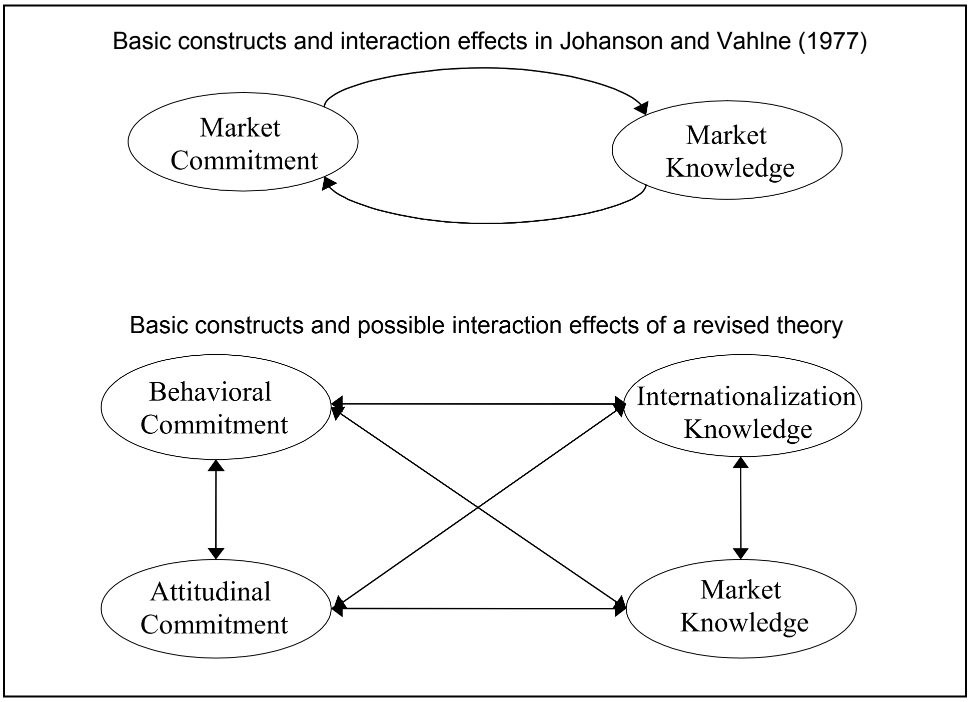

Figure 2: A scenario typology of internationalization progression