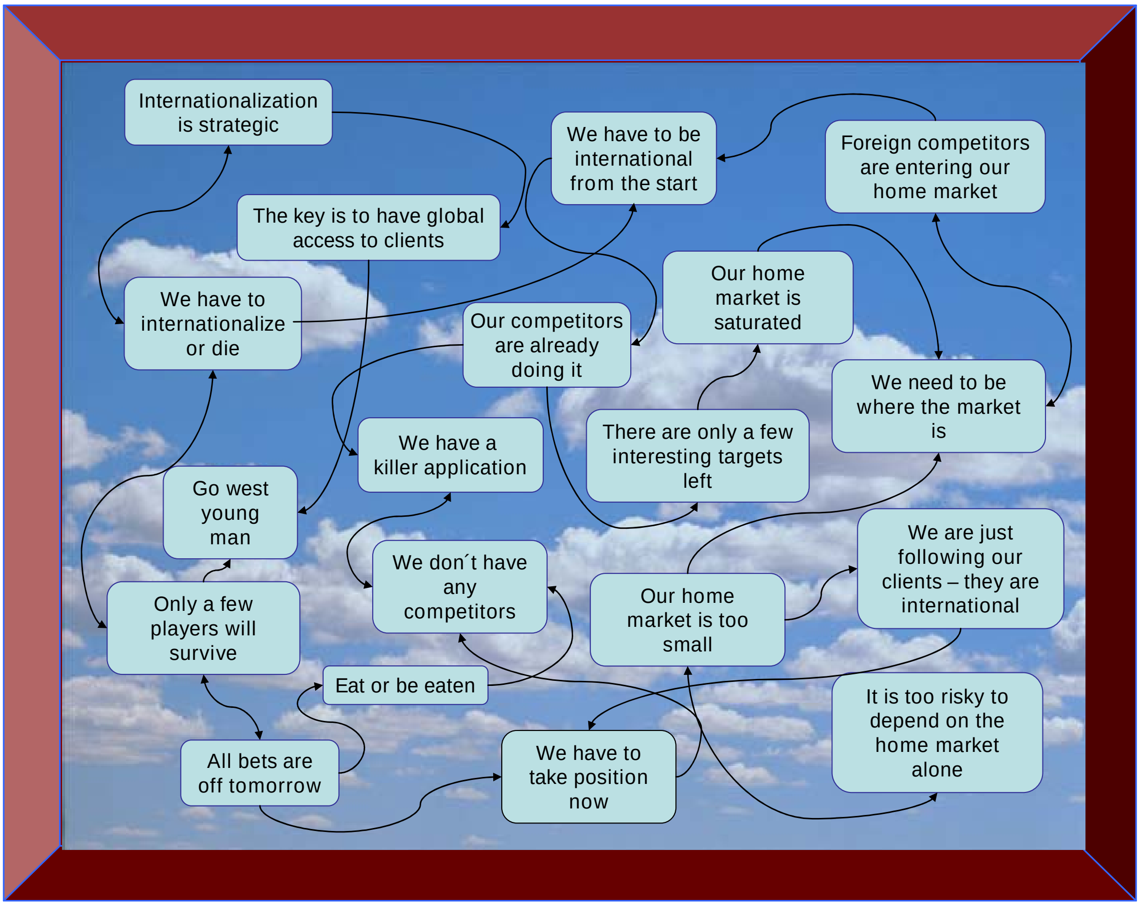


INTERNATIONALIZATION HANDBOOK FOR THE SOFTWARE BUSINESS

Toivo Äijö, Olli Kuivalainen, Sami Saarenketo,
Jani Lindqvist and Hanna Hanninen

Centre of Expertise for Software Product Business
Centre of Expertise for Digital Media, Content Production and Learning Services
LAPPEENRANTA UNIVERSITY OF TECHNOLOGY
TBRC Technology Business Research Center

Centre of Expertise for Software Product Business
Ohjelmistotuoteliiketoiminnan osaamiskeskus

Internationalization Handbook for the Software Business;
The Model of Internationalization Paths &
Internationalization Workbook

Toivo Äijö,
Olli Kuivalainen,
Sami Saarenketo,
Jani Lindqvist,
Hanna Hanninen

This publication is co-funded by Muusa2-project organized by the Centre of Expertise for Digital Media, Content Production and Learning Services and the Centre of Expertise for Software Product Business. Muusa2 is financed through the European Social Fund and the Employment and Economic Development Centre for Uusimaa.

Centre of Expertise for Software Product Business
Technopolis Ventures Oy
Tekniikantie 21
02150 Espoo
Telephone: +358 9 2517 5201
Telefax: +358 9 455 3117
URL: http://www.swbusiness.fi

2005

ISBN 952-99529-1-0
ISBN 952-99529-0-2 (PDF)

Authors

The Internationalization Handbook for the Software Business has been written by the following authors: Toivo Äijö, Olli Kuivalainen, Sami Saarenketo, Jani Lindqvist and Hanna Hanninen. The following specializations can also be noted:

Toivo Äijö, Ph.D., CEO, Top Trainers Group & TSA International

Toivo Äijö had the greatest responsibility for Part II of the Handbook. The structure of this section is based primarily on his book, The Internationalization of Finnish SMEs.

Olli Kuivalainen, Doctor of Science (Econ.), LUT/TBRC

Olli Kuivalainen served as the project manager for the book project. His contribution was primarily to the topic of Internationalization Paths in Part I.

Sami Saarenketo, Doctor of Science (Econ.), Professor LUT/TBRC

Sami Saarenketo contributed primarily to the Model of Internationalization Paths in Part I.

Jani Lindqvist, M Sc. (Econ.), Researcher LUT/TBRC

Jani Lindqvist served as editor and contributed primarily to the compilation of the information pages of Part II, the Internationalization Workbook.

Hanna Hanninen, M Sc. (Econ.), Research assistant LUT/TBRC

Hanna Hanninen's primary contribution was to the writing of the case examples.

Foreword

The mission of the Centre of Expertise for the Software Product Business* is to create and improve the business conditions of the Finnish software product companies and to help them grow profitably in international markets.

The strategy to accomplish this mission is to focus efforts on five key areas:
1. Build on the strengths of existing internationally strong Finnish industry and application areas but not forget new innovation areas.
2. Ensure the alignment and cooperation of regional centers and operations in order to use the overall resources efficiently.
3. Evaluate the merits of the on-going internationalization programs and put in place new ones which capitalize companies' desires and capabilities to address foreign markets.
4. Enhance the base of financing and support for software product companies.
5. Take initiative and support competence development programs to address the business needs of software companies.

Additionally, during 2004, a decision was made to start a vision renewal project to aim at a common vision for 2015. Since the home market in Finland is limited, internationalization is the most important of these five areas.

The support programs and activities for internationalization must recognize the need for a company-based approach on one hand and for a (macroeconomic) business development process approach on the other. In order to help the software companies in supporting the actors in a common understanding as well as in harmonizing the internationalization process, a project was started together with the Lappeenranta University of Technology. The aim of this project and subsequently of the report at hand is to describe and document the process, terminology, useful tools and frameworks for the benefit of all the parties involved within the companies and amongst all the participants in the internationalization process.

I want to thank the project team and their assistants for their enduring efforts during a relatively short time. I am confident that this document will prove helpful for all parties involved. I want to encourage the reader to take time to become acquainted with the key concepts and issues as well as to look for support and help from those who have already proved their success in internationalizing Finnish software companies.

Espoo, February 2005 Seppo Ruotsalainen
Chairman of the Executive Team

---

* The Centre of Expertise for Software Product Business is directed by the **Executive Team** representing key institutions. The members of the Team are listed below:

Eero Holstila, CEO of Culminatum Oy

Antti Joensuu, Deputy Director General (international technology policy), Technology Department, Ministry of Trade and Industry

Kyösti Jääskeläinen, CEO, Finnish Science Park Association TEKEL

Jarmo Kalliola, Senior Adviser, past President and CEO of Aldata Oyj

Irmeli Lamberg, Program Director, Centre of Expertise for Software Product Business, Secretary for the Executive Team

Seppo Ruotsalainen, Senior Adviser and professional board member

Eero Silvennoinen, Technology Director, National Technology Agency of Finland, Tekes

Heikki Sinervo, Head of IT Administration, Confederation of Finnish Industries, EK

Reijo Sulonen, Professor of Information Processing science, HUT

Preface

The idea for this book came from The Centre of Expertise for Software Product Business in the spring 2004. The objective of the Centre of Expertise is to develop a competitive, innovative environment for the internationalization of new products and companies. At the Centre, Seppo Ruotsalainen, Irmeli Lamberg, and others, had noticed that there is a true need for a book that would help software firms. Such a book should:

- Provide a common language and a framework for the organizations involved in supporting the internationalization of companies
- Help a firm to recognize and understand its stage of development regarding internationalization
- Enable a firm to implement its internationalization plan effectively
- Be equally helpful for both software firms and support organizations

The book is a result of the National Software Product Cluster –project, which involves the Centres of Expertise in several areas; Uusimaa region, Oulu, Jyväskylä, Tampere and Turku. At the completion of the book we sincerely hope that it will prove to be a valuable tool and open new avenues for thinking in software businesses.

We would like to acknowledge and thank the project's advisory board and the personnel at the Centre of Expertise for Software Product Business: Seppo Ruotsalainen, Irmeli Lamberg, Marja-Reetta Paaso and Riikka Torpo for their help in the project, and for their insights and comments on the manuscript along the way. We also thank Juhani Saukkonen at Technopolis, Keith Bonnici at Tekes, Jorma Korhonen at the T&E Center and Juha Miettinen at Hermia. Several practitioners and researchers commented on various sections of the handbook and on ideas related to its development. These include: Jani Jääskeläinen at Navicore, Markus Räipiö and Jukka Niiranen at Stinghorn, Kai Tikka at Helsoft, Uolevi Nikula and Sami Jantunen at Lappeenranta University of Technology, Olli-Pekka Mutanen at Helsinki University of Technology, Kim Hurtta at Finpro and Eero Härkönen at T&E Center. Case study examples were commented on by Ilkka Paananen (Digital Chocolate – Sumea case), Ari Backholm (Smartner), Kim Väisänen (Blancco), Juha Pöllänen (Multicom Software) and Mika Jalkanen (CRF). Also Jussi Nukari, Niilo Fredrikson, Heikki Nuutila and Pasi Sorvisto have given their comments regarding the manuscript.

In addition, there are several colleagues, who have taken time to review this document. These include Professor Jim Bell at the University of Ulster, Northern Ireland, Professor Rod McNaughton at the University of Waterloo, Canada, Professor Sanjit Sengupta at San Francisco State University, U.S., Professors Veikko Seppänen and Juhani Warsta at Oulu University and Professor Niina Nummela at Turku School of Economics.

Lappeenranta, Finland, March 2005
Toivo Äijö, Olli Kuivalainen, Sami Saarenketo, Jani Lindqvist, Hanna Hanninen

Contents

Introduction: Why Was This Book Written?

The software industry is one of the largest and fastest growing industries in the world. In Finland the industry has also grown rapidly since the 1990's. According to a National Software Industry Survey, in 2003 the Finnish software product industry generated an overall revenue of around 1,000 M Euros – of which 380 M Euros came from exports – and employed 12,000 professionals. However, Finnish and other European companies have lagged behind U.S. companies especially in the packaged software segment, due primarily to small and diverse home markets, as well as the low degree of productization and internationalization.

Is there a need for specific internationalization skills for a software firm? There are many special needs and challenges typical of the software industry, which await a firm desire for high growth – a high risk internationalization strategy. In his book, "The Business of Software", Michael A. Cusumano states that software is not like other businesses. One of the reasons for this is that technologies used consist of a digital "soft" good, i.e. programming commands that in the form of zeros and ones give directions to a computer. He offers also some other reasons, such as the large, almost infinite range of possible products and services, which can be produced and provided by software firms. Further reasons presented in numerous sources and stemming from real-life experience include:

- Constantly forming and growing new markets: innovators create new markets; new things can be enabled by software serving new converging technologies.
- Short and rapidly changing product life-cycles and at the same time a need for the recovery of massive R&D costs.
- The law of increasing returns – the initial costs are high but subsequent copies cost much less: need for the market leadership or being among a "top three."
- Network externalities – the value of the product and service often depends on the number of other users of the product: again the need for the market leadership.
- Need to harness emerging technologies – technologies should not only be applied to one's products, there is also a need for directing its development and force.
- Need to adapt to collapsing markets – a firm should be planning for the future product generations constantly, i.e. riding the "innovation stream". At the same time a firm should have a flexible structure to be able to adapt to new challenges.

These observations also partially apply to other high-technology markets such as telecommunications and digital media which also rely heavily on information systems and digital content. However, it is important to notice that software business is distinctive in a way that most firms operating in this field face all these challenges at the same time, not only one or two of them. This uniqueness can be seen based on the product and market complications that are both technology and market driven.

Finland has been often cited as a prime example of an information society. The Finnish software industry has produced some spectacular successes (F-Secure, Linux, Stonesoft, Comptel etc.), some of which have ended up being acquired by foreign players. Studies (including surveys by TBRC) show that there is a tremendous amount of creativity and new technology being generated by technology enthusiasts and entrepreneurs. However, industry analysts and organizations that provide guidance and support to the industry are concerned that too big a portion of these, often promising, innovations do not fulfill their potential and do not make it in the global software market. In other words, too many fledgling software companies fail to reach sufficiently fast growth. And fast growth in this market normally means rapid internationalization as the industry is global by nature and also as the Finnish domestic market is limited.

These conclusions were supported by the results of a recent survey of early-phase Finnish software companies by Source Code Finland Oy. According to the survey, the companies had a good grasp of technology, but little understanding of how to commercialize it, or what the business goals and strategies should be. Surprisingly few companies had considered internationalization seriously and the great majority had neglected to study their target markets in depth. This handbook is meant to help bridge this gap between software innovation and international success.

Who Will Benefit From This Book?

This handbook has been prepared to help software firms to analyze their readiness to launch international operations. As mentioned, Finnish firms have good technological competences related to software development. In some areas of wireless telecommunications, for example, their applications are among the technologically most advanced ones in the world. However, Finnish firms typically lack know-how and skills related to marketing, sales, communication, and internationalization. This can be a severe handicap, because for Finnish software firms, growth through internationalization is imperative, not an option. This is due to the fact that the Finnish software market accounts for approximately 0.5% of the total world market whereas the main market – the U.S. – covers nearly 50%.

The prime target audience for this book consists of Finnish small and medium size software companies in the beginning stages of their international expansion. We assume that you have already started in business and your real need is to understand your own position and its effect upon your ability to achieve greater success in your business. However, even if you have not yet started out in software business, this book will help you to analyze the situation, give you an understanding of what internationalization is all about, what you need to know, how to create a winning business plan, raise finance, and secure a flying start for your venture.

If you have been in business for quite a while already, but your internationalization is in its beginning stages, the later sections, especially, will be helpful. There is probably still a lot of work you could do to speed up your growth and alleviate future difficulties, just by following through these steps.

How Did We Try to Make the Book User Friendly?

We received valuable comments from the various persons mentioned in the Preface. Two fairly common comments were that the book was too “academic” and too long. On the other hand, some reviewers offered lists of other important issues that should also be covered. In reaction to these comments, more of the academic material was taken out, and some of it was moved to the appendices. We also added more case examples and survey data on Finnish software companies. Details of the market research and the steps involved in the actual strategic planning process, (such as pricing, and marketing communication etc.) were briefly introduced at the end. This all resulted in the handbook still being lengthy so we have tried to make it easier to approach by including an "executive summary for the impatient," or a “ten minute manager” overview to give an idea of what the book is all about. Those busy entrepreneurs who find the length of this workbook intimidating, might consider doing the analyses over time with their management team, or with the help of an external mentor.

Executive Summary for the Impatient: The Fundamental Questions in a Nutshell

1. Are you familiar with the basic approaches to growth and internationalization?

- Should you proceed slowly on your own to minimize the investments and risks and learn as you go?
- Would you be better off to find a partner to make it easier to grow and enter the international markets?
- Should you move fast and conquer the global markets as long as the window of opportunity is open?

2. Are you ready to grow and internationalize?

- Do you have what it takes?
- Can you fulfill all the requirements for growth and internationalization?
- Have you got a finalized product?
- What's so special about your product or service?
- Have you got financing?
- Do you have internationally experienced people?
- Are the owners and board members fully committed?

3. Are there markets for your product?

- Do you know what is happening in the global software business?
- What target country should you attack first?
- Is there enough demand?

4. Do you know how to get your products over there?

- Do you know what channels to use? Have you got the channels ready?
- How will the product be sold and promoted?
- Do you know if you need partners over there? Have you got your partners ready?

5. Do you know your intended target country and market well enough?

- Do you know what's important to your intended customers?
- Do you know what level of competition are you up against?

6. Do you know the basis for your success and strategy challenges?

- Can you perform a critical and detailed SWOT-analysis of your situation?
- What are you basic strategic choices and strategic challenges?
- What is the basis of your international success?

7. Do you know these things for sure? Do you know what the risks are?

- Are most of your answers based on just your assumptions?
- What else do you need to know?
- How well do you know the risks? How high are they?
- How well are you prepared if something goes wrong?
- What happens if the sales don't come in as planned?

8. Are you ready to make you strategic plan for growth and internationalization?

If you say ‘yes’ to most of the questions above:
And if you feel you have a unique product with a window of opportunity open right now, then perhaps you are able to take the calculated risk, and move without further ado. This handbook will still help you to clarify and hone your successful growth and internationalization strategy.

If you do not know the answers to most of the questions above:
Then you should take the time and effort to go through the workbook and find out how much you should know, how much you know already, and what are the basic ways you can go about it.

Ten Minute Manager
– Where to Find the Answers?

What are the basic approaches to growth and internationalization?
→ Go to Part I Chapter 5. Pathways to growth and internationalization on p. 19; Accelerated growth/Born global pathway (p. 20); Collaborative pathway (p. 23); Organic growth pathway (p. 26).
→ Go to Part I, Chapter 6. How to get into an accelerated pathway? (p. 34)

Are you ready to grow and internationalize?
→ Go to Part II, Section 1. Where are you now? (p. 45); Initial planning situation (p. 47); Evaluating your basic readiness (p. 49); Reasons and objectives for internationalization? (p. 51); Need for reliable information (p. 54)
→ Go to Part II, Section 2. Are you ready? (p. 59); General resources and skills (p. 63); management (p. 67); human resources (p. 69); marketing and selling (p. 73); delivery and distribution channels (p. 75); product, product development and production (p. 77); financial resources and management (p. 79).

Are there markets for your product?
→ Go to Part II Section 3. What is going on in the global software business environment? (p. 85 and 87); and what companies are doing about it? (p. 86)
→ Go to Part II Section 4. Where to go? Choosing your target country and the product? (on p. 93)

Do you know how to get your products over there?
→ Go to Part II, Section 5. Alternative entry modes (p. 101); sales and distribution channels (p. 103); cooperation and partnerships (p. 105).

Do you know your intended target country and market well enough?
→ Go to Part II, Section 6. Who are your customers (p. 111); what are the customers' needs (p. 115); what is your product concept (p. 117)
→ Go to Part II, Section 7. How tough is the competition out there? (p. 121 and 123)

Do you know the basis for your success and strategy challenges?
→ Go to Part II, Section 8: Corporate analysis (p. 127); environmental analysis (p. 129): strategy challenges and choices (p. 131); basis for international success (p. 133 and 135)

Do you know these things for sure? Do you know what the risks are?
→ Go to Part II, Section 9. Detailed international market research (p. 139); and final self-evaluation of readiness (p. 141)

Are you ready to make your strategic plan for growth and internationalization?
→ Go to Part II, Section 10, Formulation of growth and internationalization strategy: Critical strategy questions (p. 147) and Steps in the strategic planning process (p. 149)

Structure of the Book

The purpose of this book is to help software companies in their growth and internationalization effort. This is done by helping them to identify what information and analyses are needed, their present stage of internationalization as well as a proper path to adopt as part of their overall strategic approach to internationalization. In real life identifying and clarifying these issues is an on-going, parallel and iterative process. Therefore, it is rather difficult to present them in any one correct, logical order. The choice of a particular internationalization path is very much a question of an overall strategic role and approach to international markets. However, the formulation of an international competitive strategy is a detailed process that involves much more. The choice of the specific internationalization path at any stage must be based on reliable information and analyses. Whatever the stage of internationalization or the choice of the specific internationalization path, the company must formulate a strategic plan, which, again, requires information and analyses.

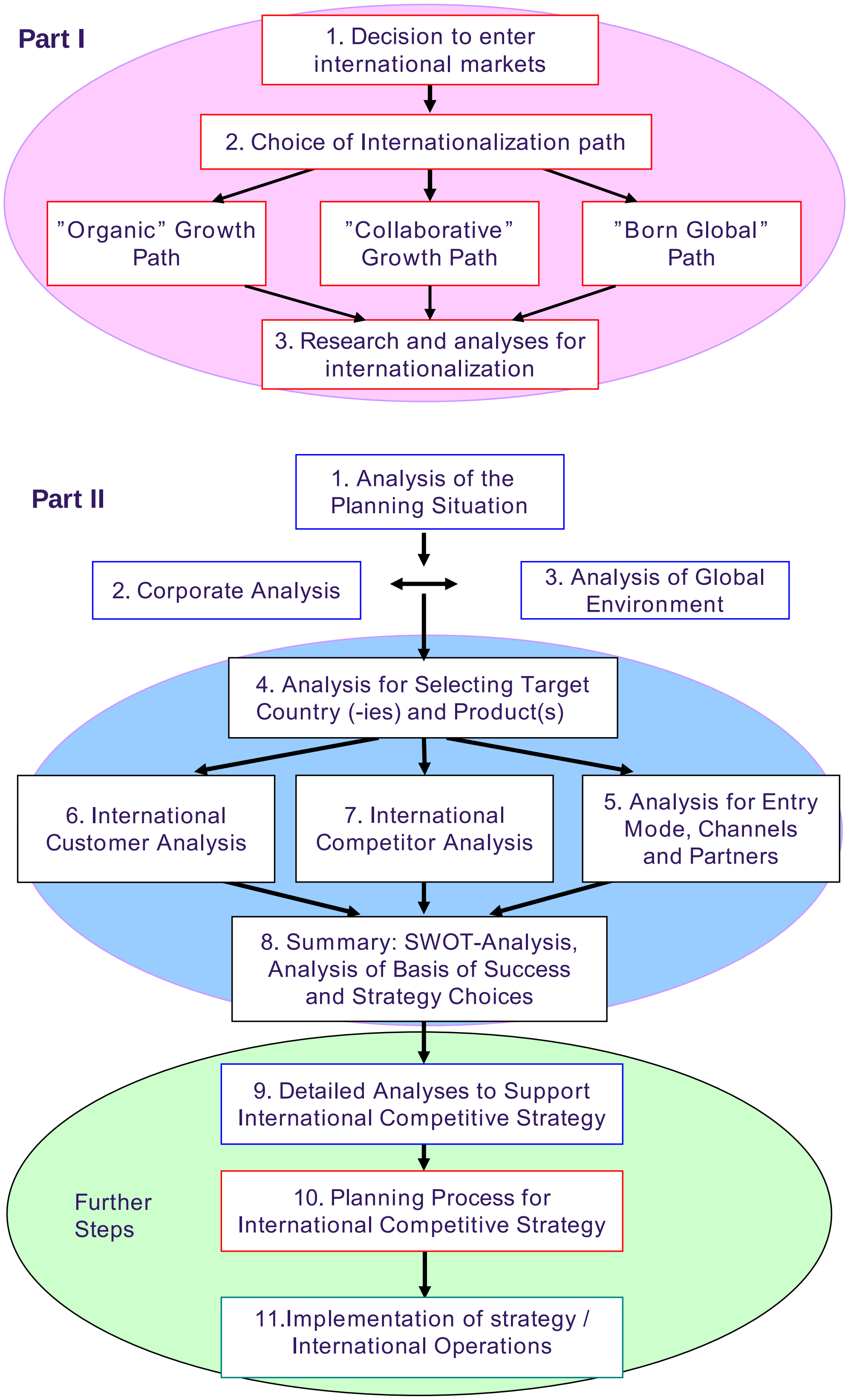
Many internationalization guidebooks begin with research and analyses, and then move on to describing the strategic and operative planning. Others begin with introducing the decisions involved in the strategic planning process and then describe the analyses and information needed. Both approaches are just as logical. In this book we have decided to begin with a general strategic approach to internationalization, present all the studies and analyses and then finish with a brief introduction to more detailed strategic planning. More specifically, these parallel and iterative activities are grouped into two parts that support and complement each other, and should therefore be used in parallel.

Part I presents an overview of internationalization in general. It introduces three typical pathways that the internationalization process of a software firm may take. Moreover, it analyzes what each path entails and presents a maturity model that consists of various stages that each firm goes through regardless of the path it has adopted. Naturally the speed of passing through the stages varies among companies. The model identifies 4+1 levels of internationalization maturity. The same approach has been used earlier in other maturity models well-known in the software development processes.

Part II provides a workbook with questionnaires and checklists for

- analyzing the company’s readiness to start internationalization,
- assessing whether it has what it takes to proceed from one stage to the next, and
- selecting different paths.

The workbook in Part II also provides an analytical basis for strategic choices concerning product concept, target country selection, segmentation, selection of entry mode or channels, etc. which are central components of an internationalization strategy. As mentioned above, whatever the stage and path, a detailed internationalization strategy must be formulated. However, for practical reasons, the actual strategic planning process itself is introduced just briefly at the end of the workbook. Strategic planning for international business is a broad subject that is best covered in a separate book. The basic structure of the book is presented in the following figures:


Part I
1. Decision to enter international markets
2. Choice of Internationalization path
"Organic" Growth Path
"Collaborative" Growth Path
"Born Global" Path
3. Research and analyses for internationalization
Part II
1. Analysis of the Planning Situation
2. Corporate Analysis
3. Analysis of Global Environment
4. Analysis for Selecting Target Country (-ies) and Product(s)
6. International Customer Analysis
7. International Competitor Analysis
5. Analysis for Entry Mode, Channels and Partners
8. Summary: SWOT-Analysis, Analysis of Basis of Success and Strategy Choices
9. Detailed Analyses to Support International Competitive Strategy
Further Steps
10. Planning Process for International Competitive Strategy
11.Implementation of strategy / International Operations

Abbreviations & Glossary

Born global	A term describing accelerated international (often global) growth pathway almost from the inception (e.g. 2-3 years).
CEO	Chief Executive Officer
Chasm	A deep gorge between visionaries and pragmatists when adopting new technological innovations (Moore 1991).
CMM	Capability Maturity Model by Software Engineering Institute (SEI)
DOI	Degree of internationalization
FDI	Foreign direct investment
Global	Company is global, when over 50% of its total sales come from outside of its home country and it has a global presence (operations in Asia, Europe and N. America).
Global niche	A specialized market, which is spread across countries globally
Growth *(in the model of internationalization pathways)*	Growth stage is indicated through the expansion of international operations and an increase in international sales volume. A firm enters the growth stage when it has succeeded in making profitable business in a few markets and makes further investments to deepen its commitment in those markets and/or enters several new target markets.
HR	Human resources
ICT	Information and communication technologies
Internationalization	The adaptation of products for potential use virtually everywhere (Wikipedia). Internationalization also refers to the adaptation of resources and skills in an organization to meet the challenges of selecting and servicing the most profitable customers and customer segments through optimal channels in target countries.
ISO	International Organization for Standardization
Maturity/ Consolidation *(in the model of internationalization pathways)*	A stable state of internationalization. Maturity is indicated by the presence of the company in all target markets. The firm involves international personnel at many levels of the organization and has successfully introduced the second generation of new products and/or services to those markets. Maturity can also be reached through international mergers and acquisitions.
OEM	Original equipment manufacturer, refers to either: - A company that supplies equipment to other companies to resell or incorporate into another product using the reseller's brand name; or - A company that acquires a product or component and reuses or incorporates it into a new product with its own brand name (Whatis.com)

Internationalization pathway	The process of internationalization measured by such indicators as the number of countries where the company is present, share of foreign sales and assets, foreign employees and owners, and international staff. A pathway includes four stages: pre-start, start, growth and consolidation/maturity The different pathways differ in terms of the time that is used to go through the first three stages.
PLC	Product life-cycle
Pre-Start *(in the model of internationalization pathways)*	The stage, which does not (yet) include any systematic export activities. The products, business model and organization of the company evolve during this phase.
Productization	The phase of software development where the technology is "hardened" so that it can be delivered to customers who might have a wide variety of systems that need to be supported. (Novell.com)
Roll-out	Introduction of a product or a company to a market(s)
SI	System integrator
SBU	Strategic business unit
Segmentation	The practice of dividing a customer base into groups of individuals that are similar in specific ways relevant to marketing, such as age, gender, interests, spending habits, and so on. Using segmentation allows companies to target groups effectively, and allocate marketing resources to the best effect. (Whatis.com)
SME	Small and medium-sized enterprises
SoberIT	Software Business and Engineering Institute of Helsinki University of Technology (HUT).
Start *(in the model of internationalization pathways)*	The stage when first investments are made to international operations, for example in recruiting or channel building. Sales from international markets begin to increase.
SWOT	Abbreviation of *Strengths, Weaknesses, Opportunities, Threats*, typical use in phrase: ‘SWOT analysis,' which is a simplistic tool for strategic planning, but efficient when used properly.
TBRC	Technology Business Research Center; a multi-disciplinary research institute of Lappeenranta University of Technology (LUT)
VAR	Value-added reseller: a company that takes an existing product, adds its own "value" usually in the form of a specific application for the product, and resells it as a new product or "package”. (Whatis.com)
VC	Venture capital

PART I THE MODEL OF INTERNATIONALIZATION PATHS

1. Introduction: How to Describe Internationalization

The life cycle model is a handy tool to analyze different types of phenomena which grow and mature over time. In business it has been applied to diffusion, growth, acceptance and maturity of products, technologies, markets and companies among other things. The life cycle of a company usually proceeds hand in hand with the life cycle of its products and technology, and it is important to realize that there are also corresponding customer and market life cycles.

There are several illustrative models of general company life cycles as well as of entrepreneurship life cycles. Adizes (1988) introduced a classic ten-stage model of corporate life cycle from pre-formation ("courtship") to death. His life cycle stages are relevant to many entrepreneurial start-ups also in software industry, but they are equally relevant to companies in later stages. In each stage he describes the typical characteristics, strengths and weaknesses, requirements for success and reasons for failure. In Adizes' model companies go through ten stages: 1. Courtship, 2. Infancy, 3. Go-Go stage, 4. Adolescence, 5. Prime stage, 6. Stability, 7. Aristocracy, 8. Early bureaucracy. 9. Bureaucracy, and 10. Death.

Some of the critical factors in the life cycle according to Adizes are: commitment of the founders and owners; realism and timing of the business idea; financing and risk-taking ability; decision-making style, delegation and planning; smooth transition from entrepreneurs to professional managers; and avoidance of complacency and bureaucracy after successful growth.

A similar life cycle model of company growth was presented recently by Churchill – it consists of six stages: 1. Conception/existence, 2. Survival, 3. Profitability/stabilization, 4. Profitability/growth, 5. Take-off and 6. Maturity. He points out that while most companies equate success with rapid growth, there are, what he calls "hobby"-type businesses where owners do not want to grow their business. He analyzes well how and why companies fail to move on to the next stage and stagnate or fall back instead.

An entrepreneurial process presented recently (Birley & Muzyka 2000) is another life cycle mode of sorts. It proceeds through 1. identifying and developing an opportunity in the form of a vision, 2. validating and conceptualizing a business concept and strategy, 3. marshalling the required resources to implement the concept, 4. implementing the business concept or venture, 5. capturing the full opportunity through the growth of the enterprise, 6. extending the growth of the enterprise through sustained entrepreneurial activity, to 7. capturing the value through a business exit.

McHugh (1999) applied the life cycle model to a software firm (see Figure 1). According to it, most software firms expand gradually from the early software "version number one" to become a more established firm if they manage to overcome early threats to survival. The specific stages are: 1. Version 1 stage, 2. Roll-out stage, 3. Early growth stage, and 4. High growth stage. In order to move from the roll-out stage into the early growth stage, the company must fulfill certain prerequisites. Similarly, to proceed from early growth to high growth, it must fulfill accelerator requirements. The so-called "steady state" represents stagnation due to a failure to proceed to the next stage.

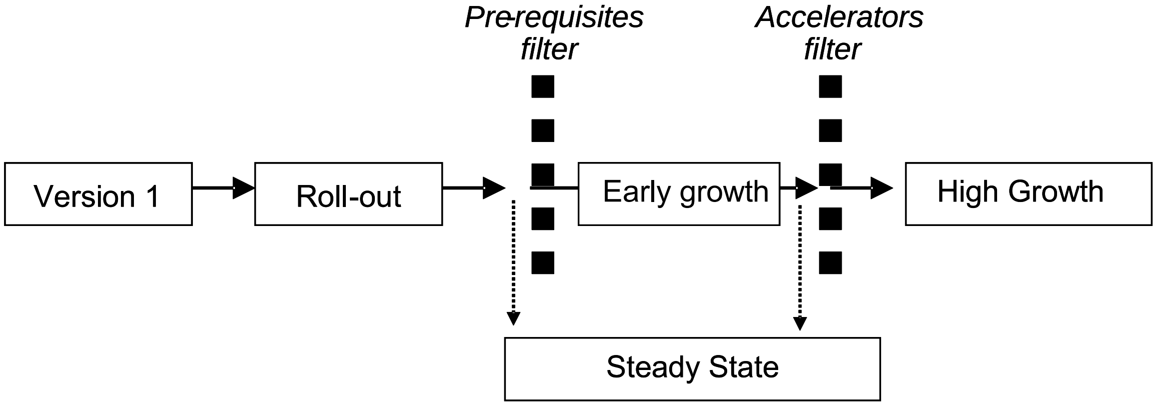


Figure 1: Early Growth Phases of the Software Firms (McHugh 1999)

For McHugh the following factors are critical for reaching early growth: 1. ambition to grow, 2. strong product offering, 3. effective management team, and 4. access to sufficient funding. To move into the high growth stage, two additional critical factors are added: 5. a winning business model (for example collaboration, partnerships and distribution channels), and 6. a clear export strategy (including deep commitment and global mindset).

McHugh discusses software product strategies in relation to customers in different stages. One of the key issues is that the product should be "customer-centric," often developed with the customer. Early customer references are important for a firm to be able to get market developing. This idea of market and customer development is similar to Moore’s (1991) technology adoption and customer-life cycle model especially relevant to high-tech and ICT products in business-to-business markets. It is equally relevant to software startups.

A central theme in Moore’s thinking is that technology, product concept, customers, and strategies vary depending on the life cycle. There is a world of difference between early narrow, experimental innovative niche and specialty markets and what he calls “main street” market. These markets are separated by a “chasm” and the danger is that our product may never enter the “tornado” of high growth and be accepted in the main street. The highway to high growth is littered with flops of failed product introductions that did not make it over the chasm.

Moore classifies the phases and adopters of high-technology products as:
1. Innovators = technology enthusiasts at introduction and early market stage
2. Early adopters = visionaries in early markets
3. Early majority = pragmatists at mass market adoption and growth stage
4. Late majority = conservatives in mainstream mass markets
5. Laggards = skeptics in end-of-life markets

The first chasm exists between innovators and early adopters as their needs and wants of the innovators are different. A second, deeper chasm exists between visionaries and pragmatics. The chasms stem from critical differences:

- Visionaries want to be first in bringing new ideas to the market; they often see pragmatists as pedestrian or dull.

- Pragmatists are careful and want to stay within the confines of reasonable expectations and budgets; they want to go steady and even consider that visionaries are dangerous.
- Therefore, it is often so that the early adopters' market is saturated but the mainstream market is not yet ready to accept the innovation.

These phases and adopters are presented below in Figure 2.

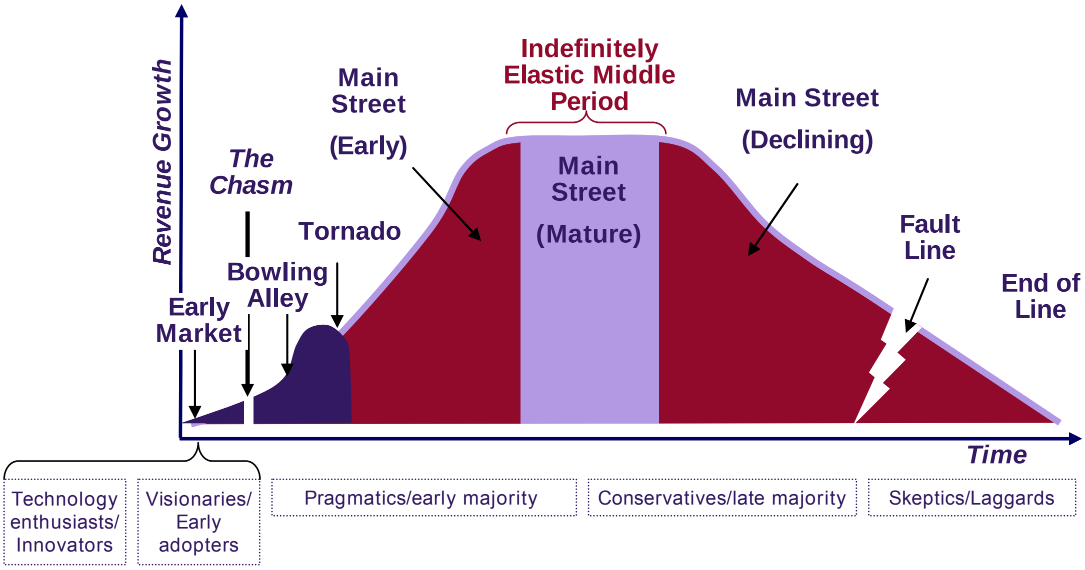


Figure 2: Product and technology adoption life cycle for high-tech products and customer types (Source: Moore 1991, 1995, 2004)

Like others before him, Moore emphasizes the concept of "whole product" or total product which refers to a finalized and completed total product concept. The single most important factor that facilitates the more from early to mainstream markets is the willingness to take the responsibility to offer the whole product. Especially in the software industry, the core product or service is not likely to fulfill all of the end-user's needs. Typically, customers want complementary products such as additional software and hardware or services such as consulting and system integration. In addition, for complex products, pre- and post-sales support may also be needed to make sure that the product is properly configured to meet the customers' needs and upgraded as required. Supporting services such as financing, delivery and billing, may also be expected to be part of the total product.

To summarize the life cycle approaches presented above, we can conclude that the life cycle approach is also well-fitted to software firms. The life cycle normally proceeds from pre-founding/innovation to the founding of the firm and continues through product development to the first version of the actual product or service, and on to roll-out and possible growth and internationalization. Depending on the success of the firm any stage of its life cycle may continue for years. An alternative scenario is that the firm fails and ends its business in a few years' time. What is important to notice is that in each phase there are specific requirements to fulfill and challenges to overcome as well as possible solutions and actions to choose from. It is imperative to understand the challenges related to various phases of the life cycle.

Think:

- Do you have a customer-centric product? What is your product concept?
- Is your production process in harmony with your business concept?
- How do the Capability Maturity Models of software development fit into company life-cycle? How do they fit into technology and product adoption life-cycle?

The workbook in Part II (Sections 2.6., 6.1., and 6.3.) helps to analyze these points.

Much of the literature on internationalization of the firm concludes that internationalization process involves a series of **incremental stages**. According to the so-called process or stage models, a firm incrementally builds up an involvement in international operations, starting with exporting in nearby countries. The firm commits itself to internationalization gradually, or through “stages,” as it gains knowledge and experience. A basic assumption is that market knowledge and market commitment affect the commitment decisions and the way they are performed (i.e. resources used) (see Andersen 1993).

Although in the stage model the number of stages vary, there has been a common underlying assumption that firms first get well-established in their domestic markets prior to developing internationalization strategies. However, these models have been criticized in the light of empirical evidence. For example there is ample empirical evidence that many software firms begin their international operations almost immediately after being established. Such rapid internationalization is also evident in other knowledge-intensive industries which contradicts the traditional incremental model of internationalization.

The basic tenet behind this book is that there is a need for systematic planning for internationalization. For example, there is a need to ask whether these predominantly small firms should aim toward internationalization, and what are the critical strategic choices which need to be made in the early years of growth, as well as to what extent these decisions are interrelated.

One good framework to use in analyzing the different phases and tasks included in international or global business is presented by Nukari, Saukkonen and Seppänen (2003). Their approach is depicted in Figure 3.

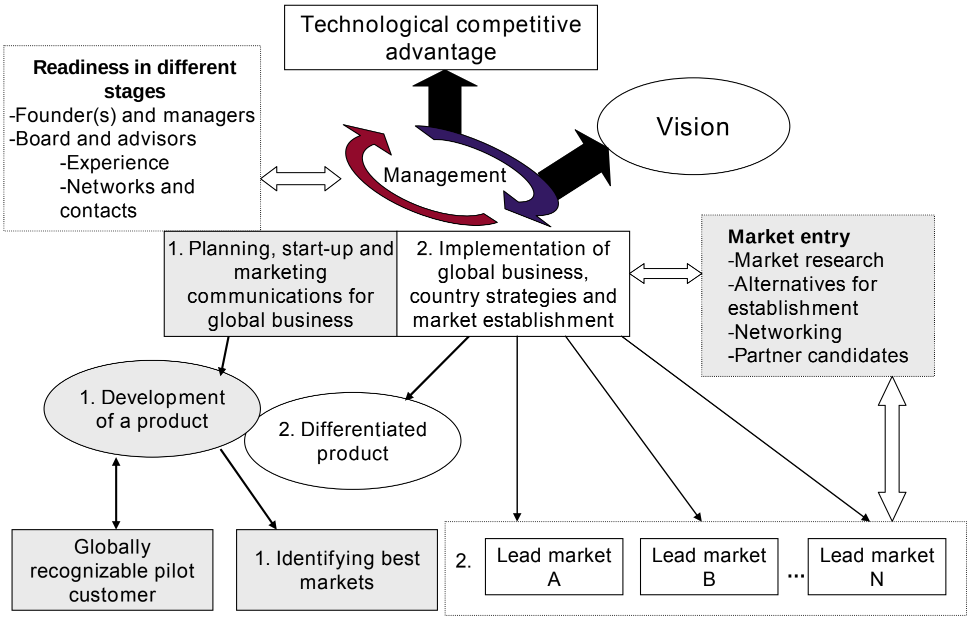


Figure 3: Elements of growth and global business (adapted from Nukari et al. 2003)

As we proceed further in the analysis of the various choices and context specific nature of internationalization, it can be noted that the real-life multitude of paths to growth and internationalization can be grouped into three distinct and more or less typical pathways. They are **organic**, **collaborative** and **born global pathways**. In many ways the slow organic and accelerated born global pathways are the opposites of one another, at the two extreme ends of a spectrum. They also often represent the choice of going it alone, while in the collaborative path the firm resorts to different types of cooperation and partnerships in order to facilitate growth and internationalization. As will be seen later, pathways in real life often represent hybrid types. Companies can also, at times, switch between the pathways. However, it helps to analyze basic pathway types and the requirements and challenges associated with them.

In spite of the different time-spans and prerequisites for the pathways, there are some common points in all models. Internationalization is seen as a learning process. Knowledge and learning go hand in hand even in rapid internationalization. The general implication of the learning process of the firm is that the past contributes to the current knowledge base of the firm. Firms aiming for the born global pathway do not have time to develop these skills inside the firm, they need to possess them beforehand or be able to acquire them from outside.

The two “extreme pathways” are illustrated in Figure 4 below.

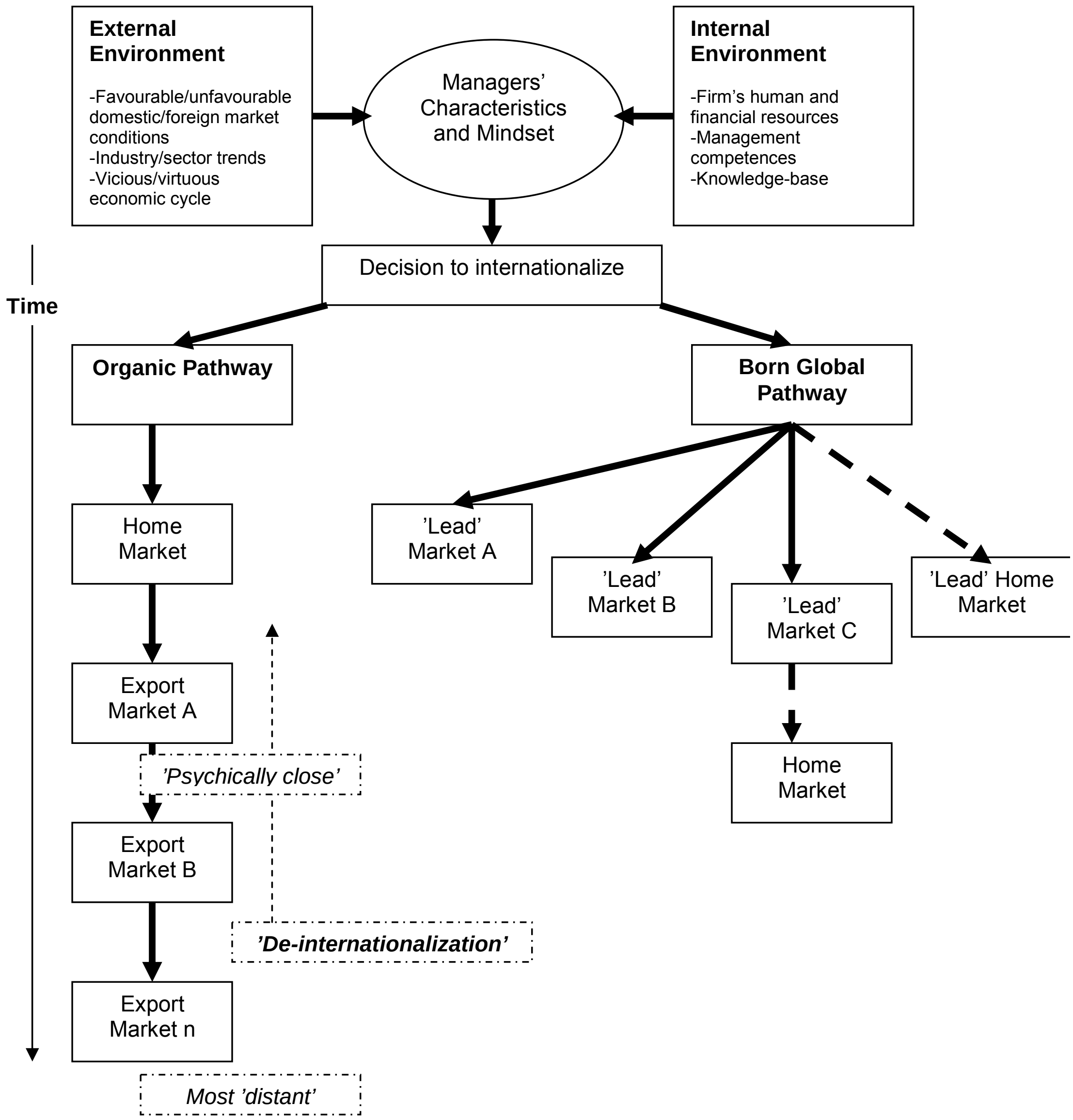


Figure 4: Two extreme pathways of software firm internationalization (Adapted from Bell et al. 2003)

2. Choice of the Pathway and Internationalization Strategy

Choice of the pathway does not consist merely of a collection of isolated decisions on products, markets, channels, partners and operation modes. These decisions are also core issues of a competitive strategy. Therefore, the choice of a pathway is all about choosing an appropriate framework for the growth and internationalization strategy for the company's competitive success. That is,

The choice of pathway must be understood
within the context of strategic planning.

The strategy of the firm is concerned with matching a firm's resources and capabilities to the opportunities and challenges arising from the external environment. This could just as easily be restated as, "The choice of the growth and internationalization pathway is concerned with matching a firm's resources and capabilities to the opportunities and challenges arising from the external environment."

According to the view adopted here:

> "The central task of strategic planning is defining, building, utilizing, maintaining, and developing a company's basis of success that consists of superior customer benefit and superior competences as well as of threshold factors."

As explained further in Section 10 of Part II where strategic planning is briefly introduced, the strategy statement itself consists of the following three components:

1. Business concept or Business model
2. Basis for success
3. Strategic principles and strategic actions

The business concept refers to the types of products the company provides and the types of customers it serves. In other words, the company selects and defines the competitive arena in which it plans to operate. Jay Bourgeois has called this "domain definition." Business model includes wider issues such as choice of the company's position in the industry value chain, outsourcing and cooperation relationships with other players, and earnings model.

The basis for success consists of defining the superior customer benefit and superior competences, as well as the threshold factors. "What a company does differently and better than competitors" is referred to here as the basis of success, which consists of (external) superior customer benefit and (internal) superior competences. The superior customer benefit can be operationalized as the reason why customers buy from us and not from competitors. This view of the strategy is customer oriented and related to everyday activities. There are also several important issues in which the company must be as good as its competition. These factors are called "threshold factors," and it is important to analyze and list these factors.

Strategic principles and strategic actions: the third part of the strategy definition consists of defining how the company is going to act. The strategy is carried out by business functions wherein the company defines what is special about the way it carries out its functions when compared to its competitors. Each company must determine what strategic actions are required in its particular market and competitive situation. For example, acquisition, a special distribution arrangement or customer service may be strategic choices for some companies, whereas others may treat distribution and service as operative issues.

Choice of the pathway is the preliminary or general part of defining the strategic principles and strategic actions for achieving growth and internationalization. The choice of the pathway depends on the business model, on the basis of success that must lead to a perfect match between the firm's resources and capabilities and opportunities and challenges in the external environment.

It would be impossible to present a planning model that would fit all situations. The contents and scope of planning vary in relation to the firm's life cycle, internationalization stage, organizational level, scope of planning, and competitive situation. Often, the first question that needs to be asked is: What is the strategic planning situation of the company and what are the special challenges of the company's situation?

The following Figure 5 depicts the main paths related to international growth:

- The three archetypes of the starting situation are on the left.
- Three typical paths through which a firm's internationalization process proceeds are presented in the middle.
- The right-hand column shows some possible outcomes of the internationalization process in relation to existing competition: different types of niche strategies, market specialist strategy (focus) and global generalist strategy (see Sheth and Sisodia 2002).

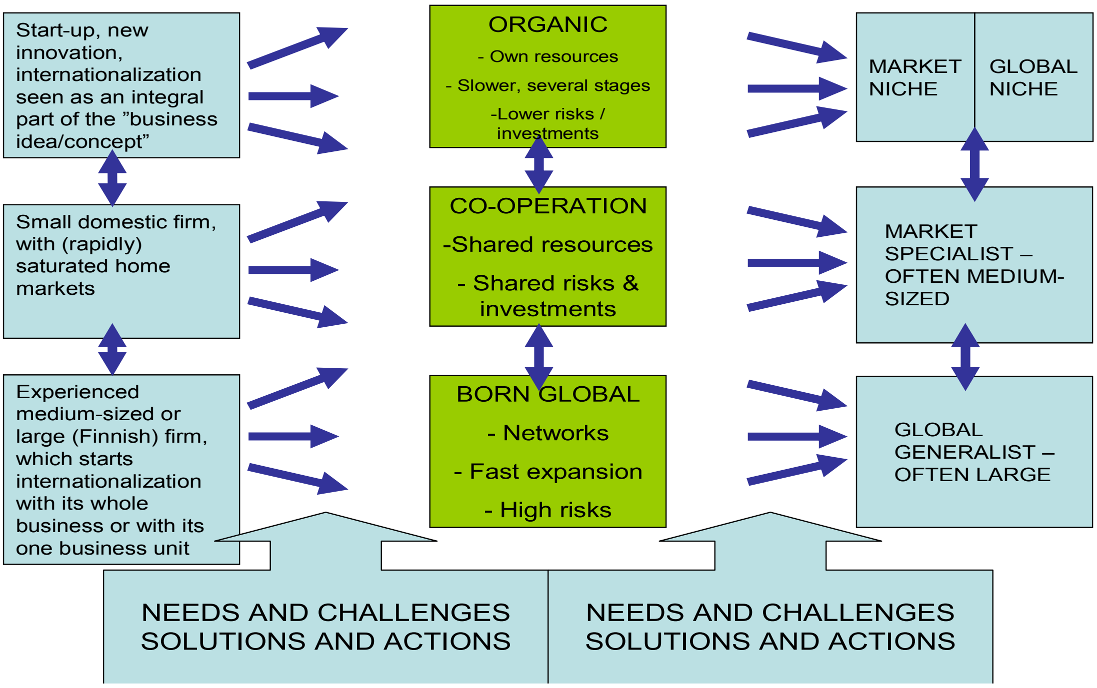


Figure 5: The internationalization challenge – Starting points, paths and possible outcomes

It would be helpful to be able to identify where a company is in this framework. That would make it possible for the company to compare its strategies to typical challenges and strategy recommendations for that position. It can be used as a valuable prescriptive tool for assessing required resources and competences. In turn it should also help the strategy development to improve growth and internationalization on the way to a successful long-term strategic role in the international marketplace (niche, market specialist or global generalist). Not being able to identify the company’s position or path would seem to reflect a problematic lack of clarity in strategic thinking.

Market potential may be one of the decisive factors in the decision toward an internationalization path. See Figure 6.

Market-based approach

In many cases a firm needs to evaluate its market potential, especially when the aim is to gain external funding. The firm is often asked to position itself in comparison to its competitors.

Following questions may be asked:

- What is the growth rate of the market in the next 1-3 years? What is the ultimate market potential?
- Has the product got technology leadership?
- Does the management of the firm possess the qualities to defend this technological leadership?
- Is there funding available for this?

Source: Juhani Saukkonen, 15.12.2004.

Figure 6: Market-based approach to analyze business potential

Other outcomes different to those presented above are related to the independence of the firm. An internationalization challenge may also end up in the acquisition of the firm by another company. The small size and limited resources available for large-scale market penetration may make this option desirable for the owners. Other possible outcomes include market exits and mergers.

3. Stages of Growth and Internationalization in Software Industry

Especially in software business, growth and internationalization are often intertwined. It is important to realize that internationalization is not an isolated activity in a firm's strategy. Internationalization is a way for a firm to achieve higher growth rates and is, in many cases, the only option to achieving growth. It does not only mean exporting but includes also other operations, such as importing and subcontracting. This is often referred to as "inward internationalization" as opposed to "outward internationalization." For example India is a good example of lucrative subcontracting in software. Importing of software has also stimulated outward operations at a later stage. Jim Bell (1995) notes that several Nordic firms obtained licenses from U.S. firms to distribute a software in Norway or Finland and subsequently "exported" product/services to other Scandinavian countries (with the agreement of the principal). One case example of such operations in Finland was Stonesoft who distributed Checkpoint's software in Nordic countries in 1990s and early 2000s.

Different definitions have been presented for internationalization. Here we adopt a broad definition: internationalization is the process of increasing involvement in international operations. More importantly, with respect to internationalization the following issues should be kept in mind:

- Internationalization is not a separate activity in the development and growth process of the firm.
- The internationalization process is a total gradual learning process, not simply a series of actions, decisions and business deals.
- While "business is business everywhere", there are nevertheless specific challenges regarding internationalization.
- The internationalization process means dealing with new types of customers who are located further away, and who may have different values and needs.
- Other cultural and linguistic barriers may also exist.
- In summary: international business operations are more demanding than domestic operations.

Therefore we need to ask:

- What kind of knowledge, skills and capabilities are needed in internationalization?
- What are the special challenges, costs and risks?
- How can we acquire this knowledge, and these skills and capabilities?
- How do the requirements vary according to the stage, and path of the firm's internationalization?
- In which stages of the firm's life cycle and in which functions are the knowledge, skills and capabilities needed?

For example, in the beginning stages of internationalization it is important to ask "Do we have adequate financial and human resources?" and "Do we have the required skills and competences, and do we have enough information on the markets, customers and competitors?" Internationalization affects all the operations within the firm although normally those functions of the firm that have direct contact with customers or (foreign) partners are affected the most.

The model of growth and internationalization stages of a software company presented in this book is based primarily on empirical findings and supported by theoretical literature in such models as those presented at the beginning.

It is typical for many software firms to start their operations by providing tailor-made software or other software services for Finnish customers. However, a software firm that has operated in the domestic market for several years may start international operations as a result of restructuring or by developing a new standardized software product. Consequently, in this case the internationalization life cycle stage or maturity in internationalization may differ from other firms' life cycles. In comparison, in firms that have had a global vision from their foundation, all the various life cycles tend to follow the same time span.

In Figure 7, two examples of differences in the life cycles are presented: Firm A has grown more rapidly than Firm B because its market potential is larger through international operations. However, there are caveats in the born global pathway. Accelerated growth demands more resources and up-front investments: the "valley of death" can be more severe. Both the strategy and the level of skills and capabilities needed differ.

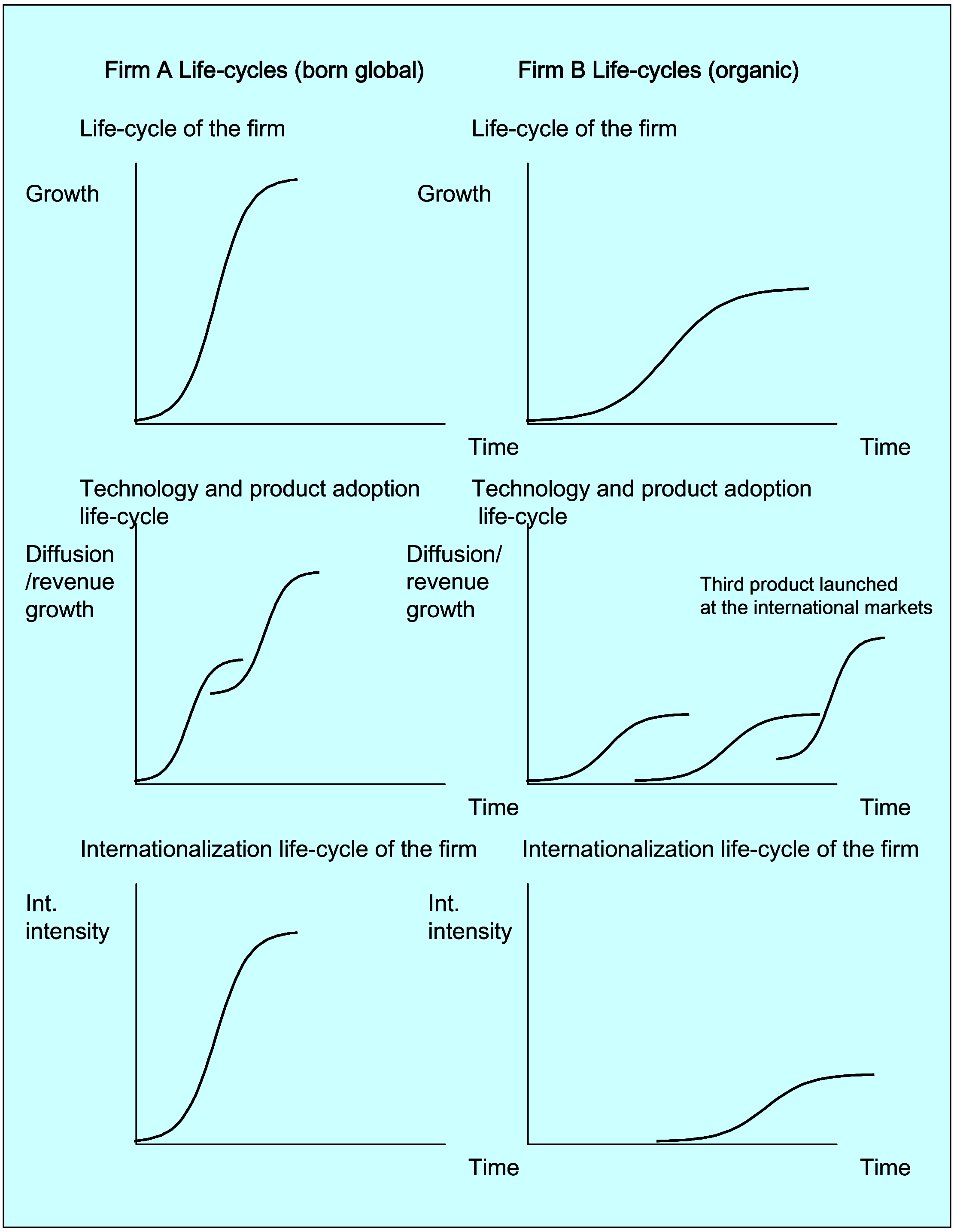


Figure 7: An example of the life cycle differences between born global/accelerated growth and organic pathways

The different lifecycles illustrated above, may coincide and create the so-called “window of opportunity,” where all conditions are favorable for a rapid entry for the company. Typically, in that kind of situation, all the life cycles are either starting the growth phase or have already reached the “main street." However, it is important to insert a word of warning: it is easy to be overly-optimistic in interpreting the trends. This is typical in the “Go-go stage” as exemplified by Adizes (see Chapter 1).

The degree of internationalization (DOI) can be used as a handy indicator - researchers, investors and business support organizations often use it as a basis for categorizing firms. The DOI is most often estimated by measuring the amount of turnover derived from international operations. Most commonly used indicators are summarized in Table 1.

Traditionally, studies of multinational corporations have used the entry mode of the firm as the key variable to measure a firm's DOI. One of the main reasons for this is that the entry mode is often seen as the main vehicle for internationalization. There are problems in this approach, however. In addition to scarce resources and knowledge intensity – characteristics which easily fit many Finnish software firms – an attitude towards risks can have an effect on the entry mode choice. Moreover, on the born global pathway it may be necessary to focus on a large number of customers and countries/regions with respect to the size of the individual sales.

Table 1: Some indicators for the degree of internationalization

Some indicators for the degree of internationalization
Number of countries/regions where the company is present
Foreign sales per total sales
Foreign assets per total assets
Foreign employees per total employees
The existence, number and share of subsidiaries or non-capital involvements in foreign countries
The extent to which a company is owned and managed by non-nationals
The share of foreign profits in total profits
The international experience of top managers
The share of employees that spend a significant part of their time on international activities

Although DOI measures do not actually give much insight into the internal capabilities of the firm, they can still be useful. For example, the ratio of foreign sales to total sales and other measures indicate the thresholds or stages as to when a firm needs to change its operations. For example, if we use the 25% criterion of foreign sales in total sales, it probably means that at this level a firm needs to take its international operations seriously and that international activities are no longer sporadic. It may also mean that there is a need to use English as a language in all company documents and meetings and that there is a need to hire foreign personnel.

4. Requirements and Challenges for Internationalization

This chapter focuses on several requirements to meet and challenges to overcome, which form prerequisites or accelerators on the road to international success. There are several lists of success factors found in the literature. An example of the existing lists by M. Cusumano (2004) is presented in Figure 8 below.

What to look for in a software start-up?

1. A strong management team
2. An attractive market
3. A compelling new product, service, or hybrid solution
4. Strong evidence of customer interest
5. Plan to overcome the "credibility gap"
6. A business model showing early growth and profit potential
7. Flexibility in strategy and product offerings
8. The potential for a large payoff to investors

Figure 8: What to look for in a software start-up? (Source: Cusumano 2004)

However, there is a problem with these kinds of lists as some of the elements are often actually predecessors of "best practices." In our model this problem has been solved by presenting a list of **general requirements and challenges** that firms face in their internationalization process and to which they need to respond. The responses to these requirements and challenges are referred to as **"solutions and actions**," which may give a firm the end result it wants.

In addition, the challenge of globalization for the management should also be studied from the 'preparedness' perspective. Solberg (1997) has presented a framework to support decision making regarding internationalization strategy. The dimensions are "How prepared a firm is (requirements vs. possessed solutions)" and "industry globality" (tightness of competition). Solberg framework is presented in Figure 9.

PREPAREDNESS FOR INTERNATIONALIZATION				
	Mature	Enter new business	Prepare for globalization	Strengthen your global position
	Adolescent	Consolidate your export markets	Consider expansion in international markets	Seek global alliances
	Immature	Stay at home	Seek niches in international markets	Prepare for a buy-out
		Local	**Potentially global**	**Global**
			INDUSTRY GLOBALITY	

Figure 9: Solberg's nine windows of internationalization

In conclusion, when analyzing the differences between the different stages and paths, we need to ask what differentiates them, what are the dimensions we describe and measure. The following questions help illustrate the different dimensions:

- What **external causes** push firms to internationalization?
- What **internal reasons and motives** push firms to internationalization?
- What are the **special requirements and challenges** at each stage and in each path?
- How do firms **typically behave and act** at each stage and on each path?
- How can each stage be **measured**? (What **indicators** can be used to measure the stages)?

What external causes push firms to internationalization?
- Product/technology life-cycle, market development, regulation, business life-cycle, customers, partners and networks, competition

What internal reasons and motives push firms to internationalization?
- Management, owners and personnel; characteristics & skills, Product, production, Financing, financial resources, Relationships, image, control wanted/needed

What are the special requirements and challenges at each stage and in each path?
- E.g. born global firms need to have experienced management team with international business competencies and a global mindset – need to credibility to be able to attract lead customers

How do firms typically behave and act at each stage and on each path?
- E.g. Organic pathway and start of international operations: exporting to a few countries

How can each stage be measured (What indicators can be used to measure the stages)?
- internal skills and capabilities, external measures related to degree of internationalization

In the tables below these different types of factors and characteristics have been grouped under three broad headings: 1. Internal requirements and challenges, 2. External requirements and challenges, and 3. Solutions and actions, such as strategies, behavior and characteristics.

Requirements and challenges stemming from the internal characteristics and conditions or from the external environment are summarized in Table 2. Internal challenges can be also attitudinal, meaning there is a need for global mindset. A strong management team is important in general and especially in the internationalization context. For example, McHugh (1999) notices that in a start-up phase, a visionary leader, usually a salesman of the firm, needs a support team with technological skills. Other important challenges regarding human resources include the need to acquire or develop internationalization skills and international business experience.

Other important issues to consider in the firm include networking and relationship management skills, financial resources and skills, as well as other general resources, such as growth management, product concept and production process maturity, and image. Image relates to the "credibility gap" which also Cusumano notices.

The technology and product adoption life cycles discussed above described the kinds of external challenges a firm needs to tackle. Other important external issues to consider include globalization and regulation of the markets. Customer demand, partner network and their degree of internationalization may lead a firm along a specific internationalization path and can also be considered as challenges.

One of the most important issues which needs to be analyzed is competition. The competitive strategy of the firm can be defined only in relation to its customers and competitors. Reliable knowledge regarding the competitors' actions need to be acquired and the strategy of the firm needs to be adjusted accordingly.

Table 2: Examples of internal and external requirements and challenges

Internal requirements and challenges
HUMAN RESOURCES: OWNERS / MANAGEMENT / PERSONNEL Characteristics, needed knowledge: • Experience: business & internationalization experience Competences & capabilities: • Language skills, planning skills, technological skills, innovativeness, sales and marketing skills Depth of knowledge: • Tacitness and transferability of knowledge, dependency on a few key people
DESIRE / NECESSITY OF CONTROL
RELATIONSHIPS & NETWORKS • Supplier, customer and other cooperative relationships/partnerships • Other stakeholder relations
IMAGE, CREDIBILITY, REFERENCES
FINANCIAL RESOURCES AND SKILLS & COMPETENCES • Ability to use foreign financial sources / to attract foreign funding • Willingness and ability to take risks
SIZE OF THE FIRM AND OTHER RESOURCES • Number of personnel • Equipment, software product tools
PRODUCT • Different types of software: software product/shrink-wrap/cellophane, tailor-made software, software as a service • Stage of the product life-cycle • Degree of 'productization'
PRODUCTION • Production process • Maturity/development state, how systematic, documented etc. • R&D

External requirements and challenges
PRODUCT / TECHNOLOGY MATURITY AND LIFECYCLE • Speed • Stage (See Geoffrey Moore for detailed analysis)
GLOBALIZATION OF MARKETS • Global demand • Homogenization of markets • Trade barriers • Standards (official / de facto)
REGULATION • Rising or changing level of regulation • Degree of free competition, deregulation, liberalization
• BUSINESS/ECONOMIC CYCLES
CUSTOMERS, PARTNERS AND NETWORKS • Degree of concentration • Degree of internationalization
COMPETITION • Structure of competition • Size classes (e.g. few international players, large number of local competitors) • Typologies: role in the value chain/network, focused or multiproduct firms etc. • Direct / indirect competition: Has a customer an option not to buy? • Level of competition: how good the competitors are? Their competences? How tight the competition is? Are competitors more experienced?

There are other production-related tasks and challenges which a firm can try to solve. These include increasing the level of standardization throughout the whole product and synchronization of the product life cycle with a possible technology adoption life cycle. New versions of the product may also prolong the life cycle and increase the total revenues.

The target market and country selection have an important effect on growth potential. However, it is important to remember that the chosen target should only consist of those types of customers that value the superior customer benefit offered by the firm. In general it is important to harmonize all the firm's actions in accordance with this principle. This also applies to human resources management, channel choice and channel management, knowledge management, training etc.

The other dimension which needs to be analyzed consists of the possible different reactions to these challenges or **solutions and actions** by the companies. The most important of them are presented in Table 3. “Strong” product is without doubt a prerequisite for the firm's successful growth and internationalization. According to modern marketing and sales thinking, the core of the product or "product concept" is what the product does to the customer. Thus, the product development has to be customer-centric.

Table 3: Internal Solutions and Actions

Internal solutions and actions
Product concept
Product life-cycle
Level of standardization
Market selection
Country selection
Targeting
Level of segmentation
Intensity and modes of cooperation
Business operations and entry modes
Channels
HR policy
Knowledge management
Training
Recruitment
Financing

Understanding the drivers and requisites of different pathways will significantly assist in the planning of appropriate internationalization strategy for a company.

All the requirements and challenges to growth and internationalization must be researched and analyzed in order to understand the particular position a company finds itself in. Part II, the Workbook (Sections 1 through 7) shows how these analyses are carried out, and finally summarized in a formal SWOT-analysis table (Section 8). Once this analysis is carried out, the company can choose the best path to growth and internationalization. The three major pathways are described below in terms of what requirements, challenges, and actions they typically entail.

5. Pathways to Growth and Internationalization

Figure 10 below represents a summary of the stages and different measures of Degree of Internationalization (DOI) discussed in Chapter 3, and possible differences regarding these measures among the three pathways. It is an illustrative example and gives some guidance as to what types of indicators could be used in measuring software firms' DOI.

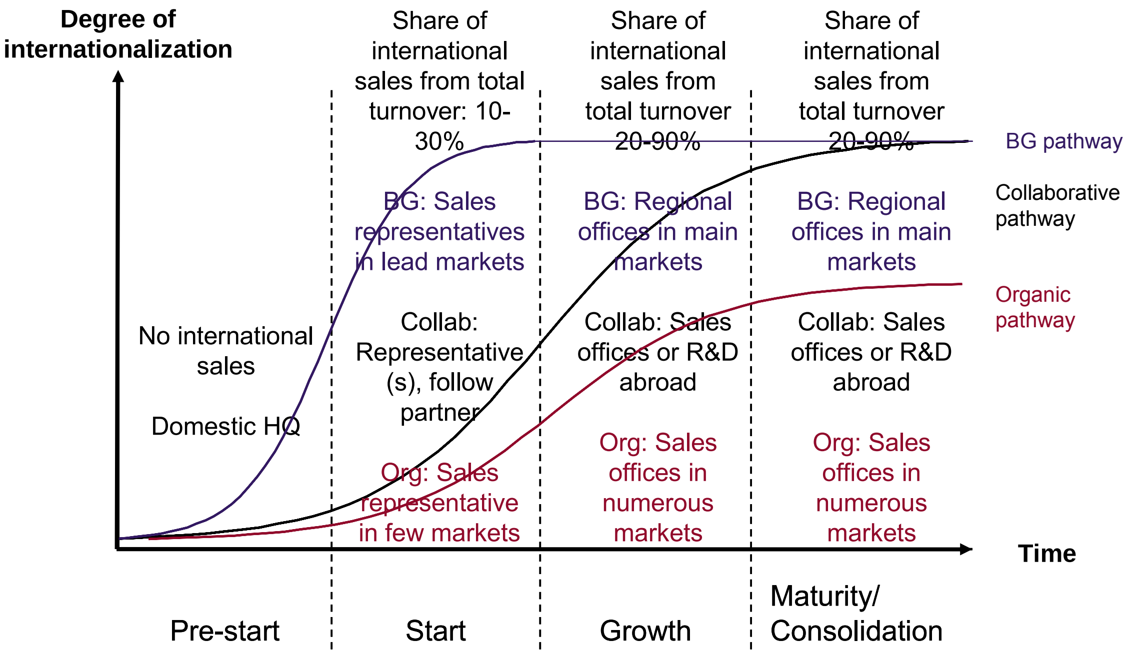


Figure 10: Indicators for internationalization in different stages and an example of the typical DOI development in various pathways

The three major pathways used here, **born global**, **collaborative** and **organic**, are first described briefly. They will then be combined into a holistic model of internationalization stages and pathways in Table 4. As mentioned above, it should be noted that the pathways are simplified abstractions of reality and that a firm can switch from one pathway to another. Nevertheless, typical pathways can be observed empirically and each pathway has a distinct profile. It then becomes important to ask what kind of a software firm typically adopts a specific pathway? Naturally, in real life, the pathways are not completely mutually exclusive: many companies actually represent borderline cases, and often the same activities can be undertaken on more than one pathway.

The model presented below divides the pathways into 4+1 stages. The four of them are based on commonly used life cycle definitions, for example such as described briefly in the Introduction. These are **pre-start**, **start**, **growth, maturity/consolidation stages and the so-called "steady state"**. As the focus in the model is on internationalization, the pre-start stage portrays the time before the start of international operations. **The start stage** begins when a firm initiates the early stages of its internationalization. Especially in the organic pathway this occurs as a reactive response to customer contacts from abroad. In contrast, the born global strategy means mainly that the firm proactively seeks growth in international markets.

The growth stage can be characterized by the expansion of the firm's international operations and by an increasing volume of international sales. **The maturity/consolidation stage** means that the firm has reached stability in its international operations. This stage can be characterized for example by "deepening international operations" and building international management systems. From this stage on, the firm needs to develop further with continually evolving products and strategies. For example, if the second product fails in the market, the firm may even need to de-internationalize. At this point, it is important to focus on the product and technology life cycles. **The "steady state"** represents stagnation or even failure, a situation where the company no longer experiences fast growth, or even regresses.

5.1. Accelerated Growth / Born Global Pathway

Firms on this pathway typically undergo rapid and intensive growth through internationalization, almost from the first day of their establishment. The emergence of global demand and shorter product/technology life cycles are among the main drivers that cause the firms to adopt an international outlook in spite of their young age and small size. The need to reach markets of sufficient size and to exploit first mover advantages are also important drivers that lead firms to internationalize rapidly and to assign less importance to the small home market.

Born globals represent a special case of rapid internationalization. These typically operate in a narrowly defined market niche and therefore cannot thrive in a single, small (home) market. A high degree of specialization requires international expansion if the firm wants to achieve substantial sales growth. Furthermore, these firms often incur relatively high R&D costs, which occur "up front", i.e. before any sales are made. In order to survive, firms must quickly catch the growth track to cover these initial expenses. Finally, competition for typical born globals is very intense and their products may become obsolete rather quickly. If a company is to take full advantage of the market potential during its "window of opportunity," it may be forced to penetrate simultaneously all major markets.

Firms following a born global pathway typically share the following characteristics:

- Growth oriented, internationally experienced management team
- Innovation, core technology developed in-house
- Internationally experienced board members, systematic international networking
- Packaged product and/or global niche market
- External financing (VC)
- Growth is often gained through networking/use of partners or acquisitions enabled by external financing

These features are further illustrated in the following Figure 11. Here internationalization lifecycle is divided into the previously defined 4+1 stages

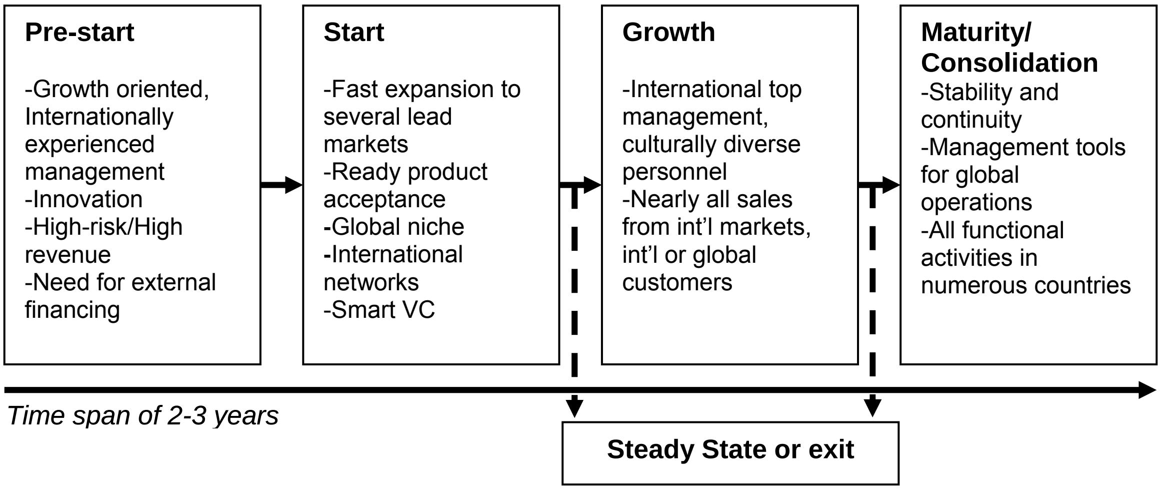


Figure 11: Accelerated growth/born global pathway

Prerequisites

In order to proceed on this pathway, the firm needs to meet at least the following prerequisites:

- Experienced management team with international business competences and a global mindset: ability to view business opportunities from a global perspective
- Strong product offering: customer-centric product concept with a strong market potential
- Ability to attract external funding
- Credibility: ability to create "fast trust" and attract lead customers

Accelerators

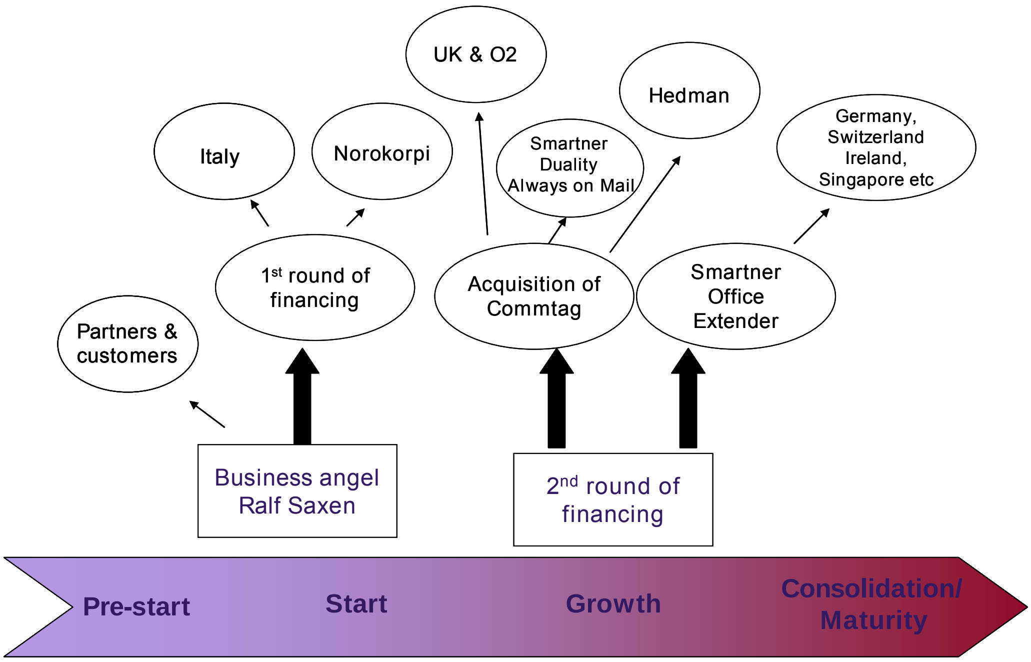
In order to proceed to maturity and to be successful in the high growth phase which is characteristic of this pathway, the firm needs to be able to trigger fast growth with the following accelerators:

- Ability to leverage the firm's capabilities through effective knowledge management, recruiting and training
- Ability to attract further funding; often foreign investors are important as the average size of the Finnish investments is rather small
- Ability to introduce new product generations rapidly and continually

Smartner Information Systems Ltd. – example of the born global pathway

In four years, Smartner has grown from a domestic company that employs only four people to an international company with 40 employees. The founders of Smartner already had their eyes set on the global market when planning the business. The owners and management have been the most important triggers, first for initial internationalization and then for more accelerated growth.

The most important prerequisites and accelerators from one stage to another in the Smartner case are presented in the Figure below:



Other Born Globals?
Other Finnish software companies that have followed more or less “stereotypical” born global pathway:

- Blancco
- Sumea
- CRF

More detailed analyses of Smartner, Blancco, Sumea and CRF are presented in Appendix 2 of this book.

Research Note
According to the TBRC survey conducted in 2001-2002, which focused on small and medium-sized Finnish ICT firms, approximately 33% of the internationalized firms were born global firms (55 firms out the 94 respondents). More than half of the respondents had international operations. The survey's response rate of the total sample was 32% (124 firms out of 386 firms). The criteria used were these: 25% or more of the entire turnover had to come from foreign markets and firms had to have started their international operations during a period of two years since their inception.

5.2. Collaborative Pathway

Within the dynamic and multifaceted software industry, competitiveness is more and more often pursued through co-operation with different actors – sometimes even with competitors. Thus, collaboration with partners can be seen as the easiest way of reaching international markets. Collaborative partnerships and alliances are formed for different reasons but, in general, they are used to strengthen some gap in the firm's own resources or competences, to reduce investments needed, to save costs or to speed up development and expansion. Finnish software firms typically have a reasonably good technological core but need complementary resources especially in international marketing and distribution.

In some way this pathway represents a compromise between the two other pathways. On one hand, a firm on this path tries to speed up its growth and internationalization more than is possible on the organic path. On the other hand, it is not ready or capable of expanding alone, simultaneously, into several markets. Firms following the collaborative pathway typically share the following characteristics:

- Lack of some key resource needed in internationalization (marketing, distribution etc.), which triggers the need for collaboration
- Relatively experienced management with good local connections. These local connections may act as "bridges" to international connections and help the firm to go abroad by providing information about clients and markets
- Systemic product, idea co-development with customers and/or suppliers
- Ready cash flow and some public R&D funding

These features are further illustrated in Figure 12. Here the internationalization lifecycle is divided into previously defined 4+1 stages.

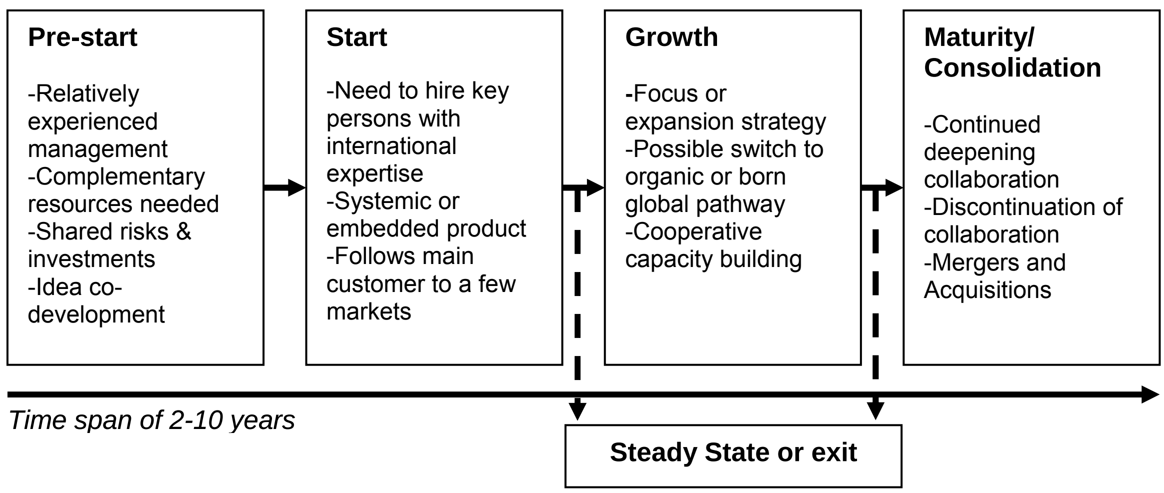


Figure 12: Collaborative pathway

Pre-requisites

Finding suitable partners and getting along with them are probably the biggest challenges on this pathway. For a small software firm the most significant partner is usually a local distributor, such as a VAR, or a system-integrator customer, who is responsible for the sales and customer support of the product in the particular market. Managers of small firms often realize soon that it is not easy to find partners who have both product- and market-specific knowledge as well as the ability and interest in supporting each principal and their customer base.

- Partnership management: in many cases success cannot be achieved alone in the software industry, and the management has to find the balance between giving away the power and keeping the critical core in-house. It has to be remembered that managing partnerships also requires resources.
- Clear channel and partnership strategy is imperative. For example, it must be clear as to how the partner's sales force is rewarded.

Accelerators

It has to be noted that a collaborative approach to internationalization is not in any way mutually exclusive to the other two pathways. Studies have shown that access to external resources through collaboration facilitates and accelerates the internationalization process of a small firm, which often applies especially to born globals. The accelerators that focus mainly on collaboration, are the following:

- Ability to provide a complementary value-adding product for large partners.
- Clear internationalization strategy: significant commitment to foreign reference customers provides a strong position on which to build further growth.

Collaborative pathway – what does it mean?

Cooperation can take many different forms. It can mean:
- cooperation in product development, application development, production, distribution, sales and marketing, and/or financing
- horizontal partnerships with companies offering complementary products or know how;
- vertical partnerships with suppliers, resellers or customers;
  contractual arrangements, outsourcing, partnerships, strategic alliances or equity arrangements, etc.

Firms that follow (vertical) collaborative pathways can also act as subcontractors or OEM manufacturers for large customers through closely knitted partnerships. This can lead to internationalization through "piggy-backing" with the help of large international customers. Examples of such arrangements include HP, Nokia, Microsoft, and Oracle (see below). However, remember that these arrangements alone do not guarantee instant success. In many cases the firms looking for growth through larger partners have been disappointed.

Collaborative pathway – real-life examples? *

CCC Group
The CCC Group, which recently received the Presidential Internationalization Award, is a good example of a company with a rather large cooperative network. The CCC Group consists of 20 companies, of which Cybelius Software is the largest. Nokia has been one of its most important domestic partners. In fact, Cybelius Software developed its main product, Cybelius Maestro, in cooperation with Nokia Mobile Phones and VTT Electronics. Timo Korhonen, Chairman and principal owner, characterized the cooperation with Nokia as “wide and deep.” Their cooperation network today also includes international research institutions and universities.

QPR Software
QPR was founded in 1991 in Oulu. Its mission was to create interactive software applications that improve corporate decision-making at each organizational level. Right from the beginning, QPR invested strongly in R&D. They started their operations in collaboration with ten pilot companies with whom the first product was developed. Close collaboration with customers and partners has played an important role in the QPR's development. The products have been shaped to respond to customer needs. This joint development work continues intensively. The firm has created a "community" which includes around 100 VAR partners in nearly 50 countries. Collaboration within this community is emphasized in the firm's marketing communications.

There are several examples of partnerships between small Finnish software companies and large Finnish or International customer-partners:
- **Digia:** Digia works as a Symbian Competence Center and Training Partner.
- **Vineyard International:** Owned by F-Secure and Vineyard management. Cooperation with Oracle, whose database serves as the basis for Vineyard tool. Additional product development in St. Petersburg, Russia.
- **Crenet:** This small software company (established in 2002) offers software solutions and services for Internet and mobile environments. It was able to join Microsoft Empower program (part of the wider MS Partner Program) already in 2004. According to Liljestrand, the Managing Director, such partnerships and platforms (including licenses for MS products, product support and product testing assistance) are crucial for small companies. The partnership program lends invaluable assistance to the commercialization and promotion of products. Being a Microsoft partner gives a small company credibility and visibility.

The following companies exemplify other types of cooperation:
- **Capslock:** This company has had cooperation with Nokia, Ericsson, and KPMG International, as well as with Hewlett Packard’s E-Bazaar project. It later concluded a cooperative distribution agreement with Dexcon, which was also scouting for potential partners for Capslock.
- **Smilehouse:** This comany was founded in 1999. It announced at that time that its objective was to become an important European player in developing web-enabling applications. It recently listed Finland Post, Nordea, Luottokunta, SAP, Econet, and ProCountor as important customer-partners that have helped it develop comprehensive e-business systems. They have also concluded distribution and partnership agreements with new media and advertising companies.

* These examples are based on information available in public sources

Research Note: Collaboration among Finnish SMEs

According to Software Industry survey 2004, 13% of the Finnish software firms used foreign subcontractors in product development and 28%, domestic subcontractors.

According to the TBRC survey in 2001-2002, which focused on small and medium-sized Finnish ICT firms, about 80% of the firms had collaborative relationships with other companies, mainly Finnish but some foreign.

The research results indicate the following:

- It is common to use partners, especially in domestic production and in foreign marketing and distribution
- New partners and complementary expertise are needed in customer relations, in the creation of a contact network and in connection with distribution channels
- Reliability and commitment are important factors in partner selection, as well as in marketing resources and complementary expertise

5.3. Organic Growth Pathway

Firms and their managers on this pathway usually do not have any prior international experience. There is a strong desire to protect the ownership of the company and to maintain close control of operations, and at the same time to minimize risks related to business (self-financing based on retained earnings). Growth and internationalization are achieved through a relatively slow internal process of “learning by doing.” The lack of knowledge about foreign markets is also a major obstacle to speedy international operations. Therefore, firms typically focus first on their home markets and postpone entry into foreign markets until the perceived risks associated with the new investment are below the maximum tolerable risk level.

This pathway comes closest to the traditional pattern of slow incremental internationalization by stages, as firms: (1) start and continue to invest in just one or a few neighboring countries, rather than in several countries simultaneously; and (2) as they carry out investments in a specific country very cautiously and while, concurrently, the firm’s representatives operating in that market are learning as they go. Finally, firms on this pathway enter new markets characterized by greater and greater cultural and geographical distance.

Firms following the organic growth pathway typically share the following characteristics:

- Domestic management without international experience
- “Learning by doing”
- Services, piloting tailor-made product
- Cash flow and/or financing with retained earnings

Pre-requisites

To succeed in international markets by using an organic growth strategy, a firm needs to meet at least the following prerequisites:

- Efficient management team, however there is lesser need for international capabilities as the degree of internationalization is lower and thus, the necessary investments and their risks are smaller.
- A strong home base with a competitive, often tailored product concept, which offers customers more added value.

The features of this pathway are illustrated in Figure 13. Here the internationalization lifecycle is divided into previously defined 4+1 stages.

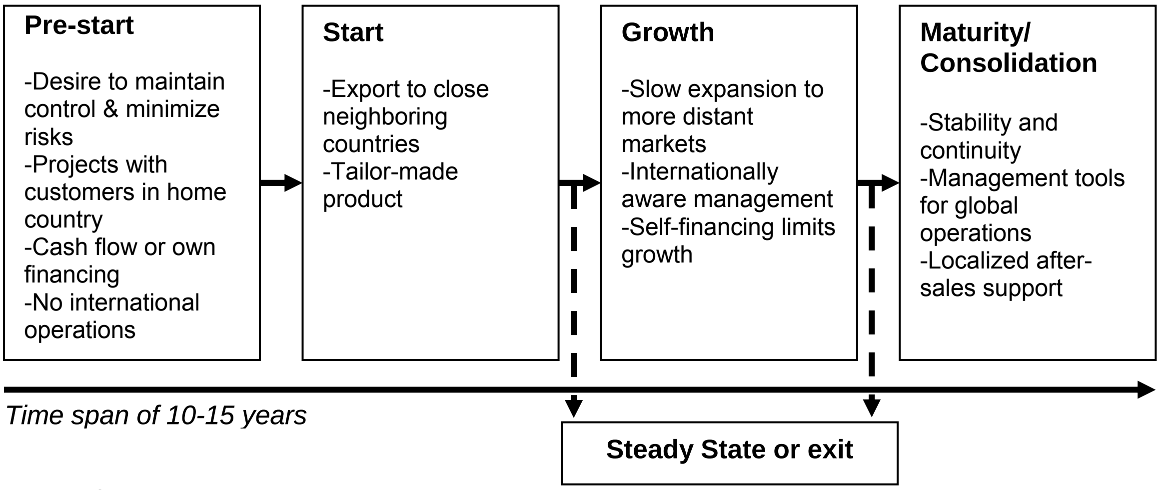


Figure 13: Organic growth pathway.

Accelerators

In order to proceed to maturity and especially to jump to a faster pathway, the firm needs to be able to trigger its growth with the following accelerators:

- There is often a necessity to look for additional sources of funding, as self-financing may limit growth. This means that owners need to accept the loss of some control. The investors often want to bring in new board members and even new management to look after their investment.
- Strong "productization" competence, new innovative business concept or other triggers or critical incidents for internationalization such as new management, new foreign customers, etc.

In general, organic growth may not be as exciting as accelerated growth by born globals. However, properly planned and executed, this pathway can sometimes provide even more success, especially in the long run.

Organic growth pathway – real life examples*

- Tietoenator and most of the software service providers and tailor-made software producers
- Stonesoft Corporation is an example of a born-again global company. This term reflects a firm that initially operates in the domestic market and after a certain critical incident or trigger starts rapid internationalization, i.e. “jumps to the other ladder” in the pathway hierarchy. In the case of Stonesoft the trigger was a new, successful product and, subsequently, growth in resources through the IPO.
- Liinos: after almost twenty years of organic growth and some attempts of international operations the firm went public and was later acquired by a Norwegian company called Visma ASA. Thus, a firm became part of the international network through new ownership. The Finnish unit is now part of the Nordic IT group. Although Liinos was relatively experienced, its management saw internationalization as a problematic issue.

Productization: Most software vendors use the term "productization" to mean the phase of software development where the technology is "hardened" so that it can be delivered to customers who might have a wide variety of systems that need to be supported. Source: Novell.com

* These examples are based on information available in public sources

5.4. Model of Internationalization Pathways

As indicated earlier, the model developed here divides the pathways into 4+1 stages: **pre-start**, **start**, **growth** and **maturity/consolidation stages**. The fifth, “plus” stage is labeled in accordance to the model of McHugh (1999) as a **steady state**. The firm with limited ambitions and other inherent constraints may often slip into this stage. Even for many software firms a high growth phase is neither appropriate nor desirable as it includes high risks.

Those firms that aim for growth must fulfill various requirements and overcome many challenges to move on to the next stage on the pathway. Some of these requirements are obligatory; they serve as prerequisites or “thresholds”. That means that the firm needs to be at least as good as its competitors to be successful. Figure 14 shows the different pathways and challenges that need to be tackled before the firm is able to move to the next stage. A firm can also switch from one pathway to another or drop into the steady state zone (indicated by a STOP sign in the figure) or fail altogether. As mentioned before, the drop means that the firm has weaknesses in some prerequisites for success.

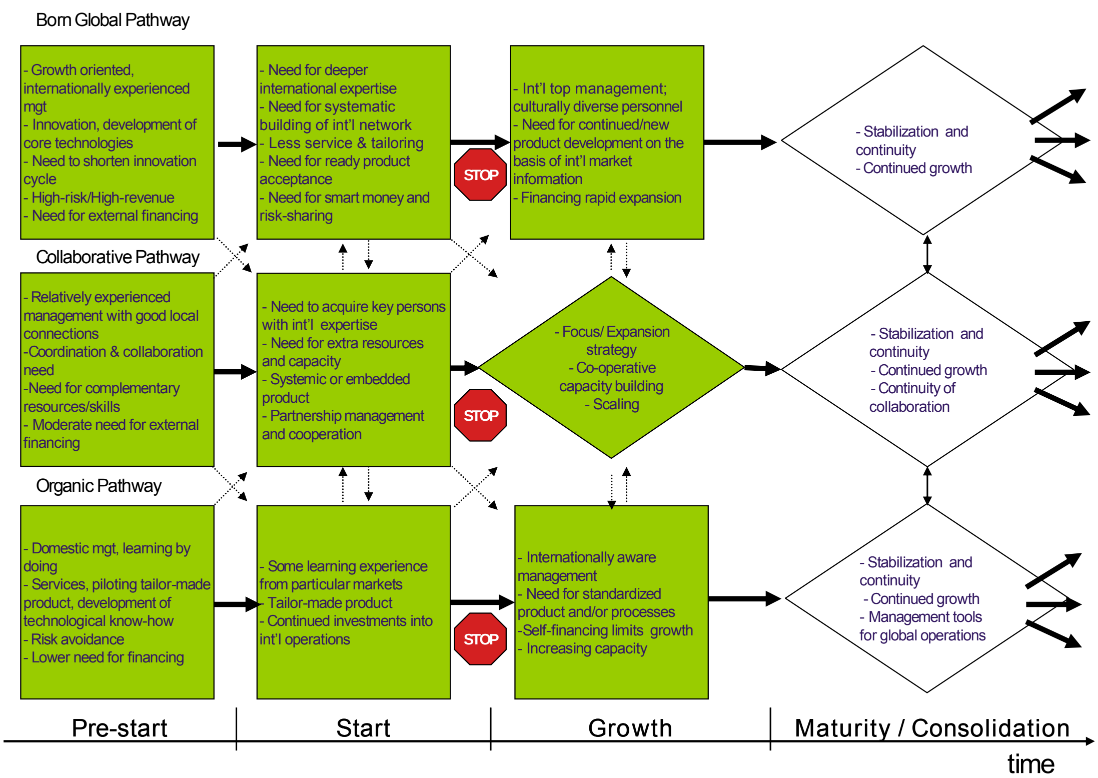


Figure 14: Requirements and challenges in different stages of the international pathways

There are two notions which need to be emphasized. Firstly, firms can "feed the growth" by using various strategies. Some common solutions and actions in the software firms are presented in Figure 15. Secondly, some of these are prerequisites as described earlier and some are “accelerators” which trigger the firm to more rapid growth or they may also trigger a firm to change its pathway, for example, to the born global path from another one.

For example, if a firm has previously searched growth in an organic manner, growth generated by its own means, it could switch into seeking growth through acquisition, for example, if it received external funding.

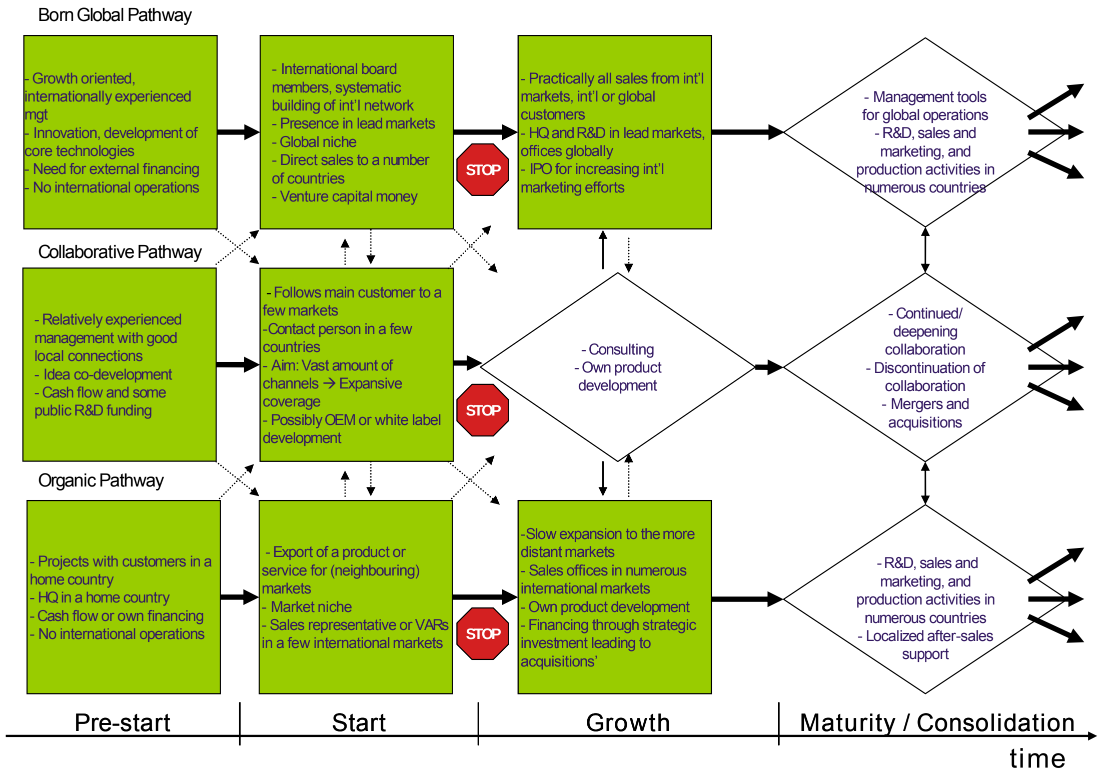


Figure 15: Typical solutions and actions along different pathways

It is also obvious that a firm needs a well-defined growth strategy to be able to get into a high growth stage. From the management perspective the life cycle of the firm can be seen developing through crises or "critical incidents." During such crises firms typically change their strategies (see e.g. Oesterle 1997, Greiner 1998, Bell et al. 2001). Greiner notices that the firm's need to grow and to manage the growth can bring forth a crisis that may force the firm to reorganize. Bell et al. found that a management change can get a firm to rapidly internationalize after many years of domestic operations.

One of the greatest challenges for the management is to actually manage rapid growth. The managers need to be able identify the areas where additional knowledge and capabilities have to be developed or acquired. It is a challenge for managers to be able to create, develop and transfer knowledge relevant to the firm. This means that a supporting infrastructure needs to be built, which focuses on financial management, new employee training programs, and customer relationship management.

Why it did not work out?

Some reasons for the unsuccessful internationalization stories:

- Timing: A data security company with a good product and plenty of technological knowledge did not succeed due to a slow start in internationalization. They did not realize that success in global markets would have required timely moves to attain a sufficient market share before their competitors.
- Technology driven: Technologically oriented firms can face problems if the markets are not ready to adopt their products or if the infrastructure to support their technology is not ready.
- Marketing driven: Riot-E used co-branding to create awareness and interest for the firm's mobile games. However, the quality of their products did not support their image. They were *market oriented* instead of *customer oriented*. Finally, fixed costs mounted too high as they built up their organization and established multiple overseas offices. They went bankrupt in 2001.
- Poor Due Diligence: The mobile telecom operator and Internet provider, Jippii, entered the German markets in 2000 by acquiring Jippii Gmbh, a subsidiary. They were not aware that the acquired telecom firm was already highly indebted. Within a year they found themselves in insolvency. In addition to lack of diligence, the management of the acquisition was not well planned.
- Innovativeness: Firm X was full of visionaries who were continuously developing new products. This lead to chaos, too much optimism, and high risk-taking. High-risk acquisitions were conducted without proper integration. Because of a lack of communication, the management was not informed about the losses the firm was incurring. In the end, the firm did not have enough resources to endure the risks it had taken.

Matchon Sports – An example of why it did not work out.

At the turn of the century, Matchon promoted itself as a sports portal that would change the way people enjoyed live sports. The aims of the company were to rapidly internationalize and to provide live sports entertainment to people "keen on sports" through global digital media. The company used leading-edge technologies to capture sporting events as they happened and for distributing them live to mobile phones, handheld devices, and the Internet.

Matchon readily attracted venture capital for the development of real-time digitization technology. The numbers of employees increased rapidly from one to forty in Finland and to twenty in their established UK subsidiary. The firm raised total funds of 7 million euros (FIM 44 million) on four occasions within a period of 18 months. However, the rapid growth had heavily increased the fixed costs and at the same time the financiers were getting cautious about all the dot.com problems. The company started to streamline its operations and cut the number of employees to twelve.

Even if the company had just succeeded in getting the betting license for the UK market and the technology was completed, it ran out of money. In retrospect, the main reason for the failure was in timing. On one hand, the evolution of the firm's business model from content provision to technology happened too late. On the other hand, the firm became one of the first Finnish victims of the emerging dot.com bust.

5.5. Summary of Pathways

The typical characteristics of each pathway are summarized in Table 4 below. It cannot be overemphasized that the firm must constantly analyze its level of capabilities and skills. This book provides a list of important dimensions which shape the firm's internationalization in the form of requirements, challenges, solutions and actions. Some of them are prerequisites to being able to compete internationally and others are accelerators which lead a firm to a faster growth and possibly to the born global pathway.

Table 4: Summary of internationalization pathways

PATHWAY	LEVEL 1 PRE-START	LEVEL 2 START	LEVEL 3 GROWTH	LEVEL 4 MATURITY/ CONSOLIDATION
ORGANIC	•Idea, development of technological know-how •No previous international experience, learning by doing	•Tailor-made •product •Reactive, Ad hoc internationalization, opportunity rather than plan •Nearby markets	•Slow growth, bootstrapping to new markets •Transition from project-based to product business	•Building and growing the international network •Possible transformation to Born-Again-Global firm
COLLABORATIVE	•Idea co-development, piloting with other (large) firms •Social networks	•Customer followership (possible OEM or White label) •Systemic product?	•Productization and leap-frogging to born global pathway, or drift to organic slower growth	•Continuing collaboration vs. dissolution
BORN GLOBAL	•Innovation, development of core technologies •Internationally Experienced management •Growth orientation	•Packaged product and/or global niche •Proactive, systematic building of international network •Lead markets	•Fast growth, external resources for marketing and financing the growth •Growing the international network	•Active management and maintenance of international network •Expanding product range, continuous innovation

Proactive or reactive internationalization?

As mentioned earlier, the main tenet of this book has been that proper (proactive) strategic planning and related analyses can improve the chances of success. However, in many cases firms find themselves going down one pathway or another and acting reactively in each important stage of its life-cycle. Choices related to markets, operation modes and internationalization path are often reactions to foreign customers and therefore reactive. Sometimes even pure luck may lead the company to a particular choices and position. In any case, firms may need advice on particular decisions such as market development, growth strategy or withdrawal, no matter whether proactive or reactive.

The second part of this book provides more tools to analyze the readiness and maturity of the firm in terms of internationalization. It includes also a self-administered rating system in which a firm can rate the level of its resources, knowledge, competences and skills. The aim is to enable a firm to make a critical analysis that can provide a basis for a successful internationalization strategy. We believe that a following workbook in Part II of this handbook can be helpful in this kind of situations. It offers a systematic framework through which a firm can de-mystify internationalization and gives a basis for the planning of internationalization strategy.

6. How to Get into an Accelerated Pathway?

Summary of the seven key factors contributing to successful internationalization

The following success factors appeared in the previous pathway analysis. They have also been identified in a wide range of other studies and practice. The list is not exhaustive, but it helps to clarify the overall picture, and, hopefully, it will prove to be a source of encouragement for those wishing to be involved in successful international software business.

1. Mindset

Since internationalization for Finnish software firms is imperative, the management team and all the recruits of the firm must – sooner rather than later – be able to view their business opportunities from a global perspective. In practice this entails managers' openness to and awareness of cultural diversity and their ability to handle it. The right mindset is reflected in the proactive and visionary behavior of the manager and in his preparedness to take risks in building cross-border relationships.

2. Experience

Even in the world of global consumers or standardized demand the crossing of borders still means a higher level of uncertainty and many kinds of discontinuities. This is demonstrated for example by differences in language and culture, as well as by differences in regulatory and competitive landscape. Previous experience is of great importance and the top management team of the firm is probably its most critical resource. Managers who have previous exposure to international professions are likely to be more aware of the challenges and also of international profit opportunities than persons who do not have such experience. In other words, they have been able to learn from their previous experience and can bring in a valuable contribution.

3. Customer-centric product

> *"The product idea is where all software adventures begin, and on whose strength much of the company's future success depends."* (McHugh 1999)

It is well recognized that products based on the best technology don't always win. However, "a strong" product is without doubt a prerequisite for successful growth and internationalization of the firm. McHugh has distinguished five characteristics of a strong software product, which are presented in Figure 16. In a nutshell, a strong product is one that is customer-centric. It is rooted in familiar territory but offers something unique, it keeps up with market developments targeting a definite market need and is continually evolving. The latter means that even if a company becomes well established, it must continue to launch new products and enhance existing offerings.

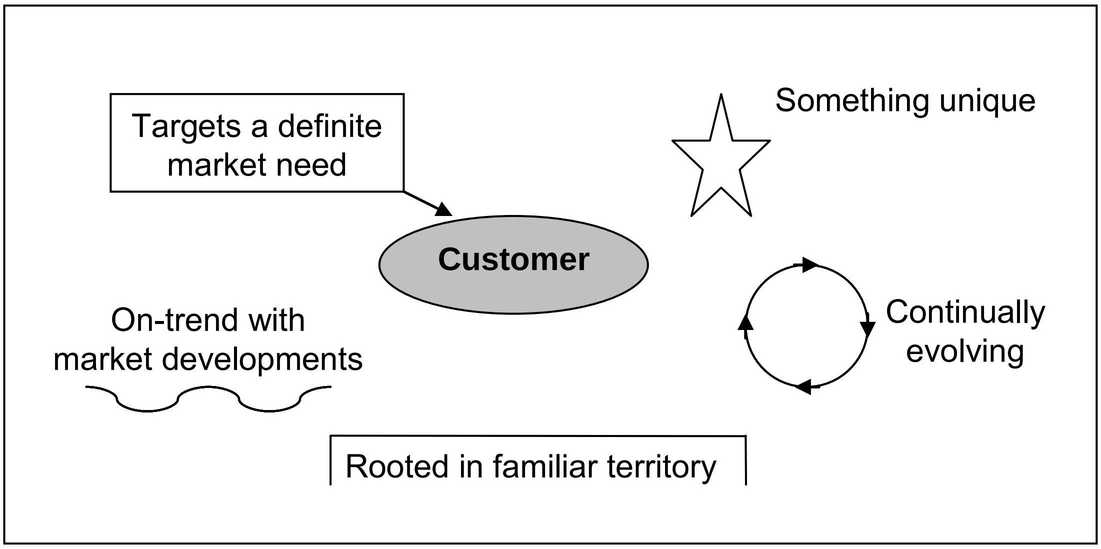


Figure 16: Characteristics of a customer-centric product (McHugh 1999)

4. Right partners

Small software firms frequently rely on “hybrid” governance structures in their internationalization, i.e. partnerships, strategic alliances and networks with other firms. Partnering with more established industry players may provide the firm with a variety of resources and legitimacy that help the firm to enter international markets more rapidly and intensively. A low-cost alternative to vertical integration is thus offered. However, it should be noticed that if other firms are to be utilized to leverage the firm’s own resource-base, a whole new set of tasks is introduced to management. In fact, the challenges in managing the partnering relationships mean that there is no guarantee to a firm’s successful internationalization.

There may be a danger that a partner behaves opportunistically and does not conform to the rules and/or contract agreed upon. For example we have witnessed the case of large Japanese firms forming predatory alliances with American high technology small firms. Nevertheless, this risk has to be taken when resources are scarce and, consequently, when it is impossible to make for the firm to make its own big investments e.g. in the form of subsidiaries. A firm may partner with firms from the home country, or from the host country. The latter might be supposed to lead to speedier internationalization as the firms from the host country may be better established and have better market knowledge.

5. Speed

“Speed is king” and “time is money." In most software firms the time-to-market is very critical. In trying to guarantee success, firms aspire to achieve a “first mover advantage” and “lock-in” the potential customers before competitors. These factors provide jointly a trigger for the company to adopt an accelerated pathway to international markets.

6. Growth management

As the company moves out of the start-up phase, the degree of management complexity increases, as the number of employees multiply and foreign operations are added to the organizational structure. Maintaining management stability and minimizing disruption are critical success factors in software firm's growth and internationalization.

While it is very difficult to generalize, McHugh (1999) has distinguished a number of specific milestones in terms of company size that govern the required management characteristics. Each milestone in Table 5 below is likely to require transformation in management style, adding new management layers and further formalization of key functions.

Table 5: Growth milestones and management requirements (adapted from McHugh 1999)

Company size	Management requirements
Up to 25 staff	Limited formal management needed; more teamwork and ad-hoc, creative management style. Often key functions covered by founding team, or if not, quickly resourced.
Up to 50 staff	First formal layer of management put in place, with staff typically organized along functional lines (e.g. sales, finance, development). Usually top team in place, and first external board appointments made.
Up to 150 staff	A layer of geographic operations (usually involving, as a minimum, local sales and support) is overlaid on the corporate functional structure, typically reporting direct to CEO. Additional corporate functions such as support, services etc. become more clearly defined.
Up to 250 staff	Formalized matrix structure combining function and geography. Fuller range of locally based functions (i.e. more than just sales and support) in key geographies, often operating under regional, then country structure.

7. Financing

The knowledge and capabilities of people are frequently considered as the most powerful resource of the small software firm. However, speedy and intensive internationalization of the firm demands also other resources such as financing. The entrepreneurs' own available funding falls short rather quickly and for the young start-up companies, the cash-flow is usually an insufficient instrument to finance growth and internationalization. At the same time, the firms commonly lack collateral and guarantees for getting bank loans. Even though there has been a radical change in the financial climate for software firms since spring 2000, external equity-based financing (in the form of venture capital) may still act as a potential catalyst for a firm's internationalization. The triggering effect of financing may be even more pronounced, if the investor itself operates on a global scale with wide industry networks that may support the firm in question.

7. Sources and Suggested Reading

Adizes, I. (1988). Corporate Lifecycles – How and Why Corporations Grow and Die and What to Do about It, Prentice Hall, Englewood Cliffs, N.J.

Andersen, O. (1993). On the Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies*, Second Quarter, 209-231.

Bell, Jim (1995). The internationalization of small computer software firms. *European Journal of Marketing*, 29, 60-75.

Bell, J., D. Crick., and S. Young (2004). Small Firm Internationalization and Business Strategy: An Exploratory Study of 'Knowledge-Intensive' and 'Traditional' Manufacturing Firms in the UK. *International Small Business Journal*, 22, 23-54.

Bell, J., R. McNaughton, and S. Young (2001). "Born-again global" firms – an extension to the "born global" phenomenon. *Journal of International Management*, 7, 173-189.

Bell, J., R. McNaughton, S. Young and D. Crick (2003). Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1, 339-362.

Bourgeois, Jay L. (1980). Strategy and the Environment: A Conceptual Integration. *Academy of Management* R. 5, 25-39.

Carr, N.G. (2003). IT Doesn't Matter. *Harvard Business Review*, May 2003, Vol. 81, Issue 51, p.41-49.

Cusumano, Michael (2004). The Business of Software – What every Manager, Programmer, and Entrepreneur Must Know to Thrive and Survive in Good Times and Bad. Free Press, New York, NY.

Farrell, Diana. (2004). Beyond Offshoring: Assess Your Company's Global Potential. *Harvard Business Review,* December 2004, Vol. 82, Issue 12, p. 82-90.

Greiner, L.E. (1998). Evolution and Revolution as Organizations Grow. *Harvard Business Review*, May-June, 55-67.

Hoch, D.J., C.R. Roeding, G. Purkert, S.K. Lindner & R. Mueller (2000). Secrets of Software Success – Management Insights from 100 Software Firms Around the World. Harvard Business School Press.

Jokinen, Jani-Pekka, Juhana Hietala, Markus Mäkelä, Petru Huurinainen, Markku Maula, Jyrki Kontio and Erkko Autio (2005). Finnish Software Product Business: Results from the National Software Industry Survey 2004. Helsinki University of Technology. Software Business and Engineering Institute: Institute of Strategy and International Business.

McGrath, M.E. (1995). Product Strategy for High-Technology Companies. McGraw-Hill.

McHugh, Peter (1999). Making it Big in Software – A guide to success for software vendors with growth ambitions. Rubic Publishing, England.

Melin, L. (1992). Internationalization as a Strategy Process. *Strategic Management Journal*, 13 (Winter), 99-118.

Moore, Geoffrey A (2004). Darwin and the Demon. Innovating Within Established Enterprises. Harvard Business Review, July-August 2004

Moore, Geoffrey A. (1995). Inside the Tornado: Marketing Strategies from Silicon Valley's Cutting Edge. HarperBusiness.

Moore, Geoffrey A. (1991). Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers. HarperBusiness.

Nukari, J., Saukkonen, J. and Seppänen, V. (2003). In Hyvönen, Eero (ed.) Ohjelmistoliiketoiminta, WSOY, Vantaa.

Oesterle, M-J. (1997). Time Span Until Internationalization: Foreign Market Entry as a Built-In Mechanism of Innovation. *Management International Review*, Vol. 37, 125-149.

Porter, Michael E. (1996). What Is Strategy? *Harvard Business Review*, Vol. 74, No 6, 61 - 78.

Rogers, Everett M. (2003). Diffusion of Innovations. New York, NY, Free Press.

Ryynänen, Leila-Mari (2004). Kehittämisestä kasvuun. KTM Julkaisuja 26/2004. Elinkeino-osasto.

Sheth, J. and R. Sisodia (2002). The Rule of Three: Surviving and Thriving in Competitive Markets, Free Press.

Puumalainen, Kaisu, Jari Varis, Sami Saarenketo, Jukka Niiranen, Kirsimarja Blomqvist, Olli Kuivalainen, Kalevi Kyläheiko, Jari Porras, Petri Savolainen, Veli-Matti Virolainen & Toivo Äijö (2001). Tietoliikennetoimialan PK-lisäarvopalvelutuottajat Suomessa – Telecom Business Research Center, Research Report 3, Lappeenranta 2001.

Äijö,Toivo S. (1996). Suomalaisyritys kansainvälistyy. Strategiat, vaihtoehdot ja suunnittelu. Fintra-julkaisu no. 82. Saarijärvi.

PART II INTERNATIONALIZATION WORKBOOK
- Analyses and Research in Support of Planning

Introduction: Strategic Framework for the Workbook

Part I introduced typical pathways to growth and internationalization and the critical issues involved in choosing the path. **The primary purpose** of this workbook in Part II is **to support the choice of a successful growth and internationalization path for software companies**. As stated in Part I, the choice of a path is not simply a matter of choosing products, markets, channels, partners and operation modes. These decisions should be seen as part of broader strategy, being core issues of a competitive strategy. Therefore, the choice of a pathway is all about choosing an appropriate growth and internationalization strategy for the company's competitive success. The choice needs to be supported by reliable detailed analyses.

The strategy of the firm is concerned with matching a firm's resources and capabilities to the opportunities and challenges arising from the external environment. Just as the choice of the growth and internationalization pathway is concerned with matching a firm's resources and capabilities to the opportunities and challenges arising from the external environment. Therefore, **the secondary purpose of this workbook is to support the beginning phases of strategic planning for growth and internationalization**, such as decisions on following types of issues:

- Are we ready for entering international markets: do we have the necessary resources and competences?
- When and how to begin exporting and internationalizing?
- Do we have all the necessary information on the international markets: institutional environment, customers, competitors, etc?
- Selection of the right business concept and business model
- Definition of the product concept
- Choice of product and target country
- Choice of channels and cooperation partners
- Choice of entry modes
- Do we have what it takes to succeed (basis of success) in international competition: superior customer benefit and superior competence?
- What are our most serious strategic challenges?
- Etc.

This list already underlines the need for extensive information and analyses in support of planning for growth and internationalization. The need for information will be discussed at the end of Section 1.3 on pages 50-57 below. It is important to note that this workbook cannot cover all of the analyses and the whole strategic planning process in any detailed manner in the limited space available. That is why the strategic perspective was introduced in Part I and why a brief introduction to strategic planning and its contents is included in Section 10 of the workbook.

A brief recapitulation of the strategic principles already introduced in Part I, and further elaborated in Section 10 at the end. According to the view adopted here:

> The central tasks of strategic planning are defining, building, utilizing, maintaining, and developing a company's basis of success that consists of superior benefit to the customer and superior competences as well as of threshold factors.

The strategy statement itself should ideally consist of at least the following three components:

1. Business concept or business model
2. Basis for success: superior benefit to the customer, superior competence and threshold factors
3. Strategic principles and strategic actions

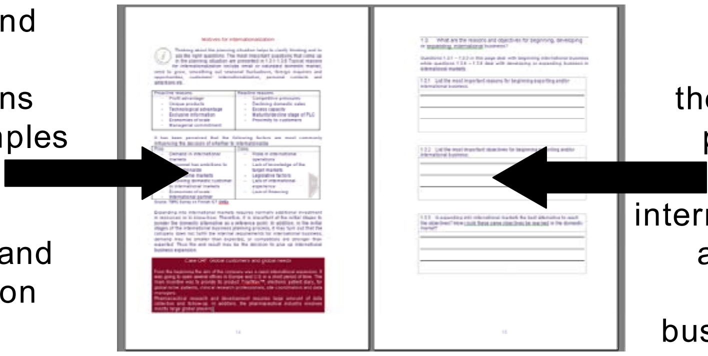
Basic pitfalls: Typical SMEs' shortcomings in strategic thinking and strategic planning

According to empirical research and observations, typical shortcomings in strategic thinking and strategic planning by SMEs especially at the initial stages of their internationalization include:

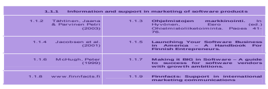
- Strategic thinking is often superficial
- SMEs are typically product and production centered, strictly based on the company's own internal perspective
- There is not enough information on customers and competitors. Competitors, especially, are not known in depth. SMEs tend to rely too much on the distributors for their information on customers and markets.
- Strategic planning often consists of simply budgeting and/or making operative annual plans
- Critical and profound understanding of the company's basis for success, core competence and competitive advantage is often lacking
- Product development and product concept is often technology and feature centered without a real customer perspective
- Companies do not realize that beginning exporting or internationalization is an investment that can take anywhere from 1-12% of turnover with an average of 2%, payback. Profitability may take years to realize (at least more than 1-2 years)

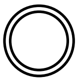
For more general problems with strategic thinking and strategic planning, please see Section 10 at the end. This workbook is also intended to help software companies avoid these kinds of basic pitfalls on their way to growth and international success.

Background info, instructions and examples to help the analyses and planning on the right



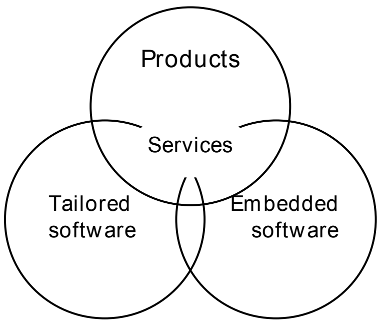
Questions to support the choice of the path to growth and internationalization and building of international business strategy

The left page contains supporting material for the analyses on the right page	
Symbol or style	**Explanation**
	Information about the reasons for the analyses and how they relate to strategic planning.
	Models, studies or other general background information for the analyses.
	Case examples from Finnish software industry: concrete solutions, actions and reasons behind them.
	Link to additional information on the topic in the Net or in literature

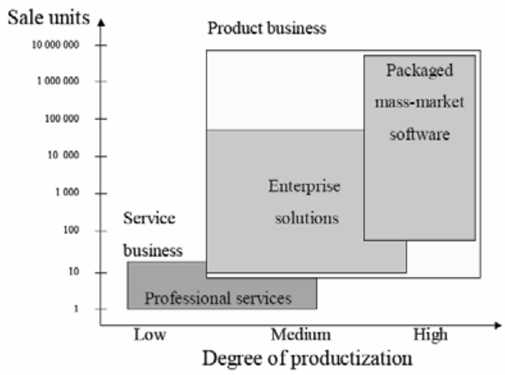
The right page contains questions to help analyze the company's internationalization capabilities and planning	
Symbol or style	**Explanation**
	Option, choose only one and look for more instructions about its meaning.
Very low / Low / Average / High / Very high 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐	Company ranking of its readiness or capabilities in a particular area. Tick one.
	Open ended questions. In many cases the issues require more contemplation than the space allows. Carry out extensive analysis elsewhere and include your summary or conclusions here. This makes it easier to communicate the conclusions externally.

The offerings of software companies can be grouped in three or four main categories. The typical classifications are *customer tailored software*, *embedded software* and *packaged software product*. Sometimes programming or support service forms its own independent type of offering. The terms that are used differ throughout the field, see figures below that present two versions of the classification of software offerings:

Product concepts in software business (see Question 2.1.3)



Nukari and Forsell 1999



Hoch et al. 1999

Also look at an example of more detailed classification of the software business in the North American Industry Classification System (NAICS), available at http://www.census.gov/epcd/www/naics.html

Cusumano (2004) gives his view on the "reality" of software business, in which he suggests that the ends of the business model spectrum, *product companies* and *service companies,* will not remain frozen in their own business model. Indeed, most of them are *hybrid solutions companies*. Warsta (2005) has also supported Cusumano's view and noted that the Finnish software product firms need to develop their service offering to remain profitable under economic downturns (as packaged software is something on which companies tend to cut down) and during the transitions between product generations. Thus, in a software product firm you should be prepared to internationalize your service as well – not just the product.

In the present workbook we have focused on software product companies, which may provide services as a value-added element in their offering. They are the firms, which are most likely to follow the born global pathway.

Moreover, those companies offering tailored software (or enterprise solutions) and professional services are able to get insights onto internationalization, even if their challenges differ in terms of marketing, management, market entry and so forth.

Particularly when your company is moving from tailored software to hybrid solutions and packaged software, when internationalization truly becomes an issue, this book gives valuable advice and support. As an established service or tailoring firm with experienced staff, you may tend to continue along a lower-speed organic growth path. However, in this workbook the analyses you make may convince you to accelerated internationalization, either with partners or by yourself.

In conclusion, the packaged software products companies have the lowest threshold to entering international markets. However, to be successful, the process of productization must be completed. Productization means standardization of the elements in the offering (see Part I, Chapter 5.3). Productization requires major changes in the ways a service or tailoring company operates. The table below illustrates the differences in business.

	Project business: tailored systems	**Product business: packaged software**
Central capabilities	Project marketing and management	Productization, channel management, alliance building strategic partners in the industry
Object of Exchange	Unique project designed and implemented in cooperation with the customer; designed for a certain hardware environment, service content high	Standard and/or modular products, designed for several different operating systems and hardware environments, service content low
Production	Activities within projects, production after sales, connections between all functions of the company, discontinuity between projects, deadlines crucial	Duplication, the production of updates or versions, production before sales, production function rather independent of other company functions
Customer base	Small, well-known customer base	Broad, faceless end-customers
Nature of markets	Familiar local/domestic, closed and networked	Distant international, open, competitive
Branding	Not important, market assets concentrated on key individuals	Central area of interest
Nature of exchange	Interactive, mutual, multi-faceted, long-term oriented, project-related exchange	Opportunistic, simple, short-term oriented, product-related exchange
Type of organization	Ad hoc project organizations	Market, product, or matrix organization

Source: Alajoutsijärvi et al. 2000

Now, as you have had a first glance at our workbook and its basic concepts, you may move into the analyses. Whether you are in the products or services business, you will hopefully appreciate the information and advice presented.

Remember: The more effort you put into going through the questions and reflecting on them in regards to your firm and business, the more this workbook can give you support and assistance in return. Also, check the left page if the terms and concepts we use are not familiar to you, and you can get some extra info.

Why is it important to stop and analyze the planning situation and the reasons for international expansion? The decision to try to speed up growth and expand into international markets is an important strategic decision. To be successful, you must be sure you have the required information, skills and resources; and you usually have to make extra investments. All this increases risks, while, if successful, it also promises higher rewards. Therefore, it is important to stop and take a serious look at the initial decision-making situation.

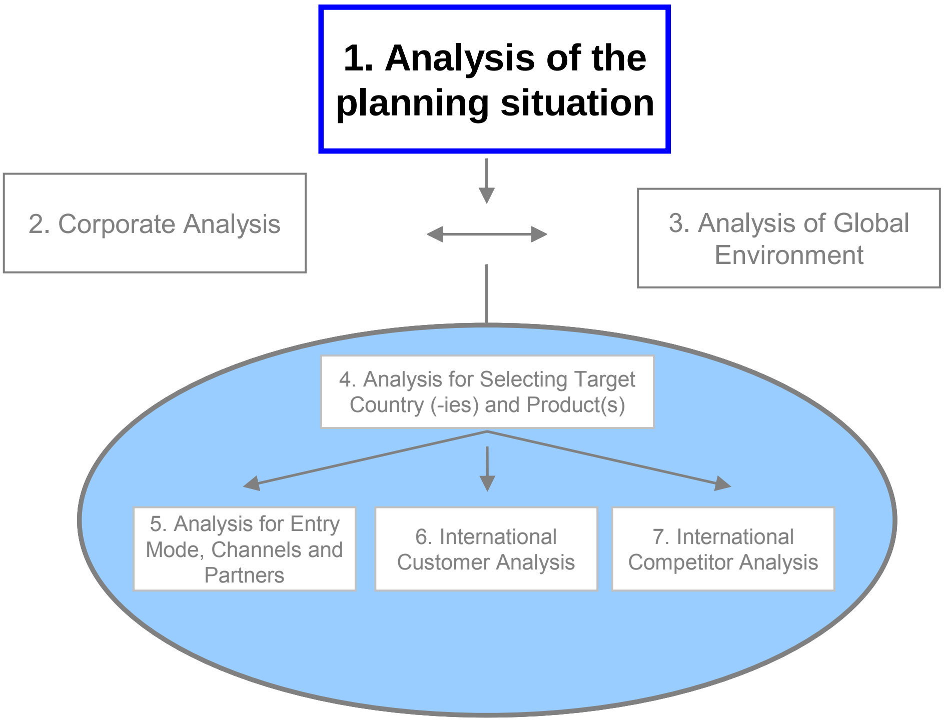
Part I introduced the typical stages of company growth and development in general, and of internationalization in particular in Chapters 1, 3, and 5. A serious look at the planning situation is typical at the beginning stages, defined alternatively as “courtship and infancy” stages, “conception/existence” stages, “version 1 and roll-out“ stages, or as “pre-star and start” stages in this book. A look at planning is, however, equally important at later stages, especially when a clear change of strategy is being considered.

Consequently, the fundamental questions are:

- “Where are we now in terms of growth and internationalization?
- “What are our reasons and objectives for trying to speed up growth and entering international markets?”
- “Which of the three paths introduced in Part I would seem to best suit our situation?

First, answering the questions helps you to understand better where you are in terms of the three basic types of starting situations that were described as part of the internationalization pathway model in Part I (Chapter 2, Choice of the pathway and internationalization strategy on p. 7-10). The three types were: 1. Small domestic firm with rapidly saturating home market; 2. Experienced medium-size or large domestic firm; and 3. Small start-up with a new innovation that requires immediate internationalization.

SECTION 1
WHERE ARE YOU NOW?



How much general business experience do we have?

How much international business experience do we have?

How important is it for us to grow and internationalize?

What are the motives and specific objectives for our internationalization?

1. Where are you now? – Analysis of the planning situation Reasons and objectives for internationalization

The questions in this section are so easy to answer that it is tempting to dismiss them as simplistic, but it is useful to stop and define your situation in a formal manner.

Going through this analysis helps you to see more clearly what is most important for you to concentrate on in later analyses and what challenges and problems are most urgent in your situation, you can ask yourself the following questions. "Do we have adequate financial and human resources?" and "Do we have the required skills and competences along with enough information on the markets, customers and competitors?" This topic is also covered in Section 4.

If the domestic market has stopped growing and/or it is already saturated, it is important to ask: "Is it easier to maintain domestic growth by innovating new products, extending product assortment and widening the customer base?" or "Are there untapped international markets that offer better or easier growth potential?" If the company is a startup, that is, a newcomer both at home and abroad, it faces double risks and challenges in internationalization. It is hard enough to succeed at home as a new entrepreneur, let alone as an inexperienced business in totally unfamiliar, highly competitive international markets. There is a need for a substantial investment in internationalization. At the same time the risks due to lack of experience and of market knowledge are high. In balance, a company in this situation must have unusually strong advantages to counterbalance the costs and risks, such as a unique product or business model together with internationally experienced managers (See Question 1.1.6. in Section 1).

It is impossible to present a planning model that would fit all situations. Contents and scope of planning vary in relation to company life cycle, internationalization stage, organizational level, scope of planning, and competitive situation. Thus the first question is: what is the strategic planning situation of the company and what are the special challenges of the company's situation? The company might have several strategic business units (SBUs) that have different internationalization stages and planning situations. In addition, development stages and competitive situations may vary in different market areas. Therefore, the same issues may not be equally relevant or as important to companies in different planning situations. In this workbook, the purpose is to present a general planning model that would serve as a good checklist for planning for as many companies as possible, even if their situations and planning needs might not be identical.

1. Analysis of the Planning Situation

1.1. What is the planning situation of the company?

Use this analysis for choosing the appropriate place to continue in Section of 1.3., beginning on page 51.

1.1.1 Is the company a start-up, newcomer in both domestic and international markets? → While all analyses are important, in this case it is most important to clearly analyze the basic motives and reasons for internationalization as opposed to domestic development, as well as to especially concentrate on the corporate analysis in Section 2.	◯ → 1.3.1
1.1.2 Is the company already well established in the domestic market and interested in starting exporting or international business for the first time? → In this case, it is important to analyze the motives for internationalization as opposed to continuing at home. When carrying out the analyses in Parts 2-5, it is crucial to ask: does the domestic strategy and basis for success work in international markets, what changes are needed, and do we have what it takes to expand internationally.	◯ → 1.3.1
1.1.3 Is the company already engaged in international business, but experiencing slow growth or other problems? Have international sales stopped growing or do they grow slower than desired? Is the company trying to solve some other new problems or challenges in international business? → This calls for a strategy for faster growth of international sales and/or for a change in strategy to solve the new problems. Special attention may have to be paid to customer and competitor analyses as well as to analyzing the basis for success. (Sections 6-8)	◯ → 1.3.4
1.1.4 Is the company engaged in basically successful international business, but trying to expand it by adding new types of products or entering new markets or changing its whole business model? → This situation calls for sharpening, developing or changing international competitive strategy. In this case the emphasis is on analyzing the markets and entry modes (Sections 4-5) or on strategy analysis (Section 6-8, and 10).	◯ → 1.3.4
1.1.5 Does beginning or changing the international business involve several different product groups, strategic business units (SBU) or several different markets? → This calls for separate analyses and strategies for each product line, strategic business unit or market.	◯ → 1.3.1. and 1.3.4.
1.1.6 What are the most important strategy challenges (difficulties) and tasks in the company's planning situation? ____	

1.2. Internationalization level and capabilities

Each company has its own view of its capabilities for internationalization. An objective analysis of the situation can be difficult to make, but the following six dimensions that are used in the corporate analysis of the workbook can assist in self-evaluation:

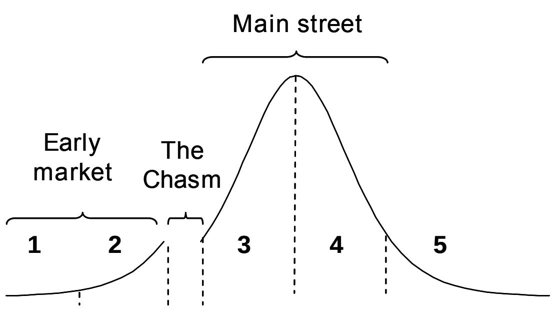
Questions 1.2.1-1.2.6:

1. The degree of internationalization
   - Share of international turnover and number of countries and foreign customers
2. Entry modes and channels
   - Utilization of market entry modes and channels for internationalization. With which means and intensity is your company capable of entering international markets
3. Management resources and skills
   - Company management's capabilities and experience in international operations
4. Product
   - International potential in technological and marketing perspective
5. Product life-cycle (PLC) (see below)
6. Financing
   - The company's financial capabilities for successful international operations

Question 1.2.5: Product /Technology life-cycle
Is your company's product(s) before, in, or over the chasm?
If your product is in the growth stage in which it attracts some pragmatists, it may have high or very high internationalization capabilities. If it appeals only to technology buffs, you have a long way to go to cross the chasms. At the other extreme, if it has only laggards as customers, it probably has a very low international market potential. (See Moore's model in Part I).

Moore (1991) classifies the phases and adopters of high-technology products as:

1. Innovators = technology enthusiasts at introduction and early market stage
2. Early adopters = visionaries in early markets
3. Early majority = pragmatists at mass market adoption and growth stage
4. Late majority = conservatives in mainstream mass markets
5. Laggards = skeptics in end-of-life markets



A chasm exists between visionaries and pragmatists and transition from one group to the next is not easy.

You can get a general idea of the level of your internationalization by filling in the questionnaire on the right-hand page. Add up the points and compare them to the interpretation below:
6-10 points: very low level; 11-15 points: low level;
16-20 points: average level;
21-25 points high level; and 26-30 points very high level.

1.2. How would you evaluate your company's level of internationalization capability?

This is meant to be a preliminary ("quick-and-dirty") assessment of your company's internationalization capabilities and/or resources before going into detailed analyses. You may first want to evaluate them roughly before doing any deeper analyses in the following sections, and revise your rankings after you have gone through the Corporate analysis in Section 2. Compare the results to the final analysis in Section 9.2. Evaluate your company's level of internationalization capabilities in terms of the following six aspects on the scale from 1-5, where 1 is very low and 5 is very high:

1.2.1 The degree of internationalization

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

1.2.2 International distribution, channels and partnering

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

1.2.3 Management and HR resources and skills related to internationalization

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

1.2.4 Selling, marketing and customer relationship management

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

1.2.5 Product/production/R&D/technology life-cycle (PLC) in the context of international market development

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

1.2.6 Financing for internationalization

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Compare your **Total score** →
to the table on the left ☐

1.3. Motives and reasons for internationalization

Exploring the planning situation helps in clarifying your thinking and in asking the right questions. The most important questions that come up in the planning situation are presented in 1.3.1-1.3.6. Typical reasons for internationalization include small or saturated domestic market, need to grow, smoothing out seasonal fluctuations, foreign inquiries and opportunities, customers' internationalization, personal contacts and ambitions, etc.

Surveys and research suggest that the factors in the table below most commonly influence the decision of whether to internationalize.

Pros	Cons
- Demand in international markets	- Risks in international operations
- International ambitions of the management	- Lack of knowledge of the target markets
- Small home market	- Legal problems
- Following domestic customer to international markets	- Lack of international experience
- Economies of scale	- Lack of financing
- International partner	

Source: TBRC Survey on Finnish ICT SMEs

Reason to internationalize can be *Proactive* *or*	*Reactive*
- Profit advantage	- Competitive pressures
- Unique products	- Declining domestic sales
- Technological advantage	- Excess capacity
- Exclusive information	- Maturity/decline of the PLC
- Economies of scale	- Proximity to customers
- Managerial commitment	

Expanding into international markets normally requires additional investment in resources or in know-how. Therefore, it is important at the initial stages to ponder the domestic alternative as a reference point. In addition, in the initial stages of the international business planning process, it may turn out that the company does not have the necessary resources or competences for international business, demand may be lower than expected, or competitors may be stronger than expected. Thus, the end result may be the decision to give up the expansion into international markets.

Case CRF: Global customers and global needs

From the start, the aim of CRF was to initiate a rapid international expansion. It was going to open several offices in Europe and in the US in a short period of time to provide its product, *TrialMax™*, an electronic patient diary, for a global niche: *patients*, *clinical research professionals*, *site coordinators* and *data managers*.

Background: Pharmaceutical research and development requires large amount of data collection and follow-up and thus the industry involves mostly large global players.

1.3. What are the reasons and objectives for beginning, developing or expanding international business?

If you ticked Question 1.1.1, 1.1.2. or 1.1.5.,
you should go through the questions 1.3.1 – 1.3.3 on this page.

1.3.1 List the most important reasons for beginning exporting and/or international business:

1.3.2 List the most important objectives for beginning exporting and/or international business:

1.3.3 Is expanding into international markets the best alternative to reach the objectives? How could these same objectives be reached in the domestic market?

Motives and reasons for change in internationalization strategy

Changing a strategy is generally the alternative that demands more resources and skills. That is why it is important to ask whether or not it is possible to reach the same objectives by improving or developing current business (See growth strategies on page 130). A framework to support management decision-making on internationalization has been presented by Solberg (1997). He presents nine strategic windows of internationalization, based on two dimensions: the level of company preparedness for internationalization, and the degree of industry globality:

PREPAREDNESS FOR INTERNATIONALIZATION			
Mature	Enter new business	Prepare for globalization	Strengthen your global position
Adolescent	Consolidate your export markets	Consider expansion in international markets	Seek global alliances
Immature	Stay at home	Seek niches in international markets	Prepare for a buy-out
	Local	**Potentially global**	**Global**
		INDUSTRY GLOBALITY	

Source: Solberg 1997

With the help of corporate analysis (Section 2), you will be able to evaluate your company's readiness for internationalization. Industry globality depends on your company's offering. If you are in the packaged software product industry, your industry is global, whereas when you are in the software service or tailored software industry, you operate in a potentially global or in some rare cases in a local industry.

If you ticked any of the Questions 1.1.3. – 1.1.5. you should continue from here.

Questions 1.3.4-1.3.6 deal with developing or expanding business in international markets.

1.3.4 List the most important *reasons* for changing or expanding international business:

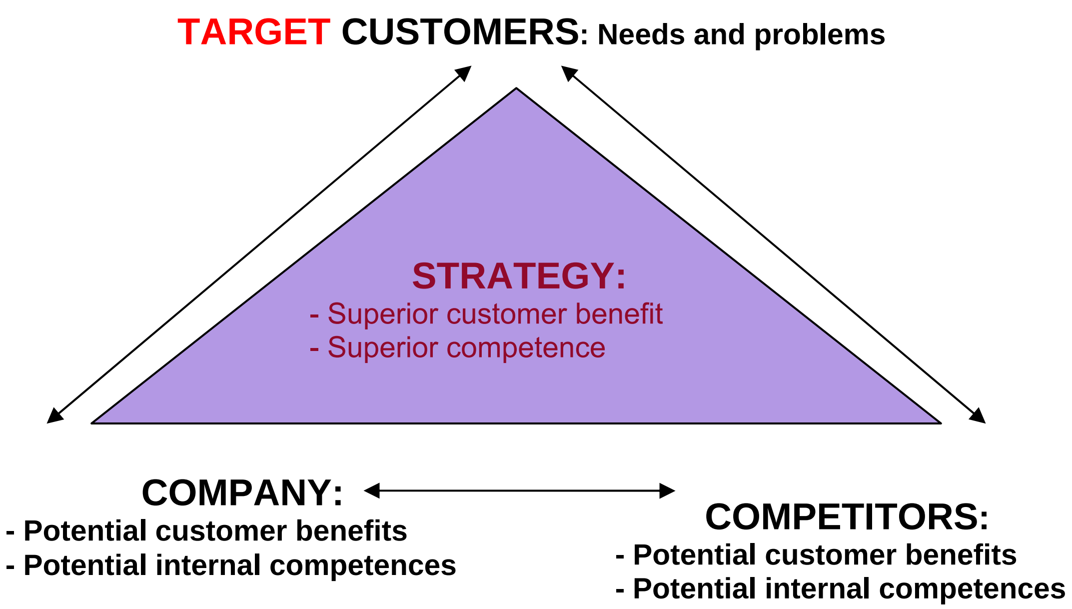
1.3.5 List the most important *objectives* for changing or expanding international business:

1.3.6 Describe how these same objectives could be reached in current markets and by developing current business:

The three “C”s of strategy formulation: The strategy triangle

Strategic planning for successful growth and internationalization requires sufficient and pertinent information.

The rule of thumb is that the company must have its own first-hand information about the customers, competitors and the market conditions. There are no general rules as to how much information is necessary and how to gain it, as it all depends on the situation. There has to be an understanding that the less information, the higher the risks. Usually, in highly competitive mature markets a successful competitive strategy requires a wealth of detailed information. On the other hand, in the case of introducing a unique innovation into rapidly evolving markets, the company may decide that there is ready demand and that “the window of opportunity” is open and that the company must move fast. In this kind of pressing "high yield-high risk" situation, it may be wise to move as fast as possible without conducting time-consuming and expensive market studies.



In all cases, however, the minimum requirement is to have realistic first-hand information that enables the company to understand the basis of its success (that is the heart of its competitive strategy). “Where can the company, in the eyes of its intended customers, be clearly better than its competitors?” This then becomes its superior customer benefit: this superior customer benefit is the reason why customers buy from the company and not from its competitors. The superior customer benefit, in turn, is based on some internal superior competence. See Section 10 for a further discussion of international business strategy.

It is thus obvious that a strategy cannot be planned without sufficient reliable knowledge of its customers and competitors. The company must be able to compare its potential benefits to its customer needs and problems in comparison with the potential benefits offered by competitors. This analysis is an iterative process that should end up in providing a clear definition of the core of the competitive strategy. Naturally, sometimes the verdict is that our benefits are not good enough in the particular competitive situation. In this case, the company must then ask: can we strengthen our customer benefits and underlying competences sufficiently.

When this analysis is finished, the company's target market is also defined: the target market consists of only those types of customers that value the superior customer benefit offered by the company so much that it determines their purchasing decision in favor of the company. To try to pursue any other types of customers is a waste of effort.

Strategic planning should be based at least on the following types of analyses:

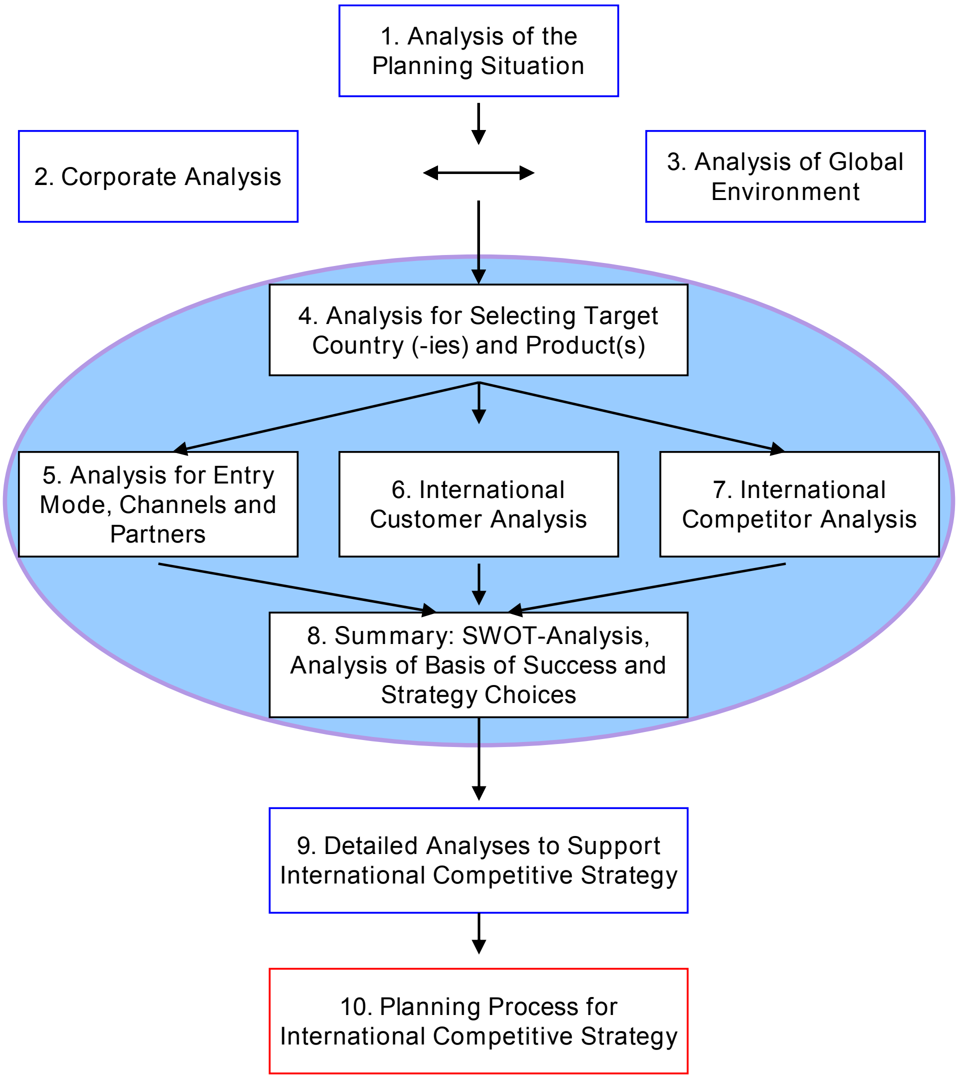
- Corporate analysis (see Section 2)
- General environmental and trend analysis (see Section 3)
- Analysis for selection of product and target market (See Section 4)
- Analysis for selecting a business model – channels and co-operation (See Section 5)
- Customer analysis (see Section 6)
- Competitor analysis (see Section 7)
- Summary: SWOT-analysis, analysis in support of the strategy (see Section 8)
- Detailed analyses for target market selection and strategy formulation (see Section 9)

More specifically, the types of analyses carried out must be related to the steps in the strategic planning process for internationalization. On the following pages, there are two simplified charts describing the role of research and analyses in support of strategic planning. However, it is important to realize that there is no single correct or logical order in which the analyses or the steps should be presented as the specific order depends on the planning situation in which the company finds itself. Also, as is evident in the chart, everything is interrelated, and several types of analyses are needed to support decisions in different stages of the strategy process. In addition, analysis and planning constitute a simultaneous and iterative process.

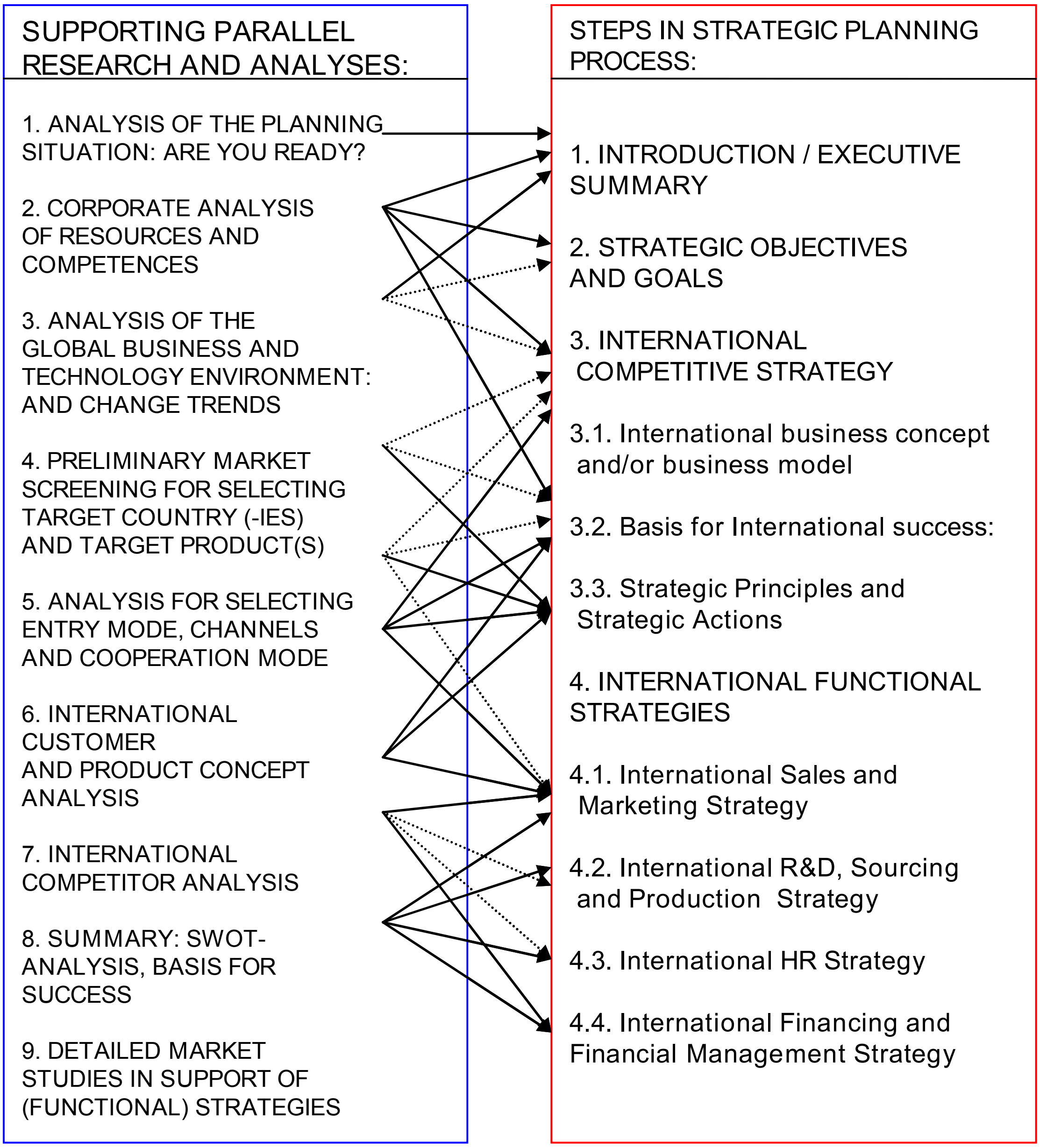
In summary, the top management must decide as to the proper approach and order of analyses and planning steps most suitable to the company and its planning situation. The lists and order of presentation used in this book should be taken as one possible approach, and, in any case, it serves as a useful checklist for all companies and situations. The choices involved are discussed and illustrated in greater detail on the next two pages. Even if there is no single correct place to start from, we can present typical situations. Thus the analyses of the planning situation, of corporate resources and competences and of environmental forces typically come first, especially if we are at the beginning stages of internationalization.

The chart below attempts to illustrate the fact that many of the analyses (especially the ones within the blue area) take place more or less simultaneously. For example, selecting a target country requires quite a lot of information about customers, competitors, and channels. Sometimes we first analyze several markets in depth, and make the target market selection after these analyses.

Since we are required to present things in a linear fashion, in this workbook, we have adopted the order of presentation indicated by the numbers in the boxes. There is a similar presentation dilemma with respect to strategic planning. Some of the analyses should clearly be performed before the strategic planning process as illustrated below. Just as well we can argue that most of the analyses can, and should, be concurrent to and support the planning process. This approach is illustrated by the chart on the following page. The arrows in that chart attempt to illustrate the fact that "everything affects everything else," that is, most analyses contribute to each other and to several areas of the strategy. Strategic planning will be introduced briefly in Section 10 of the workbook.



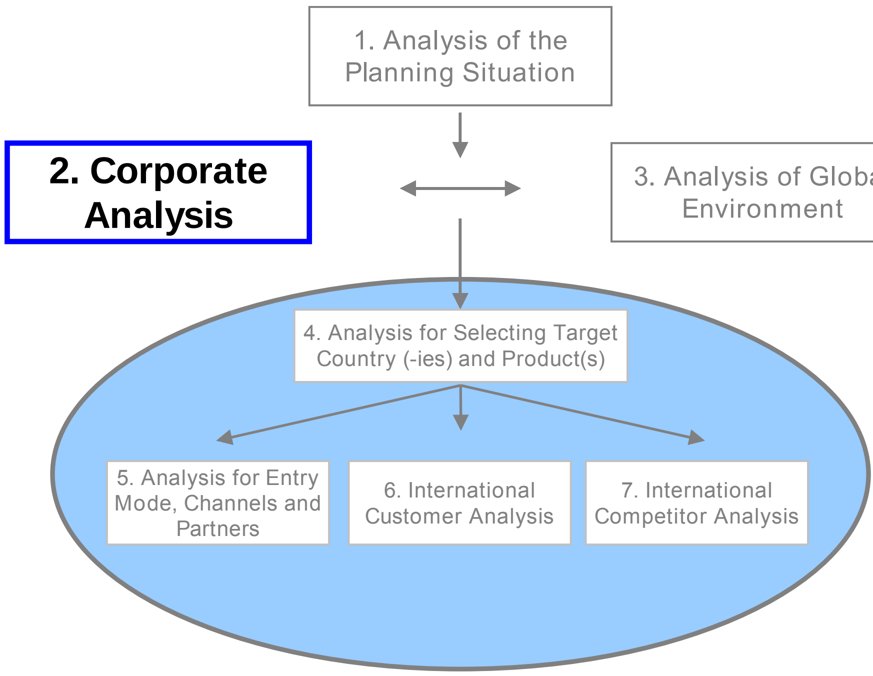
Analyses and research in support of strategic planning for growth and internationalization



The basis for competitive success begins with understanding your own strengths, weaknesses, resources, skills and competences in relation to your intended customers and in comparison to your competitors. This was already touched on in Chapter 2 of Part I, where we pointed out that in the beginning stages of internationalization it is important to ask “Do we have adequate financial and human resources?” and “Do we have the required skills and competences, and do we have enough information on the markets, customers and competitors?”

These issues were discussed further in several places in Part I, especially in Chapter 4 in terms of external requirements and challenges for Internationalization (Table 2, p. 17) and in Chapter 5 Pathways to growth and internationalization. In Chapter 5 the three major pathways were described with their typical prerequisites and accelerators. Corporate analysis helps you to understand and analyze the internal prerequisites and accelerators. Some of the facts are also included in the seven key factors contributing to successful internationalization in Chapter 6, How to get into an accelerated pathway.

SECTION 2
ARE YOU READY?



Do we have the necessary skills and resources?

Can our managers and employees succeed in international business?

Are our owners and board members fully committed to internationalization?

Is our product ready? Do we have financing, sales & marketing, production, delivery and channels in place?

2. Are you ready?: Corporate analysis

All the internal factors that affect the company's business and competitiveness are included in the corporate analysis. Often the actual (physical) corporate resource factors are separated from competencies and skills. Resources are typically connected with one of the company's basic functions, such as management, R&D, technology, production, sales, marketing, financing, and HR. They can be used for evaluating competences and skills, such as, innovativeness, speed, flexibility, cost efficiency, etc. There is an example of a list of questions concerning the company's resource and skill factors always on the right-hand page. Complete the lists with issues relevant to your firm.

When making this analysis, perceive it from the angle: ***What should be improved, added or developed to become competitive and succeed in international operations?*** After carrying out all the analyses, ask yourself: ***Where are my bottlenecks?*** The conclusions from the results of this analysis are transferred to Section 8. SWOT-analysis.

Resource-driven vs. market-driven approach to strategy

Analysis of corporate resources, skills and capabilities touches on an interesting issue that is often referred to as the resource-based view of the firm that has come to dominate the field of strategic management since the early 1990's. It has supplanted an earlier approach that is often characterized as a market-driven approach to strategy. These approaches have also been called simply an "inside-out" and "outside-in" perspectives. The defining question is, **where does the basis of competitive success come from?**

The proponents of the outside-in or market-driven approach emphasize the need to analyze the competitive forces in the marketplace, select the most attractive domain and position the company in terms of competitive tools. The proponents of the inside-out or resource-based view argue that the key to success lies in identifying and developing internally the hard-to-imitate organizational capabilities that distinguish the company from its competitors.

It suffices to say here that the two approaches need to be combined rather than presented as artificial opposites to each other. It is true that long-term success can rarely be based on maneuvering and positioning in the marketplace. There have to be hard-to-imitate organizational capabilities that set the company apart from competitors. It is also true that not all the capabilities are internal resource-based, some of them are market based, such as market sensing, channel bonding, customer relationship management etc. Whatever the origin of the unique capability and the benefits it enables the company to offer, they must ultimately be seen in the eyes of the customer as superior to those offered by competitors.

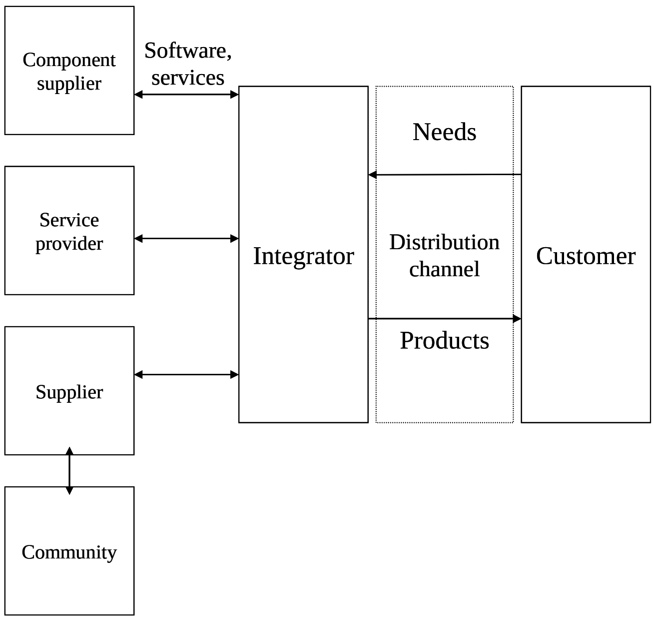
More Support for Internationalization

The Employment and Economic Development Centre (TE-Keskus) promotes the internationalization of firms through their expert services. When you are not sure if you have what it takes to internationalize, the experts can support you in planning your internationalization. Go to **www.te-keskus.fi** for more information. And see Appendix 3.

2.1. General company characteristics

The position in the industry value network – Questions 2.1.1-2.1.3

The following chart presents one view of the industry network, and might be helpful in answering the question concerning the position of the company in the value net of the software industry.



An example of a value net in the software industry (Source: Helokunnas & Laanti 2003)

Value networks have four levels in terms of being managed (Möller 2001):

1. Industries as **Networks**
2. Firms in Network (**net level**),
3. Relationship **Portfolios,** and
4. Exchange **Relationships**.

Your firm's position can be specified at the ***value net*** level, where it can also have some control. This is not possible at the value network level.

2.1. General company characteristics

A company's general characteristics, resources and capabilities can be tacit in nature or be based on subjective perceptions by outsiders. Questions 2.1.5-2.1.11 touch on these factors.

Questions 2.1.5-2.1.6

Owners and the board members of the company have significant influence on the growth and internationalization orientation and capabilities of the firm. The ownership structure of Finnish software firms at the end of 2003 is depicted in the table on the right. In this software industry survey the researchers found a significant increase in VC ownership from the previous year. In an ideal situation the company has experienced experts already on the board or at least the owners have the connections and interest to be able to get experts onto the board.

Type of ownership	Total
Founders and their family members	69%
Management and employees	11%
External individuals / business angels	2%
Private VC investors	6%
Government VC investors	1%
Banks, insurance companies and other FIs	0%
Corporations	8%
Other investors and shareholders	3%

Source: Jokinen et al. 2005

Question 2.1.7 - Credibility and brand

Creating credibility is one of the major challenges for small companies that are already at the national level. One starting point for building credibilility is using lead customers as references (Moore 1991). Brand building is another. In short, brand means a name, term, sign, symbol, design, or a combination of these, which identify the products or services of one firm and differentiate them from those of competitors.(Kotler 1997).

In addition to facilitating identification, a brand indicates the company's promise to consistently deliver a specified set of features, benefits, and services to the customers. Kotler (1997) presents a list of six levels of meaning that can be incorporated into a brand:

- Attributes (such as high prestige, quick, reliable, etc.)
- Benefits (functional, such as "I do not need to update my software myself, as it updates automatically" and/or emotional benefits, such as "I feel secure, having this anti-virus software")
- Values (such company values as prestige or innovativeness)
- Culture (such cultural values as open source culture or Internet culture, or national values, when applicable)
- Personality (fefers to a certain person, animal or object)
- User (reference to the personality type who uses the product)

Brand building is a major effort and it typically involves several pressures and obstacles, both internal and external (Aaker, 1996, for details). These are mostly due to major investments for advertising, promoting and packaging in order to support the brand creation.

Literature on brand building	
Aaker, David A. (1996)	Building Strong Brands
Buchholz, Andreas & Wolfram Wördemann (2000)	What makes winning brands different
Kapferer, Jean-Noël (1997)	Strategic Brand Management

2. Corporate Analysis: Analysis of the Company's Resources and Skills

2.1. General company characteristics and resource factors

Evaluate the general characteristics and resource factors as well as associated competences and skills of the company from the point of view of the success of its **international business strategy**.

2.1.1 What is the position of the company in the value net of software industry?

2.1.2 How would you assess your business model and earning model in relation to this network?

2.1.3 Is your product concept mainly a software product, tailored product or a service?

2.1.4 What is the degree of current internationalization (int. turnover, number of countries, number of foreign customers, internal measures like language etc.)

2.1.5 Owners (Are they committed and ready to invest in internationalization?)

2.1.6 Corporate governance, board and stakeholder relations

2.1.7 Image, references, brand, credibility

2.1.8 Location, premises (number of foreign locations)

2.1.9 Immaterial rights

2.1.10 Corporate culture and organizational structure

2.1.11 Other general company-related factors

2.2. Management resources and competences

A survey by IMD (of 220 international managers) looked into the most important management challenges and required management competences. The top of the list answers (those receiving over 3.5 points on a 5-point Likert scale) are presented below.

Most important management challenges	
1. Improving product and/or service quality	4.1
2. Developing new products	4.05
3. Keeping up with customers	4.0
4. Adding or improving customer service	3.95
5. Monitoring competition	3.85
6. Improving marketing's interface with other functions	3.6
7. Creating a marketing culture in the organization	3.8

Is your company prepared for these challenges? These lists of challenges and competences may give some indication on what to consider when answering the questions on management resources as well as on how these challenges can be confronted.

Most important managerial competences	
1. Strategic thinking	4.0
2. Communication capability	4.0
3. Sensitivity to customers	4.0
4. People management skills	3.75
5. Entrepreneurial capacity	3.7
6. Service orientation	3.7

In the start-up phase of a software company, the visionary leader, usually a salesman of the company, needs a support team with technical and programming skills, together with application knowledge (when applicable). A dedicated salesperson is one of the foremost additions to the management team. The financial manager is typically the final addition to the management team, at least when talking about SMEs. (McHugh 1999) To some extent, financial management can also be outsourced.

On the following page there are two checklists especially for the use of firms in their start-up or internationalization pre-start phase.

Ten fundamental tasks of a manager	☑
1. Making decisions and planning	☐
2. Delegating efficiently	☐
3. Motivating people	☐
4. Communicating clearly	☐
5. Presenting successfully	☐
6. Managing teams	☐
7. Managing meetings	☐
8. Negotiating successfully	☐
9. Interviewing people	☐
10. Managing change	☐

Basic tasks and issues in management and leadership	☑
1. Personal requirements: self-knowledge, self-confidence, thinking and intuition, charisma, communication skills, credibility, ability to read others	☐
2. Professional (business) skills: financial management, budgeting, project management, information technology and e-business, marketing and sales, production, innovation, technology and R&D, purchasing, logistics, and human resources management skills	☐
3. Management tasks and issues: influencing people: inspiring, persuading, leading by example, coaching, mentoring, facilitating , leadership style: (authority, evangelists and champions), feedback and positive reinforcement, power and politics, networking	☐
4. Team leadership and conflict management	☐
5. Helping others develop their potential: empowerment, knowledge management and learning organization, open-book management	☐
6. Multicultural leadership	☐
7. Visionary and transformational leadership: visioning skills, the big picture, strategy, change management	☐

Why three pages about management? “Management, and management, and management” **-** these are often said to be the first three key evaluation criteria that potential investors use when considering getting involved in the software business.

In an analysis of management resources and skills, an emphasis is set on the leadership capabilities of the top management and on their willingness and ability to use their capabilities in international operations. The former aspect refers to the willingness to take risks and the latter to the international networks the management has been able to create through previous experience. The management of an international or a beginning international company must also have certain mental capabilities to succeed. They need to be *courageous in entering new markets*, and have suitable proportion of *self-respect* and *humility*, in order to be able *to learn new things and new methods*. (Finnvera 2001 [1]) The skills of top management can and should be complemented by a strong support team in order to be able to delegate responsibility and to make quick decisions when necessary.

McHugh (1999) sees internationalization as a step at which the company founder has to seek additional support for keeping the management style and capabilities up-to-date. The management (or founder) team has to be willing to replace the CEO when the former CEO admits to being out of the “comfort zone” because of lack of specialist experience, the age factor, or burnout regarding new challenges.

Based on the type of the company’s market offering, the role, priorities and required skills of the management vary. Use the analysis presented in the table below in the self-evaluation on the right:

Top 5 management priorities	Professional services	Enterprise solutions	Mass- market software
1	People management	Partnering	Marketing
2	HR assignment	Service strategy	Partnering
3	Development	Marketing	Globalization
4	Marketing	People management	People management
5	Partnering	Development	Development

Source: McKinsey (in Hoch et al. 1999)

2.2. Analysis of management resources and competences

Evaluate the management resources and competences of your company from the point of view of the success of its international business strategy.

2.2.1 Management resources

2.2.2 Management competences: skills in visioning, inspiring, administration, and strategic planning (See the checklists on the previous pages)

2.2.3 Experiences and contacts especially in international business

2.2.4 Other experience and management factors

2.3. Human resources (HR), HR management (HRM) and skills

It is often argued that people are the most critical resource for software companies. However, the emphasis is typically on such issues as teamwork capability and communication skills. It is true that these skills are especially important when carrying out tailoring projects and providing services. Nevertheless, HR management procedures must be in place to look after the staff and to make sure that growth and internationalization of the firm do not fail due to resource or HR management problems.

First of all, the management has to provide the staff with clear objectives and goals, and guidelines as to how the feedback systems work. HR managers are involved in such tasks as recruiting and training. More recently it has been recommended that HR communication also include members of the business network, especially customers. (Tapscott et al. 2000) A more comprehensive list of HR management tasks and issues is found below:

Human resources management tasks and issues:
1. **HR planning and management**: determining HR needs, competence audits, supervision, goal setting, management by objectives (MBO), job redesign, job enrichment, flextime, work schedules, job sharing, job rotation, teamwork
2. **Employee selection:** recruitment, testing, contracts, job description, orientation
3. **Employee compensation, benefits and motivation:** pay systems: wages and salaries, incentives, bonuses and profit sharing, employee benefits (safety and health), job security, fringe benefits reward system, benefits, job satisfaction
4. **Employee development:** on-the-job and off-the-job training, management development, life-long training, employee counseling, career planning, promotions vs. demotions, transfers
5. **Appraising employee performance**, performance standards and measures, job analysis
6. **Labor relations**, collective bargaining, contract administration, grievance procedures
7. **Separation**: termination, layoff, resignation, retirement
8. **Special issues**: intellectual capital, life-long learning, learning organization, knowledge management, cross-cultural management

Staff characteristics and skills needed for international success
1. International, and increasingly global perspective in attitudes and behavior
2. Knowledge and understanding of the global business environment, preferably personal experience in international business
3. Communication and negotiation skills
4. Foreign language and communication skills, cross-cultural skills and understanding
5. Innovativeness, creativity, flexibility, ability to react fast
6. Emotional and physical health
7. Customer orientation, service mentality
8. Professional skills: product and technology knowledge, sales and marketing skills etc.

2.3. Human resources and HR management and skills

Evaluate the human resources and human resources management and skills from the point of view of the success of the company's **international business strategy**: (For details, see the checklists on the previous page)

2.3.1 Human resources: availability, quantity

2.3.2 Professional skills, creativity, education

2.3.3 Business experience, market, competitor and customer knowledge, customer relations

2.3.4 Foreign language skills, international experience

2.3.5 Quality of HR as to level of commitment and motivation

2.3.6 Vulnerability of HRM resources (dependency on few persons)

2.3.7 Human resources management, corporate culture

2.3.8 Other human resource factors

2.3.9 How would you rate the level of your company's *management and human resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Case examples in management and HR: Smartner and CRF

The founders of **Smartner** were already focusing on global markets when planning their business. Smartner deliberately recruited foreign employees in the early stages in order to assure an opening of the way to international markets. Foreign employees know their culture and their language. They are aware of how business is done in their areas/countries. From the start, Smartner's company language was English.

It is not easy to find foreign people to be members of the board of directors, but it is important. Knowledgeable people outside the company are all too willing to point out detrimental facts and events that occur in the markets. While products and management may be the most important elements for success in international markets, the board of directors is also vitally important. (Lundmark in Tietoviikko 20.6.2002) For example, **CRF** appointed two new board members: *James E. Niedel* and *Carl Yankowski.*

Niedel brings with him extensive know-how from more than 30 years in academic medicine and the pharmaceutical industry. Yankowski, former CEO of Palm, brings experience from global pharmaceutical, biotechnology and IT industries. The experience of both men further establishes CRF's global leadership position.

As a result, the skill set of CRF's international management team (CEO Pamela McNamara, director Tim Davis), industrial advisory board and board of directors provides balanced, in depth expertise in the areas of clinical development, scientific research and profitable international business operations. These teams have experiences in both telecommunication industries and pharmaceuticals. What is more, CRF has an industrial advisory board, a team of respected and knowledgeable experts from the pharmaceutical industry, which is assembled to ensure that CRF processes and technology are as applicable, usable and relevant as possible, to the users both now and in the future.

2.3.10 Visioning and strategizing skills

Essential management competences include visioning skills, creativity, a focused and systematic approach to running the business, in brief, the ability to think and act strategically. Friedrich and Seiwert (1994) have suggested a self-administered test of management's ability to think and act strategically. It has been slightly modified to suit the purposes of this workbook.

Strategic self-assessment	*Almost always*	*It depends*	*Almost never*
1. To what extent do you work to clearly defined business objectives?			
2. Do you know how to react to changes in the global environment in keeping with these changes?			
3. Do you consider your relative strengths and potential for success when you approach the international market?			
4. When you gather information on the international markets, do you know enough about what is really strategically important for your company?			
5. Do you direct your activities towards clearly defined international target customers that you always bear in mind?			
6. How deeply do you think about better solutions to the problems of your international target customers?			
7. Do you consistently translate new ideas into action, instead of giving up or forgetting them?			
8. When you make a decision, do you have enough information and sound criteria to guide it?			
9. Are you able to differentiate among your daily activities those that are important in the short and long-term?			
10. Do you regularly set aside time for strategic planning and for considering the future of your business?			
Total number of ticks: **Multiply the number by:**	x 3=	x 2=	x 1=

Add together the total to get your personal strategy rating

Interpretation	
10 – 15 points	You operate without a clear strategy or success management and do not get any further than organizing yourself and your day. The step by step analysis and strategy can help you to set strategic priorities and focus your efforts
16 – 22 points	You try to pursue strategic success management; you just need to be a little more systematic and consistent to achieve a real breakthrough. The step-by-step strategy for success will help you to develop a success strategy and to plan practical actions and first steps towards change.
23 – 30 points	Your strategic success management can already be described as good. You focus consistently on what is important. Keep it up! A step-by-step approach to analysis and strategic planning will help you to achieve faster even more and ensure lasting success.

2.4. Marketing and selling resources and competences

Especially in the packaged software business, marketing and sales are emphasized, because internationalization is usually imperative from the very beginning. The role of marketing and sales in a software company, and thus their required capabilities are threefold:

1. Operational: Advertising, packaging, etc.
2. Internal: Interaction with other functions, such as R&D and financial management
3. External: Relationship management with stakeholders, especially with customers, partners and competitors (Rajala 1997)

When evaluating your marketing and selling capabilities, you may want to think of such questions as:

- Do we know and can we use the relevant **marketing communication channels** (Advertising, direct sales, exhibitions, seminars, PR, networking and Internet) in the markets?
- How many people in the organization are capable of making an on-the-spot **sales pitch,** the so-called "elevator pitch," in English?
- Can our people handle **the entire sales process in a foreign language?** It consists of: 1. Prospecting, 2. Initial Contact, 2. Preparation, 3. Sales presentation 4. Handling objections, 5. Closing the sale, 6. After-sales service

Software products require some special attention when it comes to the marketing mix. For example Tapscott et al. (2000) suggest a new definition for the contents of the digital age marketing mix. **This definition would seem best to fit the situation where marketing and sales communication as well as delivery take place on the Net:**

Digital age marketing mix
• Buying anywhere, any time, anyway will replace the place and distribution
• Customers are part of your business network, not an external market
• The customer decides whether or not to participate in communication instead of advertising and marketing communication
• Finding the price together with the customer, instead of setting the prices one-sidedly
• The customer is looking for an experience, not a product. (This point seems to fit consumer markets the best – in the B2B markets this could be translated as "The customer is looking for a benefit, not a product")

Source: Tapscott et al. 2000

Information and support in marketing of software products	
Tähtinen, Jaana & Parvinen Petri (2003)	Ohjelmistojen markkinointi. In Hyvönen, Eero (ed.) Ohjelmistoliiketoiminta. Pages 41-76.
Jacobsen et al. (2001)	Launching Your Software Business in America – A Handbook For Finnish Entrepreneurs.
McHugh, Peter (1999)	Making it BIG in Software – A guide to success for software vendors with growth ambitions.
www.finnfacts.fi	Finnfacts: Support in international marketing communications

2.4. Marketing & selling resources and skills

Evaluate the marketing and selling resources and skills of the company from the point of view of the success of its international business strategy.

2.4.1 Marketing and sales experience and skills of personnel

2.4.2 Market research as well as customer and market knowledge

2.4.3 Customer service, customer satisfaction and customer relationship management

2.4.4 Communication

2.4.5 Selling

2.4.6 Pricing

2.4.7 Other selling and marketing-related factors

2.4.8 How would you rate the level of your company's *marketing, selling and customer relationship management resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

2.5. Delivery and distribution

Delivery and distribution channels in small domestic markets do not typically require complex solutions. However, when entering international markets, the number of parties increases, while there is a limited number of available and desirable channels. In this section, you should especially assess your skills and resources in terms of a more complex delivery and distribution channel structure like that which is common in many international markets.

Resource (i.e. Actor or "Player")	Primary Function	Role in International Marketing (& Distribution)
System integrator	Provides consultation for the end-users (defines their needs) and designs custom solutions.	Should know your product, so you should train and educate them.
Solution provider	Provides solutions. Work is based on the end-user's definition of needs.	Should know your product, but you should also market it to potential end-users (they need to know your product and ask for it).
(Value added) Reseller	Provides products with configuration and integration; turn-key projects.	Effective channel, if good partners can be found.
Value distributor	Distributor in the chain, provides value-added services in addition. Target customer normally not the end-user, but the one who sells to the end-user.	Could take care of international operations (role similar to indirect exporter).
Volume distributor	Distributor in the chain, mostly usable for packaged goods/software products.	See above.
Retailer	Business front-end sales partner.	Might be able to bring in more sales from new markets. The length of the chain hopefully increases sales.
Sales agent/ representative	Third party software vendor. Revenues based on fees from the actual sales.	Might be useful in the distant markets where one's own presence is not always useful/profitable.
Independent software vendor	Software provider without contractual relationship to you.	Usable for packaged software (i.e. software products).
Influencer, consultant, etc.	Companies that comment, evaluate, and give guidance and advice to end-users.	Useful and important especially in the case of systemic software (extra-applications for ERP systems).
OEM (original/own equipment manufacturer)	Normally provides product as one privately labeled product.	Easy way to get your products into the international market. However, this does not develop your own brand (potentially risky).

Types and roles of channel members in international software markets (Source: Varis et al. 2005)

More information on delivery and distribution channels in the US:

Jacobsen et al. (2001) Launching Your Software Business in America: A Handbook for Finnish Entrepreneurs

2.5. Delivery and distribution channels

Evaluate your delivery and distribution channels and skills in managing the distribution channels from the point of view of the success of the company's international business strategy.

2.5.1 Logistics, deliveries, distribution channels

2.5.2 Marketing and sales channels

2.5.3 Other delivery, distribution and cooperation related factors

2.5.4 How would you rate the level of your company's *delivery, distribution, and cooperation resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

2.6. Production resources

Product development in the software product business is teamwork, in which product teams target either specific segments or competitors. Service or tailoring companies develop product-like technologies to serve the needs of one client per time, typically in project form. Their production requires consulting capabilities and skills in transferring their capabilities to new customers and projects. Hybrid solutions companies need to do both to some extent. (Cusumano 2004)

In service businesses or in tailored software projects, production comes after the selling, thus making the intellectual assets of the company the greatest marketing tool, while the production efficiency and provided quality guarantee the perceived image. Then, for example, a quality certification is a good, internationally recognized means to communicate the competence of the organization.

Quality management and certifications – what can they do for you?

Certifications have been proven to be tools for improving customer focus and HR practices in software development organizations – in addition to the actual quality improvements experienced in the production process. Furthermore, they act as a promotional instrument for software service or tailoring businesses. The most renowned certifications are ISO and CMM.

ISO-9000
ISO certification has been reported to help an organization to achieve an improved customer focus, superior HR practices, and better infrastructure and facilities, thereby helping the organization to start implementing a new quality culture. This, in turn, helps the firm to achieve better quality over time. (Issac et al. 2004)

Capability Maturity Model (CMM)
CMM, a five level ranking system establishes a framework for continuous software development process improvement and is more explicit than the ISO standard in defining the means to be employed to that end. A **mature software organization** possesses an organization-wide ability for managing software development and maintenance processes, and the managers monitor the quality of the software products and customer satisfaction. Among the quality certified firms, it has been observed that CMM certified firms have better management practices and operational performance compared to ISO certified firms. (Paulk et al. 1993; Issac et al. 2004)

Additionally, you may want to ask yourself the below questions as you are rating your production resources in terms of successful internationalization:

Production resources	☑
How many people are involved in R&D?	☐
How many people are involved in product support?	☐
How many people are involved in integration?	☐

2.6. Product, product development, production resources and skills

Evaluate the production resources and skills of the company from the point of view of the success of its international business strategy.

2.6.1 Production resources, location and premises

2.6.2 Products, technology, level and maturity of product development

2.6.3 Skills of the developers and maintenance of skills

2.6.4 Production processes, organization, productivity, efficiency

2.6.5 Quality management and product testing

2.6.6 Information and ERP systems, software development tools

2.6.7 R&D activity

2.6.8 Other innovation and technology resources and skills, innovativeness

2.6.9 Purchasing/procurement

2.6.10 Other R&D, production, innovation, or procurement-related factors

2.6.11 How would you rate the level of your company's *products, production, R&D, and technology resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

2.7. How are your finances? - Financial resources and management

Financial resources and management are a prerequisite for internationalization as it is rarely possible to launch international operations without external funding – only on the organic growth path it is common to rely solely on the founder's private funds or the cash flow. However, the ownership of Finnish software companies is still mostly concentrated in the hands of the founders and their family members as well as in those of the management and the employees.

At the beginning stages of internationalization, money is needed for such purposes as travel expenses, salaries of export staff, market surveys and feasibility studies, product customization and brochures. To guarantee sufficient funds, the top management has to be capable of securing extra financial resources. Sources and options for additional funds are presented in the following table:

	TYPICAL FEATURES
Business Angels	**Who:** Wealthy and/or experienced individuals wanting solely a non-executive role; do not have to invest in the firm **Look for:** reasonable return on their money and active involvement **Impact:** Provide business experience and established networks in the field
Venture Capital (VC) investors	**Who:** Private or governmental VC companies **Look for:** Companies in development or expansion stage with very high growth potential (→ Internationalization) and a clear exit option, a capable management team, which is aware of the risks related to the product, market and financing **Impact:** Appoint an executive manager, a non-executive board member and/or financial manager
Trade Investors	**Who:** Companies in ICT field **Look for:** Companies with new products including new knowledge or technology **Impact:** Heavy transformations or disbanding the company
IPOs	**What:** Initial Public Offering (going public), company internal decision, which demands professional advisors to make **Why:** To clear debt, to increase market profile, enhance credibility, support acquisitions policy, provide staff with share options **Impact:** More frequent communication with and reaction to owners' perceptions, official accounting policies

Source: McHugh 1999

The funding options according to company growth phase have been classified by McHugh (1999) as follows:

FUNDING OPTION	Seed	Growth	Expansion
Business Angels	**Yes**	Possibly	No
Venture Capital	Possibly	**Yes**	**Yes**
Trade investor	Possibly	Possibly	**Yes**
IPO	No	Possibly	**Yes**

STAGE OF COMPANY GROWTH

2.7. Financial resources, financial management and pricing

Evaluate the financial management and financing resources and skills from the point of view of the success of the company's international business strategy.

2.7.1 Turnover, international turnover, profitability, and productivity

2.7.2 Capital: structure, availability and collateral

2.7.3 Fixed assets: buildings, equipment, etc.

2.7.4 Investor relations, structure of ownership, ability to attract foreign funding

2.7.5 Cash funds, cash flow, stock, inventory, and liquidity

2.7.6 Financial independence, solidity and returns, willingness and ability to take risks

2.7.7 Pricing as a part of your earning model

2.7.8 Other financing and financial management-related factors

2.7.9 How would you rate the level of your company's *finances and financial management resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Information and investment sources	
Name:	**The Finnish National Fund for Research and Development Sitra**
URL:	www.sitra.fi
Services:	Venture-Capital operations
Other:	The focus lies on companies that are at an early stage of their existence.
Name:	**Finnish Venture Capital Association FVCA**
URL:	www.fvca.fi
Services:	Provides a guidebook to equity financing, which includes instructions for making business plans in http://194.100.106.125/sijoitusopas.pdf
Name:	**Finnvera Plc.**
URL:	www.finnvera.fi
Services:	Provides credit insurance, internationalization loans and internationalization securities
Other:	Finnvera plc is a specialized financing company offering financing services to promote the domestic operations of Finnish businesses and to further exports and internationalization of enterprises. Finnvera is owned by the Finnish state.

Venture Capitalists - Vulture capitalists?

The experiences from co-operation between growth-oriented entrepreneurs and strategic investors have been contradictory. For the company, the development of the entrepreneur is essential, and replacing him with a professional business manager does not always succeed. Contradictions culminate in different objectives and the time span of development. Innovation is often personified in the entrepreneur, while the investor pursues an increase in the company value and a decrease in the dependence on the entrepreneur. (Ryynänen 2004, see also Adizes' corporate life cycles in Part I). However, venture capitalists differ from each other in many respects. Seppä (in Ryynänen 2004) found six different archetypes of Venture Capitalists: Treasurer, Venture banker, Empire builder, Bounty hunter, Caretaker and Professional owner. You need to explore the VC alternatives to find the most suitable one for your firm.

Business plan: a marketing tool for financing

It is important to remember that all external financiers demand to see a business plan. However, this is not exactly the same as a strategic plan for business. It is partly a marketing tool for convincing the potential financier that the entrepreneur has done his homework and is able to put together a realistic business plan. A typical outline for a business plan is presented in Section 10.

2.8. Summary of corporate analysis

After a self evaluation of your company's resources and skills from the perspective how they support the internationalization of the company in Sections 2.1. – 2.7., transfer them to the table below, add the points up and compare the result to the interpretation below.

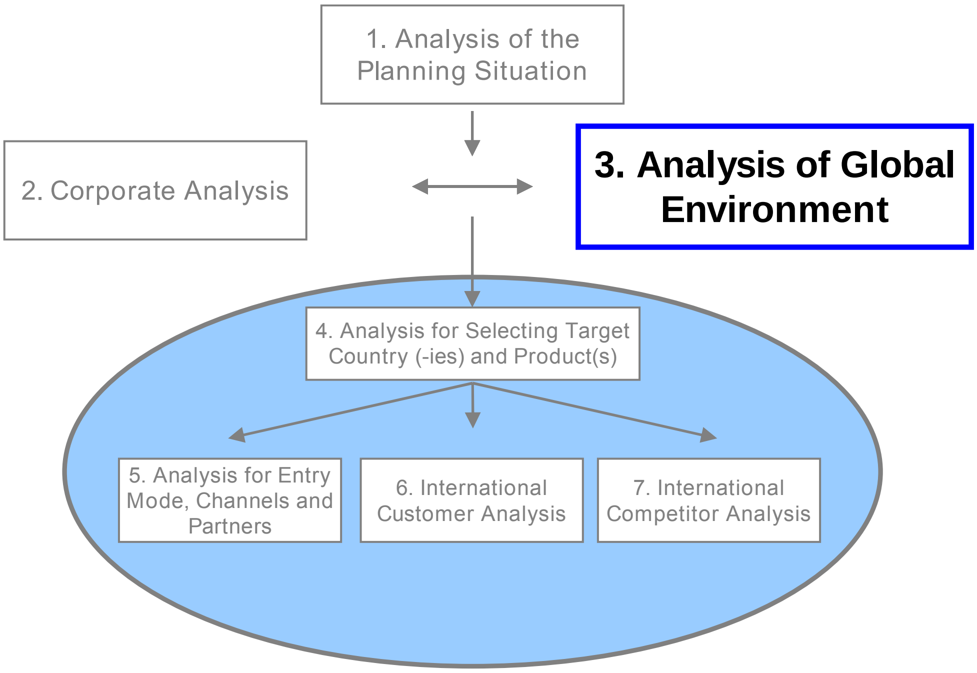
It may be interesting to compare these to the initial, "quick-and-dirty" assessment made in Section 1.2. on page 49.

	From Section 1.2	From Sections 2.1 – 2.7
2.8.1 Management and personnel resources and skills (2.3.9. p. 69)		
2.8.2 Marketing, selling and CRM resources and skills (2.4.8., p. 73)		
2.8.3 Delivery, distribution and cooperation resources, and skills (2.5.4., p.75)		
2.8.4 Product, production, R&D, and technology resources and skills (2.6.11., p. 77)		
2.8.5 Finances and financial management resources and skills (2.7.9., p. 79)		
Total		

Interpretation	
5 – 9 points	Very low level of corporate internationalization resources and skills
10 – 13 points	Low level of corporate internationalization resources and skills
14 – 17 points	Average level of corporate internationalization resources and skills
18 – 21 points	High level of corporate internationalization resources and skills
22 – 25 points	Very high level of corporate internationalization resources and skills

The rapidly changing global business environment, its effects on software business, and the importance of keeping up with these were touched on in the Introduction. Some of these issues were already discussed in Part I on a general level. Most clearly the changes in the global business environment impinge on internationalization in the form of external causes that push firms to internationalization (see Chapter 4 Requirements and challenges for internationalization, for example Table 2, p. 17). Especially the so-called Born Global pathway (see Chapter 5.1. in Part I) is a good example of a type of approach to internationalization that was largely made possible by globalization of markets and technology.

SECTION 3
HOW WELL DO YOU KNOW THE GLOBAL BUSINESS ENVIRONMENT?



3. How well do you know the global business environment?

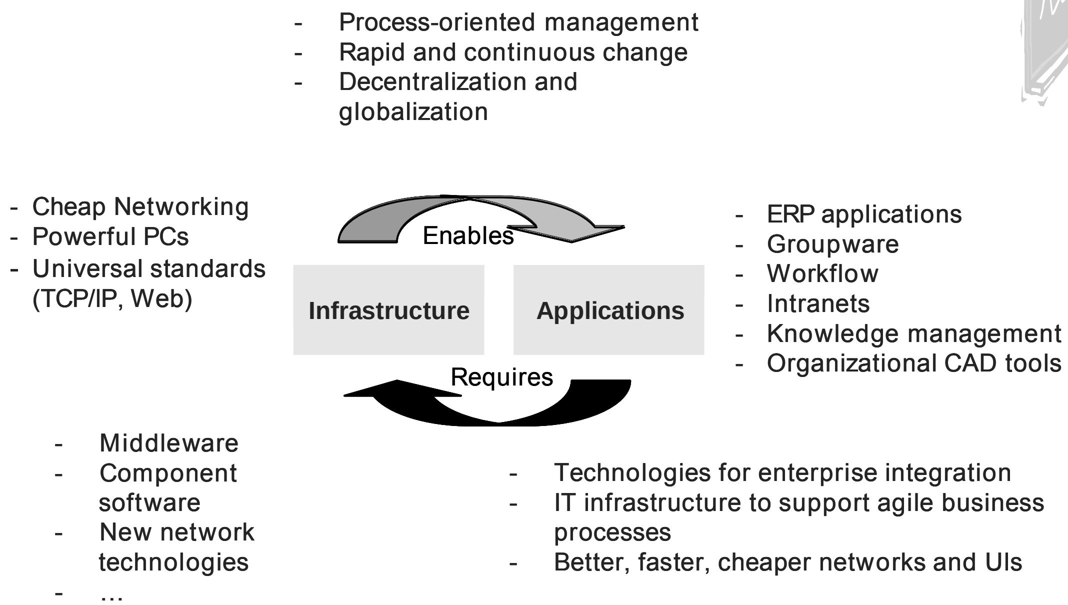
We live in a world of radical changes. Businesses must change and adapt accordingly which is reflected in strategic planning. The starting point in planning is to recognize what these changes mean to your company as well as to your customers and competitors.

The three broad categories of factors in the business environment are 1. customers and markets; 2. competition; and 3. general business environment such as changes in technology, economy and regulations. As an example, recently SAP, Europe's largest software company warned publicly of the upcoming threat of Chinese and Indian software companies that will be more serious than that of Microsoft or Oracle.

On the right side of the following pages there is a list of examples of some fundamental trends in the global business environment and of the resulting changes in business. It serves primarily as a checklist for you to complete so that you can evaluate the negative and positive effects on your company. This list helps to make the conclusions in the SWOT-analysis (in Section 8) more concrete.

Section 3.1
Economic integration: New EU members arriving in the common marketplace as well as easier access to everybody
Convergence of technologies: Have you considered what kind of an impact RFID or similar technologies will have on your business in the future?
IT integration: Adoption of shared information systems
Information security: Current issues like clogging up of the Internet (and e-mail) by crackers and spammers.

One framework for predicting trends in the IT field is presented below:



Source: Dellarocas 2000 (in Cusumano 2004)

3. Analysis of the International Business Environment: Change Trends in the Company's International Business Environment and in Global Business

3.1. What are the most important change trends in the global environment and how do they affect your company, its customers or competitors?:

Common environmental change trends	Effects
Globalization of customers, markets and competition	
Rapid technological development and new innovations	
Economic integration	
Fast diffusion of technological innovations	
Environmental problems and awareness	
Convergence of different technologies, e.g. wireless and fixed	
IT integration	
Standardization of products and technologies	
Information security	

What are other important change trends and their effects?

___

___

___

3.2. Global change trends in business: how are companies changing in reaction to environmental changes?

On the right there is a list of some global changes in business. Complete the list and evaluate the positive or negative effects for your company's customers and competitors. Assess how your company should react and adapt to the changes.

Section 3.2
Concentration on the core know how *We are concentrating on our core competence* has been the management mantra since *Competing for the Future* by Prahalad & Hamel (1990). Is this trend still valid? How do you experience this trend in your field at the moment?
Cooperation, networking and outsourcing Remember that this trend may also involve also such topics as diffusion of open source products, e.g. Linux, SQL, OpenOffice, Mozilla and Apache. Outsourcing may occur forwards or backwards from your company. You may outsource to such prominent outsourcing locations as India, Russia, China, or Eastern Europe or you may be seen as a provider of software outsourcing.

3.2. What are the most important global change trends in software industry generally?

Change trends in business	Positive effects	Negative effects	Reaction and adaptation
Concentration (consolidation) of companies (customers and competitors)			
Concentration on the core know how			
Speeding up of innovation cycle			
Cooperation, networking and outsourcing			

What are other global change trends in business especially in your own market segment and their effects?

____

____

3.3. How should the company react and adapt to the changes?

____

____

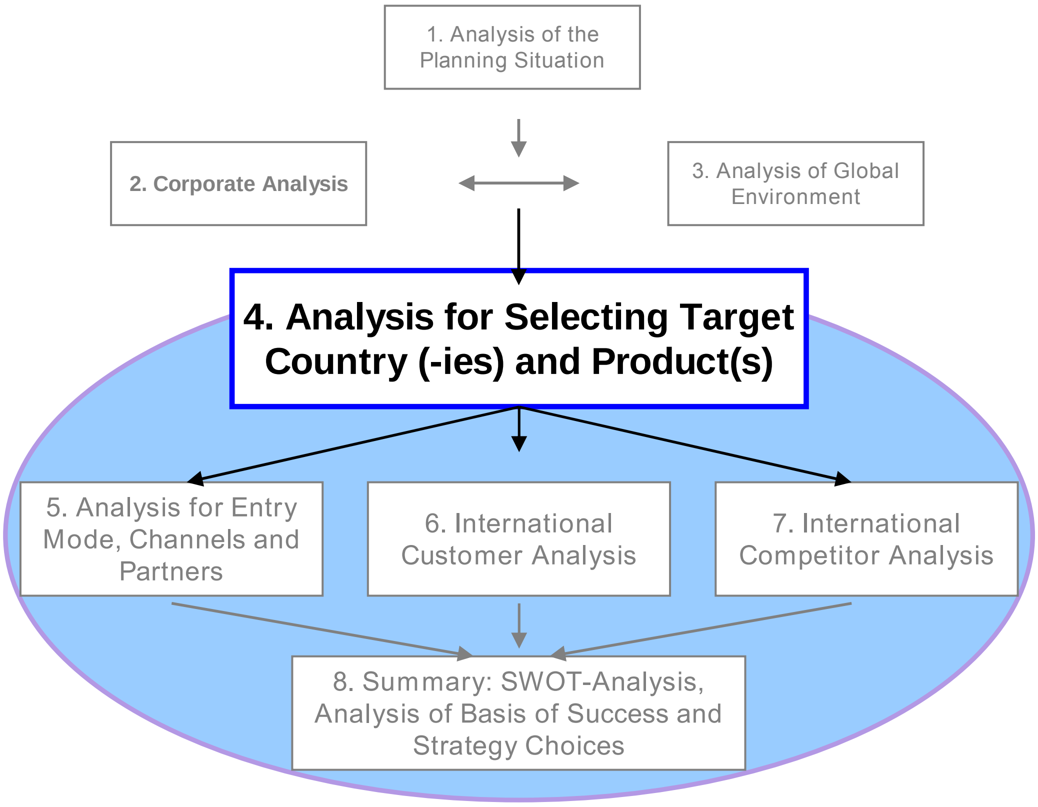
____

3.4. How would you rate the level of your company's *knowledge of changes and global trends in the business environment* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Selecting the target country and product for internationalization is a crucial decision that may ultimately make or break the company. The choice of target country figured as one of the central issues in the two models (Figures 3 and 4) presented in Chapter 1 Part I. The issue was also discussed as part of the requirements and challenges posed by internationalization in Chapter 4 of Part I (p. 15). That different choices also served as distinguishing factors in terms of internationalization paths was evident in Chapter 5, Part I. On the organic growth path, companies typically try to minimize risks and costs first by selecting familiar and nearby countries to enter. On the collaborative path the availability of partners and channels is a decisive factor. Companies on the born global path are typically forced to enter several countries at once, even to the point of having to be present in all major global markets at the same time.

SECTION 4
WHERE TO GO?



Do we know what target country is best for us? Is our product right for the target market?

What is the level of demand, life-cycle, stage, and growth in the target market?

Do we know competition in the target market? How easy is it to enter the market?

Do we know our chances of success in the target market?

4. Where to go? – Choice of target country (-ies) and product(s)

Selecting the target country and product for internationalization is a crucial decision that may ultimately make or break the company. Different choices also serve as a distinguishing factor in terms of the internationalization path as was evident in Part I. On the organic growth path companies typically try to minimize risks and costs by first selecting familiar and nearby countries to enter. On the collaborative path the availability of partners and channels is a decisive factor. Companies on the born global path typically are forced to enter several countries at once, even to the point of having to be present in all major global markets immediately. And as was mentioned at the beginning of Section 2, a company with several product lines or SBUs must perform these analyses for each case separately.

Selecting the target market (targeting) and segmentation

After selecting a target country or target countries, the target market in that country must be selected. In practice many companies refer to their target market as a “segment,” as they feel that they do not serve all types of customers but a narrow part (segment) of the customer base. However, it would be helpful to differentiate the terms target market and segment. Strictly speaking the segment refers to a subcategory of your chosen target market. In fact, after defining your target market, the major question is; should you segment or not? In reality, many small beginning companies do not segment at all but serve the totality of their target market in the same way.

Selecting the product for international markets is sometimes automatic, for example if the company has only one major product. Often the company has several products or product lines to choose from. Both target product and target country are selected on the basis of the total market potential. Total potential is estimated on the basis of the four criteria presented on the right. If these factors cannot be estimated directly, they must be estimated on the basis of indirect data, such as statistics on foreign trade, economic development, production, etc. It is useful to analyze several target countries and products, and compare them with respect to the total market potential.

How to choose a target country? – Practical insights

Choice criteria?

- Preliminary screening regarding the issues which need to be known include basic business facts about the country, such as: transport possibilities, technology orientation (if the product is high-tech), availability of skilled labor, common spoken language (to suit skills and products), suitable office locations, neighboring markets and their potential, etc.
- Naturally, you need to know if the market size is big enough. And the main question, "How much money can you make?"
- However, in many cases the most important issue is not about the ultimate market potential but the market readiness – are local customers ready to buy a product now or in a ten years' time?

How to get to an idea of the market potential?

- One traditional but practical way of searching for potential customers (and target countries) is to visit the important trade fairs like the GSM World Congress in Cannes. Finnish software companies have been represented in Cannes for the past 15 years and are willing to help arrange contacts for you.
- Conferences for academic and industrial presentations and discussions about experiences and the latest developments can provide a platform of feedback for a firm's products. Conferences are good places to get ideas about market potential and development. You will often see the "early adopters" at these events.
- The Internet is a valuable resource for locating trade fairs and conferences, both international and local. After an initial search, however, continue looking for additional information.
- Finpro and other national organizations that specialize in market research can be useful, but the firm's own personnel who are dedicated to this project are also important.

Source: Seppo Ruotsalainen 2.2.2005

Special case: the USA

Globally, the US dominates the markets in almost everything, but especially in the software business. In the SoberIT survey (Jokinen et al. 2005), Finnish software product companies ranked the USA as the 2nd most important export market after Sweden. On one hand, this explains the difficulties of entering the US market; and on the other it may explain the lack boldness by Finnish companies to enter the US markets.

William M. Paulin (2001, in Jacobsen et al.) has provided a list of typical errors that the Finnish companies have made in trying to enter the US market. You should consider these before planning your entry strategy:

- *Products arrive too late* for Finnish companies to win against established competitors
- *Products arrive too complete*, as US customers do not expect finished products as soon as Finns do
- *Products are too expensive* for mainstream markets, which determine survival
- *Products serve too narrow a niche*, and do not provide a total product, which is what the US customers want
- *Lack of market segmentation* (too many unrelated products), behaving like project companies, not product companies
- *"Great products sell themselves" attitude*, which could not be further from the truth in the US advertising-oriented market

Adjust your way of thinking to the US mode, and then seek support from national organizations. Recruit US-born professionals. But first of all, read *Launching Your Software Business in America* by Jacobsen et al. (2001) to understand the real nature of US business and how to adapt to it successfully.

4. Research and Analyses in Support of Selecting a Target Country and Product

(For details, see checklists on the following pages)

4.1. What is the level of demand for the product(s) in the market? What factors determine the demand? What is the level of market growth now and in the future? Is the market saturated? What area/sector is the demand concentrated on? How is the demand fluctuating?

4.2. What is the amount, structure and level of competition in the market? What are the quality and price levels of competing products, technology levels?

4.3. How easy is the access to the market: trade and investment barriers (laws, norms, standards), distance, etc.

4.4. What is the degree of acceptance of the product in the market: how familiar is the product/concept in the market, what is the life cycle stage of the product in the market?

4.5. How would you rate the level of your *knowledge about potential target countries* on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

…/… 4.6. Preliminary screening for target country/area and product selection

Below you find a checklist of questions, which can be used while contemplating the questions in this section.

Do you know your target markets? A checklist for target market choice and evaluation	☑
Is there an explicit need for our product/service in the target country? Or is it possible to create a demand for it? And if yes, how?	☐
Typical customer in domestic markets: Who is buying? From where? Why? How often? How much?	☐
How large are the markets? Are the sales increasing or decreasing?	☐
How large are the estimates for revenues vs. the costs?	☐
What does the target country public sector do to promote or complicate the business in the market?	☐
Does the target country provide tax, etc. benefits for companies?	☐
Are there potential partners available for the company in the country? (Such as: suppliers, distributors, etc.)	☐
Are there suitable human resources available for the company in the target country?	☐
What is the media environment like in the target country: What are the available market communication channels?	☐
What is the general infrastructure of the country? (roads, electricity, data communications, telecommunications, etc.)	☐
How stable is the political and economic environment?	☐
Is the target country safe?	☐
What kind of customization is required for the product/service in target markets?	☐

Source: Saarenketo & Kuivalainen 2001

Practical insights for Analysis, planning and control

- The basic idea is that one has to be prepared for hard work in finding suitable customers, partners and target markets. Proper planning is of help *before* and *after* the initial entry decision is taken.
- When creating a business plan for entering new markets, you need to evaluate how much there is to gain and how much you can afford to lose if the risks are realized. The business plan needs to be followed and modified accordingly, when new information is gained, or when key facts are changed.
- The planning cycle goes from trade fair to contacts and market research to entering the market and then finding the first deal. *One year is a short time* for this and long-term objectives and strategies should be formulated.
- Whenever succeeding in one market and failing in another, you need to evaluate the reasons – different markets, different people, too short a time reserved for trying to enter the market…
- ***The whole thing is about being able to find and do the right things before the competitors can do them.***

Source: Seppo Ruotsalainen 2.2.2005

4.6. Target country selection in terms of market attractiveness and competitive strength

Using this analysis you may evaluate your target countries and your company's strengths in them.

Time of analysis: ____________________

Analysis of product area: ____________________ in country: ____________________

Market attractiveness

	1 Very Poor	2 Poor	3 Medium	4 Good	5 Very Good	% Weight Factor	Result (grading* weight)
Market size							
Market growth							
Buying structure							
Prices							
Buying power							
Market access							
Competitive intensity							
Political/ economical risks							
etc.							
Total						100	

Market attractiveness = Result: 100 = __________

Relative competitive strength
with regard to the best competitor = __________

	1 Very Poor	2 Poor	3 Medium	4 Good	5 Very Good	% Weight Factor	Result (grading* weight)
Products fit market demands							
Prices and conditions							
Market presence							
Marketing							
Communication							
Obtainable market share							
Financial results							
etc.							
Total						100	

Relative competitive strength = Result: 100 = __________

Source: Hollensen 2004

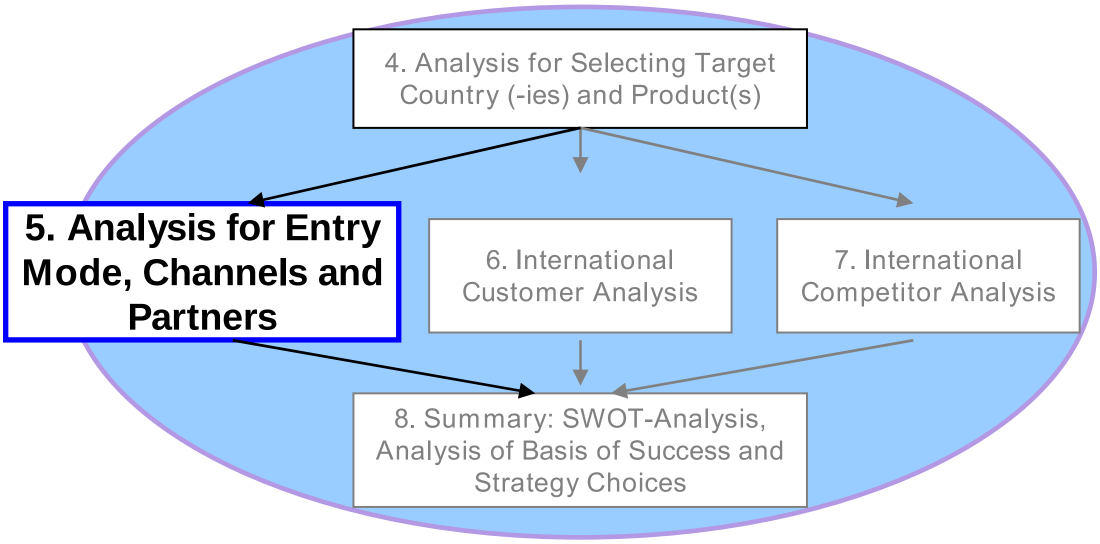
The choice of the correct mode of market entry or international operation as well as the choice of marketing and distribution channel are strategically very important decisions. Together with the decision of whether or not to engage in international cooperation, these questions are indeed central to the choice of the internationalization path. The paths are largely defined in terms of these issues as different companies make different choices depending on the paths and the stage.

For example, at the beginning stages the company lacks resources and experience. Therefore it is normal to resort to less demanding modes of entry such as indirect or direct exporting, which are seen as relatively safe and low cost entry modes as no third parties are involved.

If the company wants or needs to speed up its growth and internationalization, the route of slowly accumulating the cash reserves, competences and contacts (organic growth path) may no longer be satisfactory. In that case, other solutions as to mode of operation or channels must be used. This entails higher risks and demands a higher level of resources and competences (born global/rapid growth and globalization path). The acquisition of these can be facilitated by the use of different cooperative arrangements with channels and customers (collaborative path)

These issues were touched on in several contexts in Part I, in several of the models in Chapter 1 and in Chapter 3, where stages of growth and internationalization were introduced. Entry mode was also introduced as a typical indicator of the degree of internationalization (DOI) in Chapter 4. Finally, the three paths described in Chapter 5 were largely defined in terms of different approaches to entry mode, channels and international cooperation.

SECTION 5
HOW TO GET YOUR PRODUCT OVER THERE?



How do we get our products over there?

What type of entry mode should we have into the target market?

**What are the suitable channels in the target market?
Does our product suit the channel?**

What type of co-operation should we have? How do we find a suitable partner?

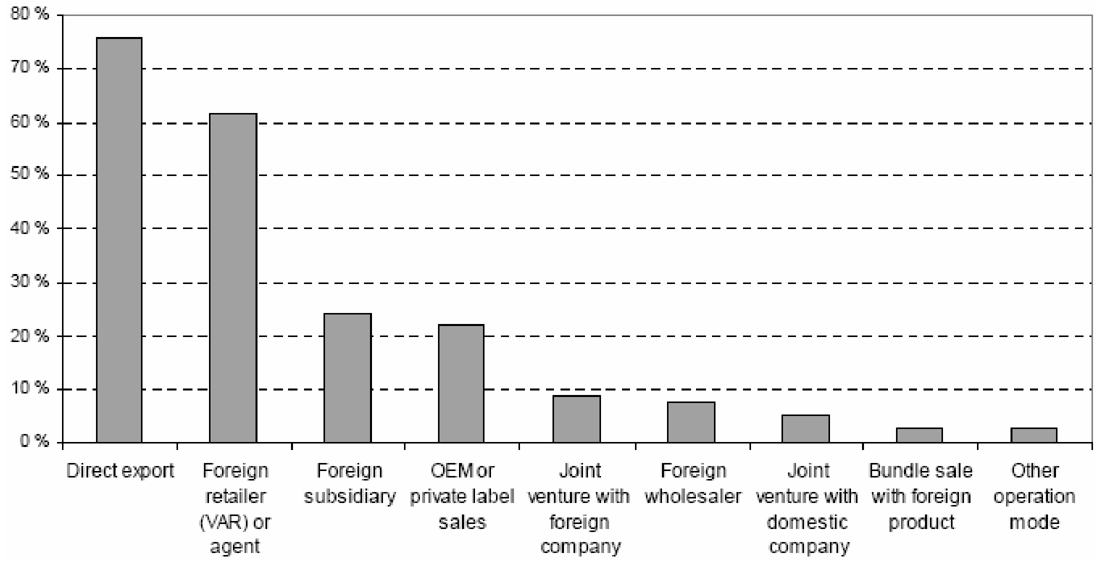
5. How do you get your product over there? – Entry modes, channels and partnering

The question ”How to get your products over there?” is one of the crucial questions and involves decisions about entry modes, marketing, sales and distribution channels as well as partnerships. These questions are indeed central to the choice of internationalization path: the paths are largely defined in terms of these issues as different companies make different choices depending on the paths and the stage. For example, at the beginning stages the company lacks resources and experience. Therefore it is normal to resort to less demanding modes of entry such as indirect or direct exporting, which are seen as relatively safe and low cost entry modes (Loane, McNaughton and Bell 2004) as no third parties are involved. This is also reflected by the statistics presented in the table below.

If the company wants or needs to speed up its growth and internationalization, the route of slowly accumulating the cash reserves, competences and contacts (organic growth path) may no longer be satisfactory. In that case, other solutions as to mode of operation or channels must be used. This entails higher risks and demands a higher level of resources and competences (born global/rapid growth and globalization path). The acquisition of these can be facilitated by the use of different cooperative arrangements with channels and customers (collaborative path).

Traditionally, these broad issues have been considered as separate topics: for example entry modes and partnerships have been treated as separate strategy issues, whereas sales, marketing and distribution channels have been included in the marketing and sales strategy. Here we have decided to look into the three areas together.

The typical entry modes of Finnish software companies are direct export and foreign retail. A more extensive presentation on entry modes is presented below:



Source: Jokinen et al. 2005

Case Blancco: Dynamic use of entry modes and channels

Quite soon after its foundation, Blancco became the market leader in Finland.

Domestic market sales had taught the company who the major players in the market were as well important issues concerning the structure of the market. Since operations in the domestic market seemed to proceed smoothly, the company founders of this privately owned company were planning to become market leaders first in Northern Europe and then to expand globally. At the beginning countries similar to Finland (Scandinavia, Northern Europe, Benelux countries and Germany) were selected as target markets.

After the selection of the markets Blancco created country-specific strategies and named one person from the company responsible for each market. After selecting key customer groups the company focused on creating well-functioning partnerships with the local dealers. Partners were carefully chosen on the basis of effectiveness reliability.

Blancco has developed a unique franchising-model:
The partners typically keep their own products under their own name and, at the same time, keep Blancco's product under Blancco's name (using Blancco franchising concept). Partners assume the risk for the business while Blancco concentrates on product development and the delivering of all the materials to the partners.

Blancco's sales are evenly distributed between the partners and the Internet. However, most of the face-to-face selling is delegated to the dealer network in the main markets (Scandinavia and Benelux). Deliveries are made either by mail (on CD) or through the Internet.

"Internetization"

"Internetization" is a term used in describing companies, which have internationalized rapidly by using the Internet as an integral part of their business model.

The Internet enables Web presence as well as extranet and intranet options for companies. The Internet mainly represents a marketing communications medium for software firms, but it can also provide a direct and immediate entry mode to foreign markets. In fact, the Internet is the force behind the born global phenomenon, which allows companies to promote and provide their offerings globally, without their physical presence in a foreign country.

The Internet is rarely a sufficient sales mode on its own, but it offers one critical channel to serve potential and current international customers.

Nowadays, it is a necessity for a software firm to have an English language website. Remember, you must support your company image and strategy globally.

5.1. Entry modes

Compare relevant entry modes on the basis of the following figure. The most intensive form of international operations is FDI and the least intensive is indirect exporting. Licensing and franchising may seem to be less involving at first glance, but the process of managing and structuring these relations can be very complex and require major development work.

Source: Saarenketo & Kuivalainen 2001.

When evaluating and choosing entry modes and channels to enter (multiple) international target markets, here is an acid test in the form of a list of questions, which may be used to evaluate the fit of each channel or entry mode:

Checklist for the choice of channel or entry mode choice	☑
Can the product be sold through the channel?	☐
Are the support material and the product ready to be sold by an external party?	☐
Can the product be sold separately? (vs. within a system or with a service)	☐
What type of approach is used in sales management – how the sales people are rewarded?	☐

Support After Selecting the Target Country

Finpro, a service organization that has expert consultants, aims at speeding up the internationalization of Finnish companies. They have established the **Finland Trade Center Network**, which has offices in 41 countries world-wide. You may want to check out the locations of these trade centers on **www.finpro.fi** and use their expertise and connections to fully understand how to enter which country. See Appendix 3 for more information on Finpro.

5. Research and Analyses in Support of Selecting Entry Mode, Channels, and Cooperation Mode

5.1. What are the alternative entry modes to the market? (For examples of entry modes see previous pages)

5.1.1 Compare the relevant entry modes below

Entry mode 1: ______________________________

Entry mode 2: ______________________________

Entry mode 3: ______________________________

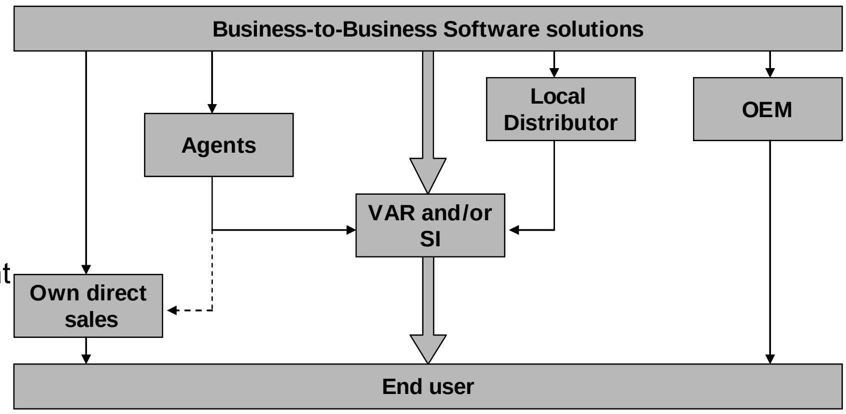
5.2. How to get your products over there? – Sales and distribution channels

Channel choice and entry modes sometimes overlap. In the software business a deep understanding of the channel mix is necessary. Choosing the appropriate channels for your product in different countries is crucial – especially when there are so many channels to choose from. They include international and local distributors, value-adding resellers (VARs), system integrators and major hardware companies.

The basic **starting point** for channel building as presented by a major Finnish software company consists of the following issues:

1. Understand your **product**
2. Understand the **channel opportunity**
3. Understand the **existing channel structure** in each country
4. Understand the **channel agent**

In the case of B2B applications, the figure on the right provides an overview of different channel options.



Source: Kuivalainen, Saarenketo & Jääskeläinen 2000.

Channel choice is also related to the **sales cycle** of the product. Usually a longer sales cycle requires more direct involvement by the producer. Product-related factors that stretch the sales cycle are depicted on the right.

Source: McHugh 1999

Where and how to start international channel building? A software professional's checklist for channel choice	☑
Where do the competitors make money?	☐
Where are the complementing products sold?	☐
Is there a need to support the channel and the customer simultaneously?	☐
What is the support call response time requirement?	☐
Do we need to establish local office?	☐

5.2. Sales and distribution channels

5.2.1 What is the channel structure?

5.2.2 Channel members

5.2.3 Channel management

5.2.4 Cost structure of sales and distribution channels in relation to your earning model (see Sections 2.1 and 2.7)

5.3. How to get your products over there - Partnerships and co-operation

Partnerships provide a software company with an array of alternatives, which are capable of growing their technology portfolio, market coverage, scope of products/services, research and production capacity, knowledge base, and complementary skills, while also facilitating management of risks. (Mohr and Spekman 1994)

The evaluation of and selection of potential partners relates to the identification of the value network of the company and to the general strategy of the firm.

A study shows that Finnish software companies have not evaluated their own strengths and weaknesses thoroughly enough to be able to establish fruitful relationships. (Source: Varis et al. 2004)

Below, there is a more detailed checklist to support the assessment of potential partners. Evaluate, whether there is business potential, customer fit, product and service fit, or marketing and sales fit, and how important are the particular aspects for your company.

Evaluation criteria	High	Medium	Low
Business potential			
1. Strategic importance			
2. Business potential (long-term)			
3. Short- and mid-term revenue			
4. Partner commitment to co-operation			
Customer fit			
5. Complementing customer base			
6. Complementing partnership network			
7. Partnerships with competitors			
Product and service fit			
8. Complementing products and/or services			
9. Depth of product integration			
10. Partner's competing product offering			
11. Number of potential applications (application partners only)			
Marketing and sales fit			
12. Strong global market footprint			
13. Centralized (+) or decentralized (-) organization			
14. Need for solution packaging			

Source: Varis et al. 2005

5.3. Partnerships and co-operation

Consider what co-operation possibilities there are in other activities than in sales or distribution relevant to international markets. (For detailed checklists for partner selection see the previous page and for partnership management, see the following page)

5.3.1 Type of co-operation

___

5.3.2 Outsourcing, cooperation relationships and networking

___

5.3.3 Co-operative partner, what types of firms

___

5.3.4 Co-operation and partnering relationship management (see next page for info)

___

5.4. How would you rate the level of your knowledge of entry modes and of your ability to select a suitable entry mode into international target markets on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

5.5. How would you rate the level of your knowledge of channels and of your ability to select suitable channel in the international target market on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

5.6. How would you rate the level of your *knowledge of cooperation forms* and *partners* and of your *ability to select suitable cooperation or partnership* in the international markets on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

More information on the partner-management process

Partner selection and management is a difficult process with several phases of varying lengths.

Below you find an example of a partner management process by a Finnish software company, which offers systemic software products for business customers.

Phase	Issues Included	Estimated duration
1. First contact	- Filling of partner application form - Collection of background information - Information given about validation criteria	
2. Early negotiations	- Business review (analysis of products and competence) - Partner assessment and presentation of partner program	
3. Analysis of the potential partner	- Filling of the partner analysis form	
4. Second stage negotiations	- Visit by the potential partner - Preparation of the business plan (assistance given by Company B) - Draft of contract	
5. Signing of the Contract		
6. Early phases of the partnership	- Establishment of partner folder, early information collection - Discussion and analysis of training issues - Agreement on partner monitoring criteria	
7. Training	- Participation of partner's personnel on training academy	
8. Consultant gives further training	- In-house consultation for the new partner	
9. Pilot case	- First customer	
10. Normal operations		
11. Review	- Partner meetings and assessments - Further development of marketing plans etc.	

Source: Varis et al. 2005

***Hyvönen (ed.) 2003. Ohjelmistoliiketoiminta* (*Software Business*)**

Introduction

This book provides an extensive overview of the topics that need to be considered in the software business including: business models, productization, marketing, computer law, equity finance, financial management, management and leadership, software product business cluster, global business, and research on the software business.

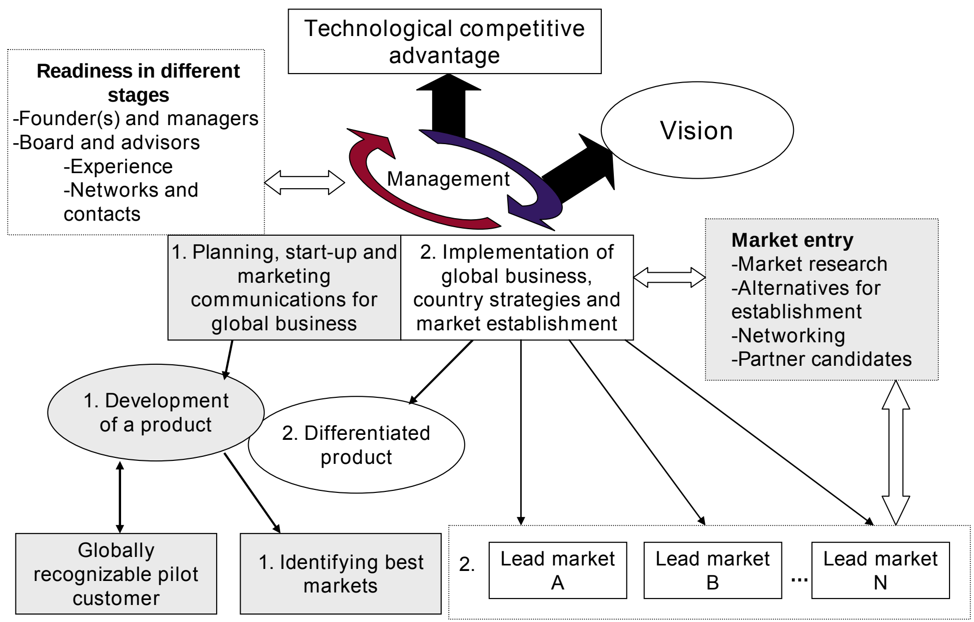
The book is targeted for:

- Personnel in software firms interested in having a theoretical knowledge base to support learning and decision-making
- IT students interested in business aspects
- Business administration students interested in the software business
- IT researchers interested in productization and entrepreneurship
- Software entrepreneurs interested in a guide for different aspects in the software business

Internationalization

Internationalization aspects are presented in Section 10 (pages 160-213) by Nukari, Saukkonen, and Seppänen. The writers see internationalization as a necessity for Finnish software firms. The global markets for software are presented, and the born global model for internationalization is featured.

Most interesting for entrepreneurs and managers of software firms is the framework for the establishment and rapid development of a global software business. It suggests that in the pre-start phase the fundamental factors for success are the vision based on the executives' experience and market understanding and the knowledge of how to diffuse a breakthrough technology. The elements of start-up and growth of a global business are presented in the figure below:

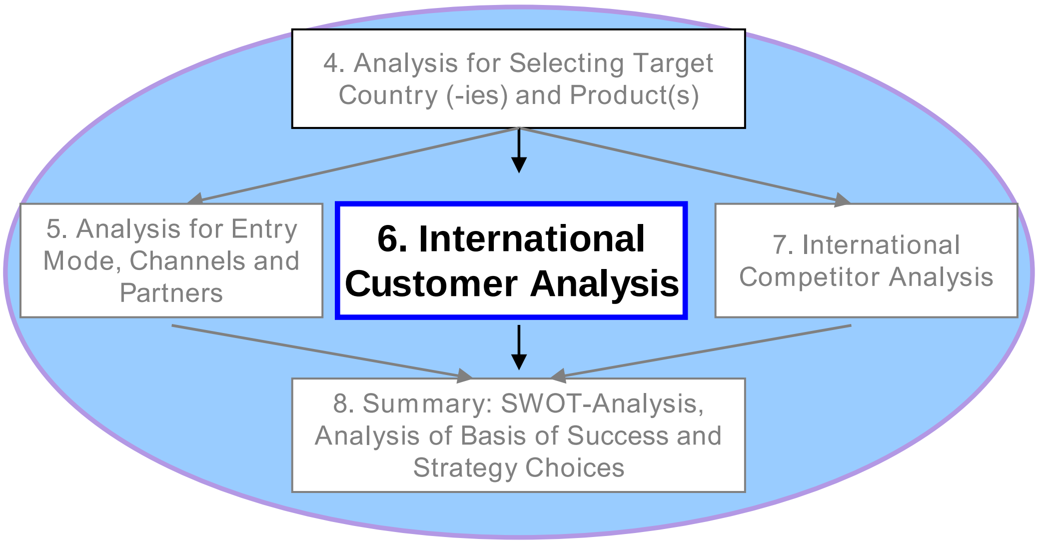


High tech and software companies are often accused of forgetting the customers and developing technology for technology's sake or trying to sell know how and technology instead of solutions to customers' problems. There is some truth to this claim, although many software companies were born in reaction to the customers' needs. The questions, "Who is the customer and what does the customer want?" are therefore important questions. Being customer centered ensures your success in the competitive marketplace and getting onto an accelerated growth path, as was pointed out in Chapter 6 of Part I.

In the introduction to Part I, it was mentioned that although life cycles are usually defined in terms of the development of products, technologies, and companies, it is important to realize that there are also corresponding customer and market life cycles that need to be understood. Geoffrey Moore's model was introduced and his central message is that if we are entering the markets with a new innovation that may be loved by the early-market "technology buffs," the major hurdle is to get it accepted by the "mainstream" customers and markets. These two markets are, in fact, so different that he argues that there is a major "chasm" between them. McHugh talks also of similar stages of market and customer development.

Nukari, Saukkonen and Seppänen presented a model for internationalization, where the role of a globally recognized pilot customer is emphasized. Naturally, customer orientation is a central issue in the requirements and challenges for internationalization in Chapter 4, Part I. For example, Cusumano's list, "What to look for in a software startup?" lists as the fourth point "Strong evidence of customer interest." Naturally, companies on different internationalization pathways also differ in terms of their approach to customer strategy as is shown in Chapter 5, Part I.

SECTION 6
WHO ARE YOUR CUSTOMERS?



Who are our customers? Who are the end users?

What needs does our product fulfil?

Who have most influence to the decision making by end-users? What is their purchasing process?

Does our product concept fit the end-customers' needs?

6. Who are your customers? – Customer and product concept analysis

The question, "Who is the customer?" is very important, and yet the answer is seldom self-evident. It is important to analyze different customer types and levels, and the purchasing process. This analysis must be based on objective and reliable information about the customer base, characteristics and purchasing process, as was pointed out in Section 1.3. Competitive strategy is defined in relation to customers and competitors. Thus a meaningful strategy cannot be defined without first-hand and reliable customer knowledge, even if the company would not actually handle the sales activity directly with customers. Gaining this knowledge does not always require broad and demanding market studies.

Most beginning exporters tend to consider their reseller as the customer. However, the analysis must in all cases be extended to cover the whole customer chain and especially the end users. At the same time, understandably, we must treat the reseller as an immediate customer. Especially, during the beginning stages of internationalization, distribution members (representatives or resellers) may provide reliable knowledge about the end users and final customers.

End users of Finnish software product businesses

Typical end users for Finnish software products are business users. The table below presents the end users of Finnish software products in 2003.

	Revenues from product business (million euros)				
End user	**<0.2**	**0.2-0.99**	**1-1.99**	**2.2.99**	**3 -**
Micro Enterprise	20%	12%	6%	33%	7%
Small Enterprise	50%	39%	41%	83%	13%
Medium Enterprise	57%	49%	53%	100%	60%
Large Enterprise	50%	47%	53%	83%	73%
Public Administration	29%	43%	18%	17%	53%
Private consumer	13%	6%	12%	33%	13%
Number of cases	56	51	17	6	15

Source: Jokinen et al. (2005)

Organizational buying

The buying process of business buyers typically involves several stages and takes more time than in consumer markets. The decision to purchase may have to be collective. In the best case, you are able to raise the awareness of a person with the authority to make the purchasing decision, and induce him to buy on the spot. The actual adoption is often preceded by a trial period. The steps in the organizational buying process are:

1. Problem recognition (What is the need? Who has the need?)
2. Assignment of buying authority (Who knows most of the product? Who has the problem? Who is in the position of responsibility?)
3. Search procedures (Locate the product. Develop a selection system)
4. Evaluation and selection (Lowest bid, most specs met, other criteria)

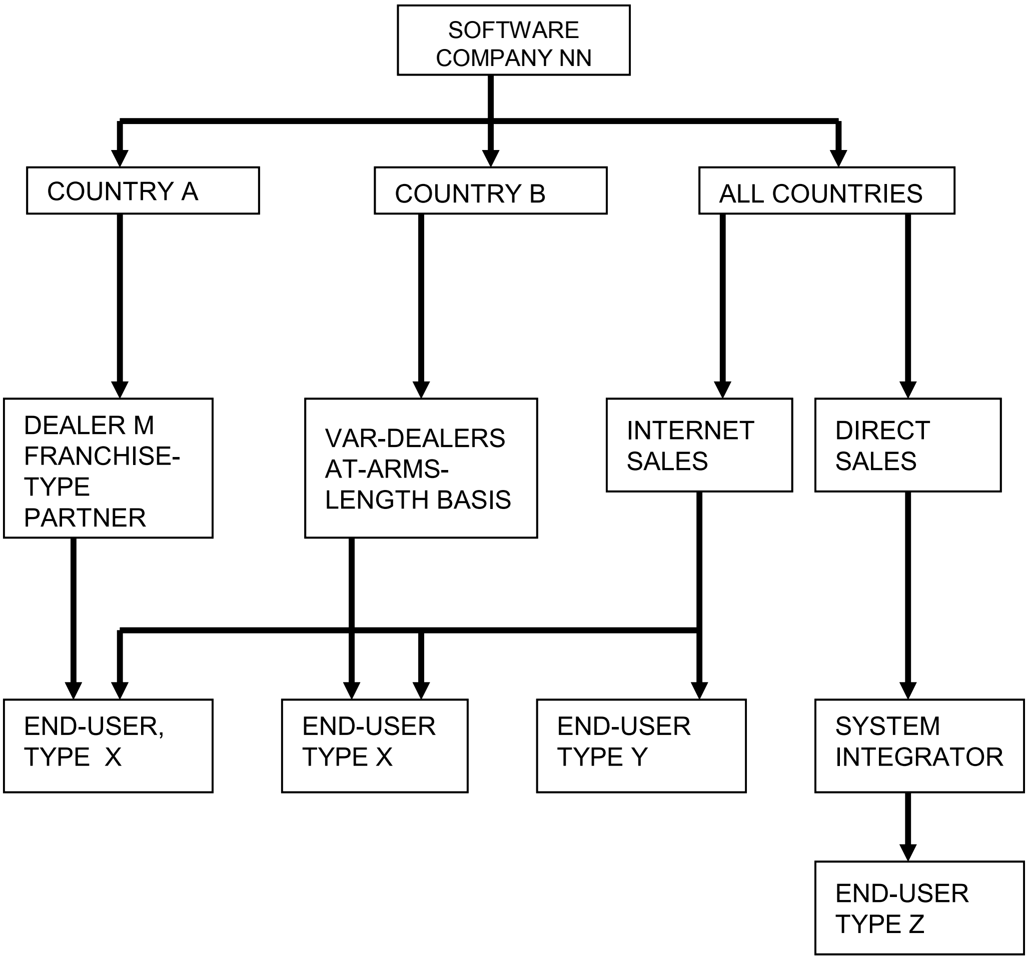
6. International Customer and Product Concept Analysis

6.1. Customer analysis: Who are the company's customers?

6.1.1 What is a typical customer/purchasing chain (including immediate buyer, potential end user and customers' customers)? [Make a list or a drawing. See the example on the following page.]

6.1.1. An imaginary example of a customer chain.

A typical example of charting a customer chain is depicted below. Each company must find the best way to describe its own customer chain. Important questions in this analysis are listed on the opposite page.



6.1.2 Who are the immediate customers (e.g. reseller)?

6.1.3 Who is the customer's customer? Who are end users and/or final customers?

6.1.4 Whose satisfaction with the company's products will determine the success of the company in the long run?

6.1.5 What is a typical purchasing process and chain of purchasing decision-making?

6.1.6 Which parties inside and outside of the customer companies participate in the purchasing decision-making process (for example planners, financiers, authorities etc.). What is the role of each party in the purchasing process (influencer, decider, payer, user, etc.)?

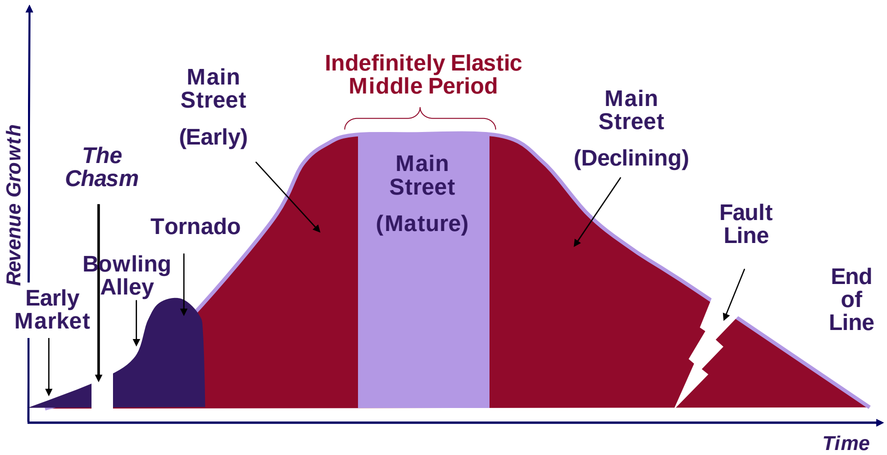
6.1.7 Who should be the first persons you need to contact? Who can you influence the easiest in the chain?

6.1.8 How would you rate the level of your company's knowledge of your customer chain and customers' *purchasing process* from the perspective of internationalization on a scale from 1 to 5?

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

6.2. Analysis of customer needs

In analyzing customer needs it is useful to proceed by listing immediate, self-evident reasons. When you have first answer to the question: ”Why does the customer need our products?” continue to ask, “why is it so?” When this line of questioning is continued long enough, we can finally come up with the deeper, more important needs. The Japanese call this approach “the method of seven ‘why’ questions,” and imply that we should repeat the "why" question seven times in each instance. Customer need analysis leads naturally to a customer-based definition of products and product strategy. Therefore, we have included here a general product concept analysis, even if it actually forms part of the strategy formulation process itself.



You may want to analyze the customer needs with respect to the market development life cycle and technology adoption cycle according to Moore (1991), whose customer life cycle model was briefly introduced in Part I. According to Moore (1995), there is an optimal business model for each stage in the technology adoption life cycle as depicted in the table.

Life-cycle effects - when to enter?
The question again regards your properly done “homework.” It is important to evaluate and identify which phase the market in the target country is currently situated. Is your target country in the early or late stage of market adoption compared to your own current markets?

Early market	Professional services
Bowling alley	Application products
Tornado	Infrastructure products
Main street	Transaction services

Most Finnish firms do not possess the resources to educate innovators and early customers, so instead of going to the market at G. Moore’s "bowling alley," where no pins are available, a small firm *should usually head for the “tornado" markets, which are almost ready for the rapid growth stage.* In this stage products are normally based on familiar technology and the market is ready to adopt and buy. A fast approach is important. One should grasp the opportunity and start operations at once. (Ruotsalainen 2.2.2005)

More information about the technology adoption life-cycle by Geoffrey A. Moore:

Crossing the Chasm (1991): Marketing and Selling High-Tech Products to Mainstream Customers

Inside the Tornado (1995): Marketing Strategies from Silicon Valley's Cutting Edge

With Johnson & Kippola: The Gorilla Game (1998): Picking Winners in High Technology

Living on the Fault Line (2000): Managing for Shareholder Value in Any Economy

Wiefels (Foreword by Moore): **The Chasm Companion (2002)**: A Fieldbook to Crossing the Chasm and Inside the Tornado

6.2. Customer needs analysis: what are the customers’ needs?

6.2.1 Why do end customers/end users need and use the products? What are the end customer/end user needs and problems associated with the product use?

6.2.2 How do end customers/end users want that the above-listed needs/problems to be solved? What other additional needs or problems do customers have related to the product use?

6.2.3 What are the customer needs and problems in business/business-to-business marketing? How would the customer’s customer want these needs to be fulfilled/problems solved?

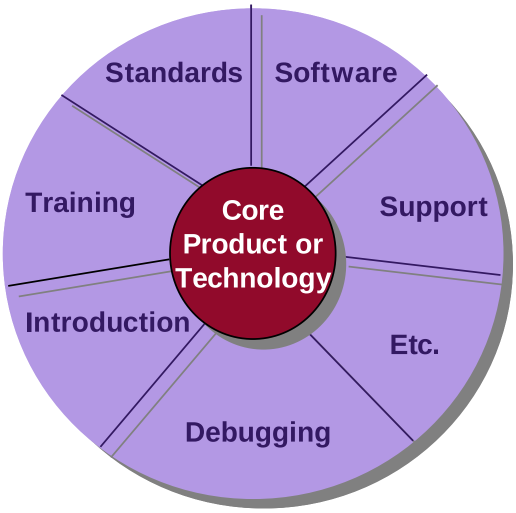
6.2.4 What are the needs and problems of possible immediate customers’ (e.g. resellers)? How would the immediate customers want these needs to be fulfilled/problems solved?

6.4. Product concept analysis

According to modern marketing thinking, the core of the product or the so-called '*product concept*' refers to **what the product does for the customer**, that is, what benefit (needs/problems solutions) the product offers to the customer. Thus, the basic principle in product strategy is:

You do not sell product features but <u>customer benefits</u>.

The product concept can be in the following way: *"The company offers its customers solutions for controlling the production process, and solutions for improving the efficiency and speed of the production process."* Defining product concept in this manner is closely related to the way we define the overall business concept or business model. (Section 10, p. 145)



The whole product concept (Moore 1991, 1995)
Finnish firms have the tendency to rely on their superior technology capabilities and neglect the auxiliary offerings and services. Moore suggests that after the early market stage, the company needs to institutionalize its product by integrating the existing product with existing services. This package can then be then used to cross the chasm by selling it to a particular niche, through which other niches can be reached. In creating and providing the whole product, the company needs to recruit partners to guarantee the offering. The wheel on the right gives you an idea about the services associated with the core product and how to deliver the whole product.
Finally, Moore does not suggest that the whole product concept provide a permanent solution, but rather that it is most suitable for early markets after which the service content can be removed to a great extent.

Checklist: Whole product?	☑
Are your targeting early markets, like technology enthusiasts or visionaries? → If yes, continue → if not, skip the rest of the questions	☐
Do you think you can deliver a whole product?	☐
If you cannot, are there available partners who could support you in providing the whole product?	☐

More information on product strategies:	
McGrath, M.E. (1995)	Product Strategy for High-Technology Companies.

6.3. Product concept analysis: What is the company's product concept?

6.3.1 Define your product as a solution to the end customer's/end user's needs or problems.

____

____

____

6.4. How would you rate the level of your company's knowledge of your *customers and their needs and problems* from the perspective of internationalization on a scale from 1 to 5?

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

6.5. How would you rate the level of your company's *product concept definition* from the perspective of international customers on a scale from 1 to 5?

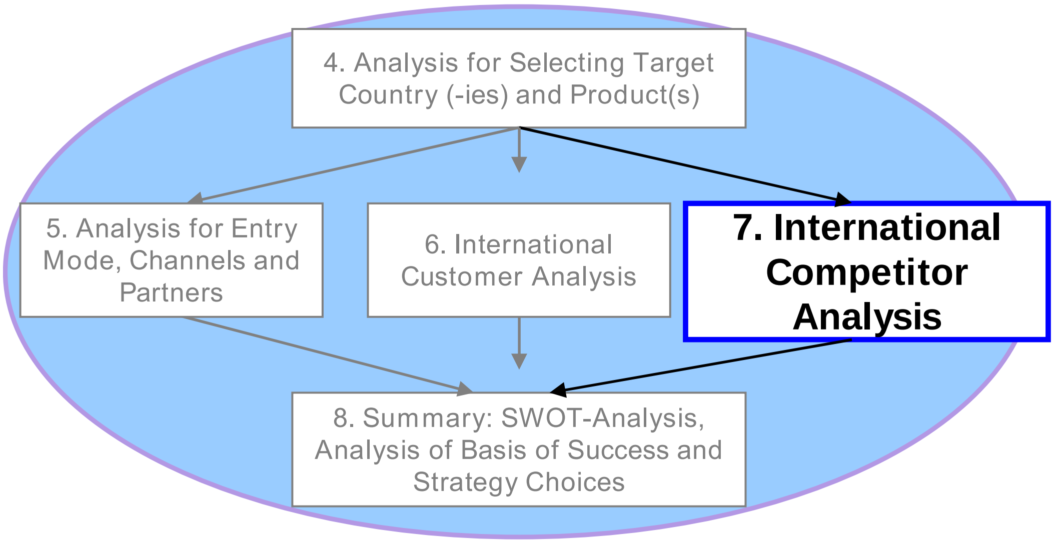
Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

It is true that we should try to develop unique skills and products and not imitate competitors. However, it is equally true that we must certainly know what our competitors are already offering to our intended customers so that we can present a good reason to them to buy from us and not from our competitors. Thus, knowing the competitors is as important as knowing the customers. Competition should be understood broadly. Especially companies with a unique product often claim that they have no competition. It would be more correct to say that they have no direct competition, as the old ways of doing things can present an important form of indirect competition.

The nature of competition and our way to relating to it are important factors that characterize different stages and paths of internationalization. This was evident in the different stage models in the introduction to Part I. As technology, products, and markets mature, the level and amount of competition rise, which affects the choice of the internationalization path. Many life-cycle models assume that the maturing of the different phenomena go hand in hand with the maturing, growth, and internationalization of the company. That is why it was pointed out in Chapters 1 and 2, Part I, that companies may switch paths as the company, technology or markets mature at different speeds.

Companies enter the growth and internationalization stage at different corporate and technological life cycles. Companies may have grown quite large while in the domestic market or they may still be small startups at the moment. Likewise, their product and technologies may be brand new or may be already mature. The timing of these different cycles was depicted in Figure 5 in Chapter 3, as well as in Table 2 in Chapter 4, Part I. Naturally, competition is also an important factor to the requirements and challenges for internationalization.

SECTION 7
HOW TOUGH IS THE COMPETITION OVER THERE?



Who are our direct and indirect competitors?

What is the structure and level of competition in our target market?

How strong are the competitors? How does our product match up to the competition?

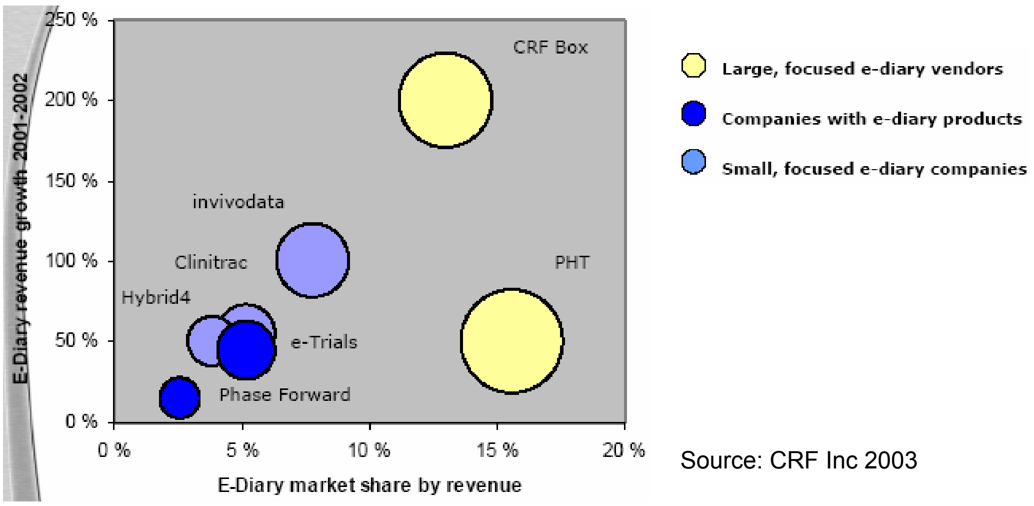
How do we get to know our competitors better?

7. How tough is the competition over there? – Competitor analysis

Competitive strategy can be defined only in relation to customers and competitors. (See The Three Cs strategy triangle in Section 1.3 on page 54) Thus reliable first-hand knowledge of competitors is indispensable. The purpose of a competitor analysis is to find out who are the most important direct or indirect competitors in different customer categories, as well as what is the structure and level of competition. This analysis must be based on reliable personal understanding and clear facts. Even if the company offers new innovations, and does not yet have direct competitors, in normal markets there are always indirect competitors. The results of the analysis will be used in Section 8.

Sometimes indirect competition is as important as direct competition, for example when the product is a new innovation or new way of doing things in the market. An important type of indirect competition is that the customer does not buy the product but is satisfied with the old solution or old way of doing things. That is why the company must often be able to present arguments against both indirect and direct competition.

One way of summarizing the competitive situation is to depict the market players' revenues, revenue growth and size in a matrix form, as presented below:



Source: CRF Inc 2003

Case Blancco: Competitive analysis

Competition for Blancco is mostly indirect. Blancco has identified at least 50 competitors. Most of them are small companies, freelancers or departments of corporations. Competitors also include large multinationals and companies that offer shareware or freeware solutions for free. Blancco pursues to differentiate its offering with quality and service, keeping its prices relatively high. Blancco pursues to keep its products technically advanced and well-functioning and provides an array of value-added services.

7. International Competitor Analysis

7.1. What are the structure and level of direct competition? What are the number, market share, and size of the competitors (how many small local competitors and how many large international competitors)? How do the products and prices of competitors compare with those of ours?

7.2. What types of companies are our direct competitors (companies that offer similar products and/or services)? What are the benefits offered by our company in relation to those of our direct competitors?

7.3. What kind of indirect competition does the company meet in the market? What other products, services and companies are competing for the same customer funds (e.g. alternative investments)? What are the benefits offered by our company in relation to those of our indirect competitors?

Competitor analysis – two opposing views

Modern management thinking has developed two opposing views of the importance of analyzing competitors. According to the traditional view it is of utmost importance to analyze and understand the competitors as closely as possible so that with the right competitive strategy you can react to their moves and beat them. The newer opposing view could be summarized as “reinvent our industry,” that is, do not worry about competitors, it will only lead to imitating them. Instead, get ahead of them and develop revolutionary and unique ideas. The truth may lie somewhere between the two extremes. In any case, it is important to understand and study the competitors to know for sure, if you can afford to ignore them or not. Furthermore, all businesses mature sooner or later, competition develops, and we must understand what we are up against and what we need to do to stay ahead of them.

Benchmarking – a useful tool for competitive analysis
Benchmarking is a systematic method for monitoring, measuring, and comparing the performance against some challenging yardstick: for example, the best competitors or the best-in-class performers anywhere in the world irrespective of the industry or activity. Benchmark is a reference or measurement standard for comparison, a measured best-in-class achievement, or a performance level recognized as a standard of excellence. If best-in-class means the best in the world, it is usually referred to as world-class. Best practice is superior performance in an activity or an approach or methods that leads to it. Benchmarking attempts to identify best practices that are interesting or innovative business practices, which contribute to superior performance. There are three main dimensions or levels of benchmarking: internal (other parts of the same corporation), competitive (other similar companies), and best-in-class or world-class (irrespective of industry). Different aspects of business activity can be benchmarked, such as functions, processes and operations. Typical areas include performance in customer service, product/service provision, core business processes, support and service processes, employee activities, supplier activities, new product/service development and technology. A benchmarking partner is another organization that has agreed to cooperate closely to conduct mutual benchmarking. Benchmarking was originally developed by Xerox to study the practices of its Japanese competitors in the late 1970s.

Literature on benchmarking:	
Bogan, C.E. and English, M.J. (1994)	Benchmarking for Best Practices: Winning Through Innovative Adaptation
Boxwell, R.J (1994)	Benchmarking for Competitive Advantage
Karlöf, B (1993)	The Benchmarking Management Guide
Watson, G (1993)	Strategic Benchmarking

Source: Äijö, Toivo S. (forthcoming). Latest Management Ideas and the Business Paradigm Shift – Concepts and Gurus That Shape the World,

7.4. List and analyze the most important competitors of the company in the market by comparing the following characteristics of the competitors to the company characteristics (perform the same analysis for each important competitors separately).

Competitor 1: ______________________________

Products: ______________________________

Customers: ______________________________

Strengths: ______________________________

Weaknesses: ______________________________

Position in the market: ______________________________

Strategy/basis for success: ______________________________

Competitor 2: ______________________________

Products: ______________________________

Customers: ______________________________

Strengths: ______________________________

Weaknesses: ______________________________

Position in the market: ______________________________

Strategy/basis for success: ______________________________

7.5. How would you rate your level of *knowledge about your competitors, their products, resources and skills* from the perspective of internationalization on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

The SWOT analysis is a summary of all the previous analyses. Its purpose is to help planners form a clear, comprehensive picture of the situation. It will help you to choose the best path to growth and internationalization, to elaborate the strategic challenges and choices, and finally, to formulate a successful competitive strategy for international markets. How the internal corporate and external, environmental factors (requirements and challenges) summarized in the SWOT-analysis help you choose the right path to growth and internationalization was analyzed in Chapter 4 of Part I. How these factors and their effects differ along each pathway was presented in Chapter 5 of Part I.

	POSITIVE	NEGATIVE
COMPANY: - Internal resources, skills and competences - External assets, skills and capabilities	Where the company is clearly better than its competition with respect to its customers? (Company strengths)	Where the company is clearly worse than its competition with respect to its customers? (Company weaknesses)
ENVIRONMENT - General trends in global industry environment - Customer and market developments - Competition, etc.	What are the main positive changes in the business environment and the opportunities they offer us? (Opportunities)	What are the main negative changes in the business environment and what challenges and problems do they present us? (Threats)

⇓

Strategic challenges and strategy choices

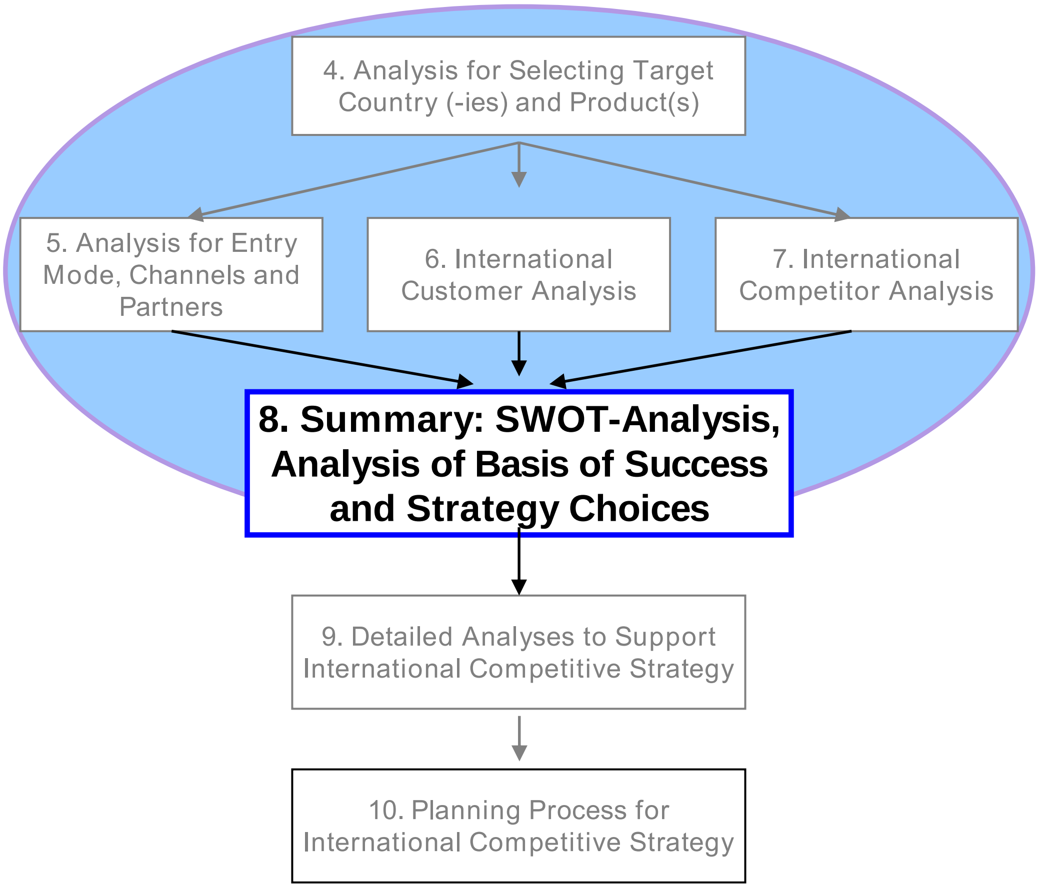
⇓

Choice of pathway to growth and internationalization

⇓

Choice of competitive internationalization strategy

SECTION 8
DO YOU SEE THE FOREST FROM THE TREES?



Where are we strong or weak in relation to our competitors?

What is the basis for our international success?

What are the biggest strategic challenges and risks? What are our strategy choices?

What are the threshold factors of our intended customers?

8. Do you see the forest from the trees? - SWOT analysis, strategy challenges and options, paths, and the basis of international success

The SWOT analysis is an important type of analysis in support of strategic planning. Here the results of all the previous analyses (company, global business environment, customer and competitor analyses) are summarized. The company's strengths and weaknesses as well as the opportunities and threats offered by its business environment are defined in the conclusion. The purpose of the SWOT analysis is to help develop reliable definitions for the company's superior customer benefit and superior competence, which will serve as the core of its strategy. The SWOT analysis will be performed separately for each product group or strategic business unit (SBU) as well as for each market. A meaningful SWOT requires relating the company to its customers and competitors – without which, it is impossible to formulate a successful strategy.

After performing the analysis we have a good understanding of the choices we have and what the challenges and risks are associated with each choice. This will make the appropriate path easier to choose. The latter issue is discussed further in Section 8.3.

There are two main shortcomings of typical SWOT-analyses: first, the analysis is not concrete enough; and second, the analysis is not critical enough. There are no general absolute strengths – there can only be strengths compared to specific competitors and in relation to fulfilling customer needs. We must not be content with general statements such as "technology" or "experience" as strengths. Instead, with respect to technology and experience, we must ask, "What are we able to give to the customer that is clearly better than what competitors are offering?"

8.1. Corporate analysis

Here the results of the analysis of the company's resources and competences (in Section 2) are summarized. In a corporate analysis the company's strengths and weaknesses are assessed in relation to customers and competitors by asking: "What are the company's strengths and weaknesses in relation to customers and in comparison to competitors?" This is why the analysis of the company's resources and other characteristics must have concrete reference points derived from environmental, customer and competitor analyses. Answer the following questions about internal and external characteristics (for example: resources, skills, competences, experience, management, human resources, financing, leadership, production, R&D, purchasing, logistics, deliveries, products, technology, references, location, marketing, service, image, etc.).

The core of the strategy (external and internal basis of success) is based on the company's strengths. This is why it is important that the analysis is as concrete and critical as possible. If the strengths are not sufficient for success, one of the tasks of a strategy is to make sure that the strengths are secured and developed and that their maintenance is also secured in the future. The findings from 8.1-8.3 will be summarized in Section 8.4.

8. Conclusion: SWOT Analysis and Clarifying Strategy Challenges, Options, and the Basis of the Company's International Success

8.1. Corporate analysis:

8.1.1 In which customer-related and internal areas is your company clearly better than its competitors from the customer perspective ("strengths")? In each case it is good to refer to the following critical questions:

- Is your company clearly better than its competitors from the customer's perspective in this area?
- What does "clearly better" mean concretely? What exactly do your company and its products do better than its competitors?
- How much better than its competitors is your company (can the superiority be measured)?

8.1.2 In which important issues must your company be as good as the most important competitors from the customer perspective?

8.1.3 In which important areas is your company clearly worse than its competitors with respect to customers ("weaknesses")? In these areas it is important to ask:

- Is the weakness crucial to success?
- How much worse than competitors is the company (from customer's perspective)?
- How can the company alleviate or compensate this weakness through its strategy?

8.2. Environmental analysis

The environmental analysis summarizes the results from the analyses in Sections 3, 6, and 7. It covers all the areas important to the company that affect its products, customers and competitors. Here we ask what kinds of positive changes (“opportunities”) or negative changes (“threats”) are occurring in its environment that are important for the company. When the word “opportunities” is used it is easy to commit the common mistake of thinking of “what can we do” and beginning to list ways of reacting to changes. Similarly, the word “threats” often leads companies to think of “what is difficult or risky for us” instead of listing negative, threatening changes in the environment. These questions (“what can we do” or “what is difficult and risky for us”) belong to the analysis of strategy alternatives. (This is why we have included Section 8.3. to cover these questions). It is important to be as concrete as possible in analyzing the environmental changes and trends from the company’s perspective.

Typical negative changes in the business environment include: rising level of competition, slowing down of the market growth, new restrictions on business, new, better product innovations, market saturation, etc.

8.2. Environmental analysis:

8.2.1 What is occurring in the business environment that is clearly positive from the company's perspective ("opportunities")? What are the specific positive effects of these positive environmental changes on the company's business? How can the positive changes in the business environment be beneficial?

8.2.2 What are the important changes in the business environment that are basically neutral from the company's perspective, but which the company must adapt to?

8.2.3 What clearly negative changes from the company's perspective are occurring in the business environment ("threats")? How do these negative environmental changes or trends affect the company? How should the company react to these negative changes in its business environment?

8.2.4 What are the entry barriers in the company's intended markets, i.e. in what areas (such as experience, management skills, market position, image, resources etc.) are the established competitors in those markets clearly better?

8.3. Strategy challenges, the choice of growth and internationalization path and competitive international business and strategy

Above, when discussing the environmental analysis part of the SWOT analysis, we drew attention to the danger of beginning to list alternative actions under the heading of “opportunities,” as the word easily leads us to understand it in terms of “what can we do.” Similarly, the category of “threats” often leads managers to think of “what is difficult or risky for us to do.” It is best to carry out these strategy analyses and interpretations separately as a conclusion of the entire SWOT analysis. At this point it is important and useful to use a creative brainstorming approach. On the basis of this analysis it will later, during the actual strategy formulation stage, be easy to choose the best alternatives as to the growth and the internationalization path.

For example, the problems may include issues such as lack of growth in the main market, a higher level or a new form of competition, new regulations, lack of skills or resources, etc. If there is a lack of growth, it is first important to analyze the reasons for it. It may be temporary due to business cycles, it may be more serious, due to higher level of competition, or it may be permanent due to saturation and/or maturation of the market. In each case, it is important to brainstorm all possible courses of action that constitute the particular growth and internationalization path for us.

As was described in Part I, especially in Chapter 6, the growth and internationalization paths consist of the following types of choices: strengthening our resources, skills and competences, entering new segments or new markets, finding cooperation partners, finding new channels or distribution outlets, improving products, developing new products or new services, improving our cost efficiency, increasing our promotion and sales effort, lowering prices, etc. Each alternative course of action will lead to further analysis as to specific ways of implementing it. The problem may be that the customers do not know us, or have a negative view of us. In this case brainstorming would concentrate on different ways of improving our distribution, marketing communication, different messages and possible branding choices, etc.

Formal Growth strategies

The growth strategy matrix (originally developed by H.I. Ansoff) is still a very useful tool for analyzing different alternatives for solving the types of problems described above. Traditionally, these strategies are referred to as “growth” strategies, but they are useful in most analyses of strategy alternatives, whatever the original problem. There are three basic types of strategies

1. **Intensive growth strategies:** here the company decides that its business concept is still valid but that it has to intensify and improve some aspects of its competitive strategy. Under intensive strategies we have three sub-categories: 1.1. *penetration strategy* (improve pricing, promotion, or distribution, etc.)*;* 1.2. *product expansion strategy* (new types of products or services)*;* and 1.3. *market expansion strategy* (new types/segments of customer served)*,*
2. **Integrative growth strategies:** here the company seeks the improvement via cooperation (integration) with other companies
3. **Diversification strategies:** here the company decides that they cannot continue to be competitive in their old business, but that they will have to get into a new type of business (that is to change their business concept).

8.3. On the basis of the SWOT analysis, what are the strategy challenges and strategy choices?

8.3.1 Given the company's situation summarized in the SWOT analysis, what are the main strategic challenges and problems that the company is facing?

8.3.2 What are the alternative solutions for each problem listed above?

8.4. Basis for international success

This analysis is based on the results of all the previous analyses (summarized in the SWOT analysis). The core of a competitive strategy is the basis for a company's success. The basis for success consists of external and internal factors where the company is clearly better than its competitors in the eyes of its chosen customers. It is important that the external and internal superiority factors are related to each other. The results of this analysis form the foundation for the actual strategy formulation and strategic planning process.

It is especially easy to see the need for a clear competitive superiority in the case of a company that is planning to enter new markets. As a newcomer it has several weaknesses when compared to established competitors in the same markets (This is why it is good to analyze the entry barriers as a basis for analyzing the basis of success). However, irrespective of the specific situation, all companies face market entry barriers that consist of the competitors' strengths. Consequently, all companies must think where they are clearly better than competitors. The main question is therefore: **are the company's superior customer benefit and internal superiority strong enough to compensate for the entry barriers?**

In this workbook we are using, on purpose, neutral terms, such as external superiority or superior customer benefit as well as internal superiority or superior competence. The reader may choose his or her own terminology. For example, there are several different terms and definitions used for the superior customer benefit (defined here as the basis for success or as the reason why customers buy from us and not from our competitors), such as:

- Competitive advantage
- Added value, added customer value
- Unique selling proposition
- Critical success factor, etc.

Recognizing, defining and strengthening the superior customer benefit is one of the central issues in strategic planning. Customer orientation, comparison to competitors, as well as being concrete and critical are important in defining superior customer benefits. The so-called "million-dollar question" is: Are we sure that our company is clearly better than our competitors from the customer's perspective, and if so, how much better? Sometimes the company may conclude that the product characteristics are the same as in competing products, but that the superiority lies in service (speed and/or flexibility). Being concrete means that, in this case, the company must be able specifically to tell how its service is clearly better than its competitors from the customer's perspective. (The core contents of a strategy have been touched on in Chapter 4 of Part I, in Introduction, and Sections 1 and 10 of Part II)

8.4. What is the basis of the company's international success?

8.4.1 EXTERNAL SUPERIORITY or SUPERIOR CUSTOMER BENEFIT: In which areas, important to its chosen international customers, is the company clearly better than competition? Are these issues decisive to the customers' purchasing decisions?

8.4.2 INTERNAL SUPERIORITY or SUPERIOR COMPETENCE: In what internal area (crucial to its success) is the company clearly better than its competitors? What does the company have to be able to do inside the company clearly better than its competitors so that it can continue to offer a superior customer benefit to its customers?

8.4.3 How would you rate your ability to define a clear superior customer benefit for your intended international customers on a scale from 1 to 5?

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

8.4.4 How would you rate your ability to define a clear internal superior competence in comparison with your international competitors on a scale from 1 to 5?

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

It is important to relate the superior customer benefits to the internal superior competences, by asking: "If these are the company's superior customer benefits, what must the company be able to do clearly better than its competition internally for continued success?" The following table might be helpful in this analysis:

Superior customer benefits		Superior competences
	➡ ➡ ➡	

8.5. Threshold factors

In Section 8.4. we discussed the company's internal superiority or superior competence and the external superiority or superior customer benefit and how important it is to be critical and concrete in this analysis and ask: "Are we sure that in this area the company is clearly better than its competitors, and if so, how much better? Often a company cannot be clearly better than its competitors in the core business functions (such as production or logistics), but its superior competence may lie in better customer knowledge, speed, flexibility, etc. Being concrete means that the company must be able to tell what it is doing better than competitors in these areas.

Realistically, we need to remember that there are only a very few points where we can be clearly superior to competitors. However, there are several areas where our company must be able to be as good as our competitors from the customer's perspective. These issues are called "threshold factors." Using a sports metaphor, the threshold factors are the ones that decide whether or not the company qualifies in the series, whereas the superiority factors decide which company wins the race. In fact, the list of threshold factors is usually much longer, and just as important for our success in the long run as the superiority factors.

These are the factors where we cannot afford to look clearly worse than our competitor in the customer's eyes. That is why the threshold factors have also been called "tolerance factors." We may be able to differ from our competitor but within certain tolerance limits, for example, in terms of price, speed or service. If our superior customer benefit is based on a better product feature (based on superior R&D ability), we may be able to charge a slightly higher price for our product, but only within a certain tolerance.

8.5. Analyzing threshold factors

8.5.1 EXTERNAL THRESHOLD FACTORS: In which important external areas (visible and important to the customer) must the company be at least as good as its best competitors?

8.5.2 INTERNAL THRESHOLD FACTORS: In which important internal areas must the company be at least as good as its best competitors?

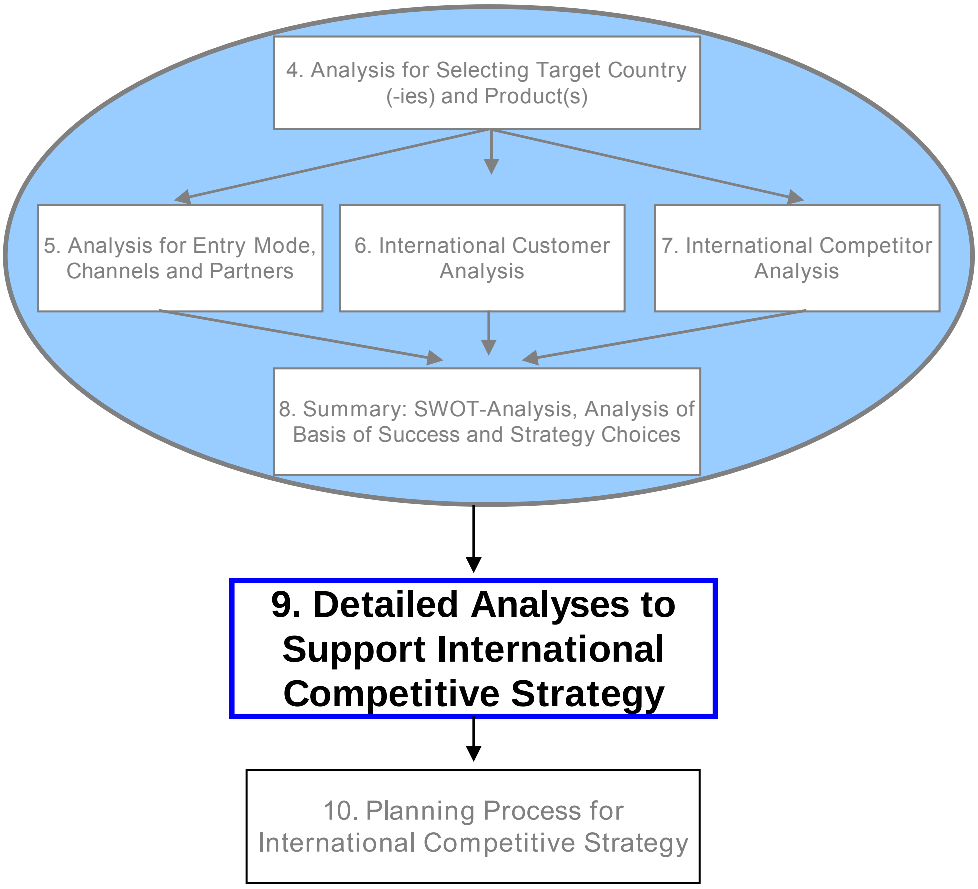
8.5.3 How well does the general or domestic basis of success (superior customer benefit, superior competence and threshold factors) work in different international markets? What are the tolerance limits for the most important threshold factors?

8.5.4 How would you rate your ability to *define clear external and internal threshold factors* (where you need to be as good as best competitors in your international customers' eyes), on a scale from 1 to 5:

Very low	Low	Average	High	Very high
1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

This quidebook tries to present a general picture of what it takes to embark on a road to growth and international success in terms of three main pathways and the analyses that help to determine your readiness to make the best choices. The need for reliable information does not stop there. On each path the company must choose, for example, a particular market, target customers and segments to serve, as well as the entry mode, channel, and potential partnership. These issues are prominent in Chapters 4, 5 and 6 in Part I. To select and implement these decisions necessitate further studies and analyses. This section is intended to help you stop and determine what else needs to be done.

SECTION 9
INTERNATIONAL MARKET RESEARCH



What is the stage of our internationalization maturity?

What else do we need to know?
Where can we find extra information?

How can we collect the data most efficiently?

Are we ready to formulate detailed plans for growth and international expansion?

9. Detailed international market research and final evaluation of readiness

When particular growth and internationalization paths, which comprise the product and the target country, entry mode, channels, and possible partners, have been selected on the basis of the analyses in Sections 1 to 8, it is important to continue with different detailed market studies. Each path, customer type, and target country have their characteristics, demands, challenges, and risks that need to be studied in greater detail. There is also a need for the actual formulation of a successful international expansion strategy. Sometimes the company does not have money or time for an extensive, time-consuming market research. Even in that case the management must acquire reliable first-hand understanding of the market one way or another. Detailed market studies may concentrate on any important aspect of the international expansion strategy, such as: customer purchasing behavior, communication, distribution conditions, and pricing conditions.

If the mode of operation is other than exporting, the following issues may be important to study: financing, accounting, business law, purchasing, production, transportation, human resources, and management, etc. As it is not possible to cover all possible issues in this workbook, we can only remind you that there are numerous excellent sources available.

In doing a market readiness analysis one prominent case firm thought about the following:

- Country comparisons: if it took seven years for the product innovation to reach a 70% market penetration in the UK what would be the right time to enter the Brazilian or French market?
- The US market was three to five years late in comparison to most developed markets in Europe. After realizing this window of opportunity, a firm rapidly entered the US market where the current market leader had been doing “customer education” for years. In two-years’ time the firm had become the new market leader and was able to benefit from the market that had been created by its competitors.

Case Multicom Software: Do your market research

Multicom followed the internalization program that Kaakontieto had started. Multicom had been spun off from Kaakontieto in 1991 as a business unit, which concentrated on packaged products. They had developed one product, Electronic Data Interchange (EDI) software, which was supposed to have a demand in the global markets. However, problems occurred concerning the choice of target countries. The development of EDI was in different stages in different countries. The telecommunication networks in Europe were 10 years ahead of those in the US in the middle of the 1990s, and thus there was no reason to enter the US markets.

In addition, legislative problems existed. In some countries Multicom was not able to sell its product as the legislation did not approve of legal contracts made if they were made electronically with EDI. Also England was left out, because their domestic competition was intense. England was still using old fashioned standards, while the other European countries were using UN-standards. In this case, Multicom’s product should have been customized for one, heavily competed market.

9. Detailed International Market Research and Final Assessment of Readiness

9.1. Detailed international market research in support of formulating international expansion strategy.

9.1.1 What issues about the target country/target market must be studied in depth for a successful formulation of international expansion strategy?

9.1.2 How is the company going to arrange the collection and analysis of the necessary market information?

9.2. Final self-evaluation of maturity

Internationalization maturity of the firm

The self-administered rating system used in the workbook is only as good as your ability to be objective in administering the test questions. However, if done with thought, it can help you to clarify the areas where you might need to improve your knowledge and skills.

This rating system is also helpful in determining which general pathway suits you the best and whether or not you fulfill the prerequisites for proceeding from one level to the next in your selected pathway towards successful growth and internationalization.

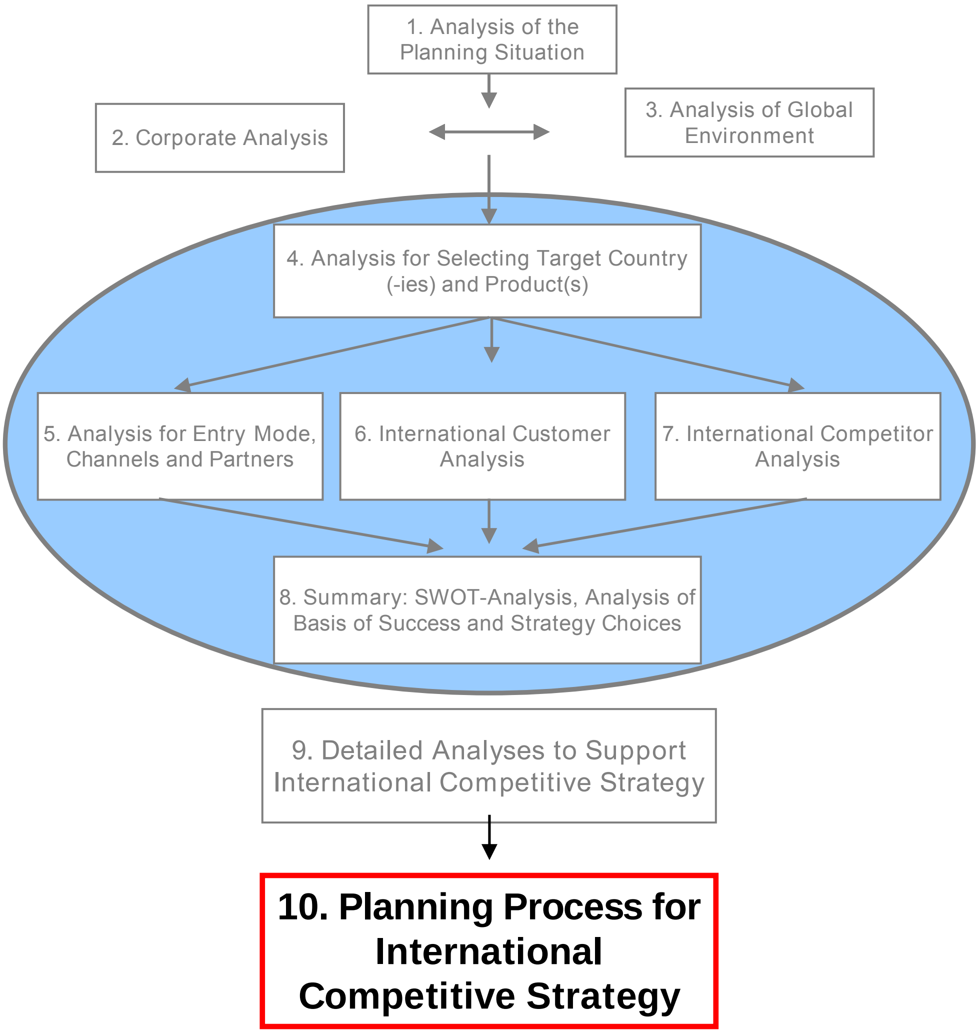
You may try to estimate your overall level of your resources, knowledge and competences for growth and internationalization by adding up the ratings from all the analyses below:

Interpretation	
12 – 20 points	You have a very low level of resources, knowledge and competences for internationalization and might need considerable improvement in all areas.
21 – 30 points	You may have some strengths, but a generally rather low level of resources, knowledge and competences for internationalization. You need clear improvement in most areas.
31 – 40 points	You have an average level of resources, knowledge and competences for internationalization, but still need improvement in some areas to ensure superior performance.
41 – 50 points	You generally have a rather high level of resources, knowledge and competences for growth and internationalization. You need to check if there were any gaps in your resources or competences, but after that you should be on your way to success. You must still ensure that your strategy and its implementation correspond to the high level of your readiness.
51 - 60 points	You have a very high level of resources, knowledge and competences for growth and internationalization. Congratulations! You need to ensure that your strategy and its implementation correspond to the high level of your readiness.

9.2. Summary of strategic thinking and planning competences	
Summary of corporate readiness (2.8., p.81)	
Knowledge of international environment and global trends (3.4., p. 87.)	
Knowledge of target countries (4.5., p. 93)	
Knowledge of and ability to select suitable entry mode (5.4., p. 105)	
Knowledge of and ability to select suitable channel (5.5, p. 105)	
Knowledge of and ability to select suitable cooperation mode or partners (5.6., p. 105)	
Knowledge of customer chain, needs and purchasing process (6.4., p. 117)	
Quality of product concept definition (6.5., p. 117)	
Good knowledge of relevant competitors (7.5., p. 123)	
Ability to define a superior customer benefit (8.4.3., p. 133)	
Ability to define a superior competence (8.4.4., p. 133)	
Ability to define meaningful threshold factors (8.5.4., p. 135)	
Total	

As was pointed out in Chapter 2 of Part I, and again in the introduction to Part II, the choice of growth and internationalization pathway is all about the company's strategy. It could be called the overall approach to growth and internationalization or the general framework of growth and internationalization strategy. After the first level strategic choice is made, the actual competitive growth and internationalization strategy can be formulated. This is a broad issue, which was not included in the scope of this guidebook. However, it cannot be completely separated from the initial decisions included here. The research and analyses included in this handbook also serve the strategy formulation process. This is why the formulation of competitive strategy was brought up in several points, and why Section 10 "Toward formulation of detailed internationalization strategy" was included.

SECTION 10
INTERNATIONALIZATION STRATEGY



Do we need a business plan for investors, customers or partners?

What type of strategic plan and planning system should we have?

How clear is our competitive superiority? How easy is it to copy? How can we defend it and guarantee our long term competitive edge?

How can we maintain our competitive superiority?

10. Towards Formulation of Detailed Internationalization Strategy – A Brief Overview

Strategic issues have been touched on in several contexts. For example, in Chapter 4 of Part I, in Introduction, and Sections 1 and 8 of Part II. The following presentation is intended to provide a brief summary of these strategy issues, and give a general overview of the next important stage of the internationalization process: that of the actual competitive strategy formulation.

The crisis of strategic planning and typical problems with strategic planning

The fact that traditional formal and cumbersome approaches to strategic planning no longer work in today's fast-changing world has been referred to as the crisis with strategic planning (see Mintzberg's *The Rise and Fall of Strategic Planning*). The main symptom of this crisis is the wide-spread attitude that "strategic planning is bureaucratic routine activity far removed from everyday work..." This is very common especially in small entrepreneurial start-ups.

Typical problems with strategic thinking, strategic planning and the concept of strategy shared by most companies are listed below. Naturally, these are all serious challenges to fledgling software companies on their way to internationalization.

- Strategic planning is seen as abstract or bureaucratic activity far removed from everyday work. This often leads to reluctance to engage in strategic planning by SMEs
- Strategy is often confused with objectives
- Strategy is often confused with the whole strategic planning process →
- Strategy is often confused with action plans
- Strategy is often confused with its implementation (i.e. with the ways the strategy is carried out)

What is needed, therefore, is a new back-to-basics flexible approach to strategic planning. This new approach has been already briefly introduced in Part I, Chapter 2 and in Section 8 of Part II. This approach is further explained below.

The view adopted here represents a different perspective of strategic planning and strategy:

Strategic planning is all about defining, building, utilizing, maintaining, and developing a company's basis of success that consists of superior customer benefit and superior competences as well as of threshold factors.

Traditional steps in the strategic planning process

Traditionally, the steps involved in the strategic planning process are presented more or less as follows:

1. Introduction: Vision, Mission, Values etc. (or Executive Summary)
2. Strategic Objectives (and Goals)
3. Strategy Statement
4. Functional strategies, Action Plans and/or Annual Plans (at operational and/or tactical level)
5. Budgeting
6. Organization
7. Implementation
8. Control and Feedback

One of the problems with traditional approaches to strategic planning, in this respect, is that the process often consisted of defining the company vision, mission, values and strategic objectives, after which followed the appropriate action plans required for the reaching of the objectives. In this approach, the actual specific strategy statement was missing altogether. Therefore, it is easy to understand why mission, vision, and objectives easily got confused with strategy.

Again, according to the traditional view, a strategy explains how a company is going to act in the market place in order to reach the objectives and goals. But it is impossible to define how the company is to act without also defining the business concept or the basis for success in carrying out the activities.

Consequently, in this workbook, we define strategy as follows:

The three components (dimensions) of a strategy definition:

1. Business concept or Business model
2. Basis for success
3. Strategic principles and strategic actions

The basic concepts of strategic planning:

1. Business concept: in simplest terms this means defining the types of products the company provides and the types of customers it serves. In other words by defining the business concept the company selects and defines the competitive arena in which it plans to operate. Jay Bourgeois has called this “domain definition.” In the ICT industry the term "business model" is more widespread as the industry and its structure are less settled. The business model includes wider issues such as choice of the company’s position in the industry value chain, outsourcing and cooperation relationships with other players, and an earnings model.

2. Basis for success consists of defining the superior customer benefit and superior competences, as well as the threshold factors. The central message in the famous article "What Is Strategy" by Michael Porter was: O*perational excellence is not strategy*. According to Porter, a strategy is based on what a company does differently and better than its competitors, providing a unique benefit. This is the concept of strategy also adopted in this workbook, and "what a company does differently and better than competitors" is referred to here as the basis of success, which consists of (external) superior customer benefit and (internal) superior competences.

However, there are also several important issues where the company is not able to, or does not need to be clearly better than its competitors, but where the company must be as good as its competition. These factors are called "threshold factors," and it is important to analyze and list these factors.

3. Strategic principles and strategic actions: the third dimension of the strategy definition is to define how the company is going to act. The strategy is carried out through business functions where the company defines what is special about the way it carries out its functions compared to its competitors. Each company must determine what strategic actions are required in its particular market and competitive situation. Acquisition, a special distribution arrangement or customer service may be strategic choices for some companies, whereas others may treat distribution and service as operative issues.

Levels of strategic planning

Basically, the three main levels of strategic planning are:

1. GROUP LEVEL
2. BUSINESS, UNIT or SBU LEVEL
3. FUNCTIONAL or OPERATIONAL LEVEL

Naturally, the levels depend on the size, complexity, and structure of the company. There may even be additional levels, such as a divisional level (between group and business levels) as well as a sub-functional level. Each company must decide on the meaningful levels and determine what is planned at each level. The SBU concept may be relevant even for small companies, as two entirely different product lines may deserve to designated as two SBUs with their own competitive strategies.

More information on strategies:
Äijö,Toivo S. (1996). Suomalaisyritys kansainvälistyy. Strategiat, vaihtoehdot ja suunnittelu. Fintra-julkaisu no. 82. Saarijärvi.

Once the competitive strategy has been defined, it should be subjected to a barrage of test questions, such as the ones presented on the opposite page:

10.1. Critical strategy questions

Evaluate your strategy from the point of view of the success of the company's international business strategy.

10.1.1 How clear is the competitive superiority, that is, how easy is it to differentiate ourselves clearly enough from the competition in the customers' eyes?

10.1.2 How do we differentiate and communicate our superior customer benefit successfully?

10.1.3 How safe is our competitive superiority, that is, how easy is it to achieve and/or copy by competitors?

10.1.4 In the case of technological superiority: How do we protect our technological innovations?

10.1.5 How do we ensure the superiority now?

10.1.6 How do we ensure the superiority in the future?

10.1.7 In the case of technological superiority: how do we maintain innovativeness

An Example of a **Business Plan Outline that may be submitted to a financier**
(see Section 2.7., p. 79)

1. Executive Summary, such as:
   Vision, Mission, Objectives, Current state, Products and services, Strategy and competitive advantage, Customer acceptance, Financial forecasts, Money required, Timing and Business deals pending

2. Basic business Information, such as:
   Title, Legal structure and corporate data, Contact information

3. Current Business Situation, such as:
   Current business and its market, Corporate history, Organization and business infrastructure

4. Strategic Analysis, such as:
   Environmental trends and impacts, Unique selling points, Core competencies, Resources, Value chain, Financial resources, Industry structure, Competitors, SWOT

5. Strategic Plan, such as:
   Vision, mission and objectives, Sustainable competitive advantage, Competitive position, Brand strategy, Portfolio, Business design

6. Marketing Plan, such as:
   Market segments, Customers and customer needs, Target market, Product positioning, Marketing mix, Products and services, Pricing, Advertising, Channels and distribution, Customer care, Marketing forecasts

7. Operations/Production, such as:
   Location, Make or buy, Production process, Facilities, equipment and machinery, Engineering, Quality control, Staffing, Sources of supply

8. Research and Development, such as:
   Organization, Plans, Resources

9. Management and Organization, such as:
   Organization chart, Top management and its competences, Corporate governance, Staffing, Recruitment, Training, Labor relations, Employment costs

10. Forecasts and Financial Data, such as:
    Performance rations, Sales forecast, Underlying assumptions, Profit and loss account, Balance sheet, Cash flow, Valuation, Payback, Break even

11. Financing, such as:
    Operations prior to financing, Current shareholder loans, Funds required, Use of proceeds, Pending deals, Anticipated gearing, Exit routes for investors

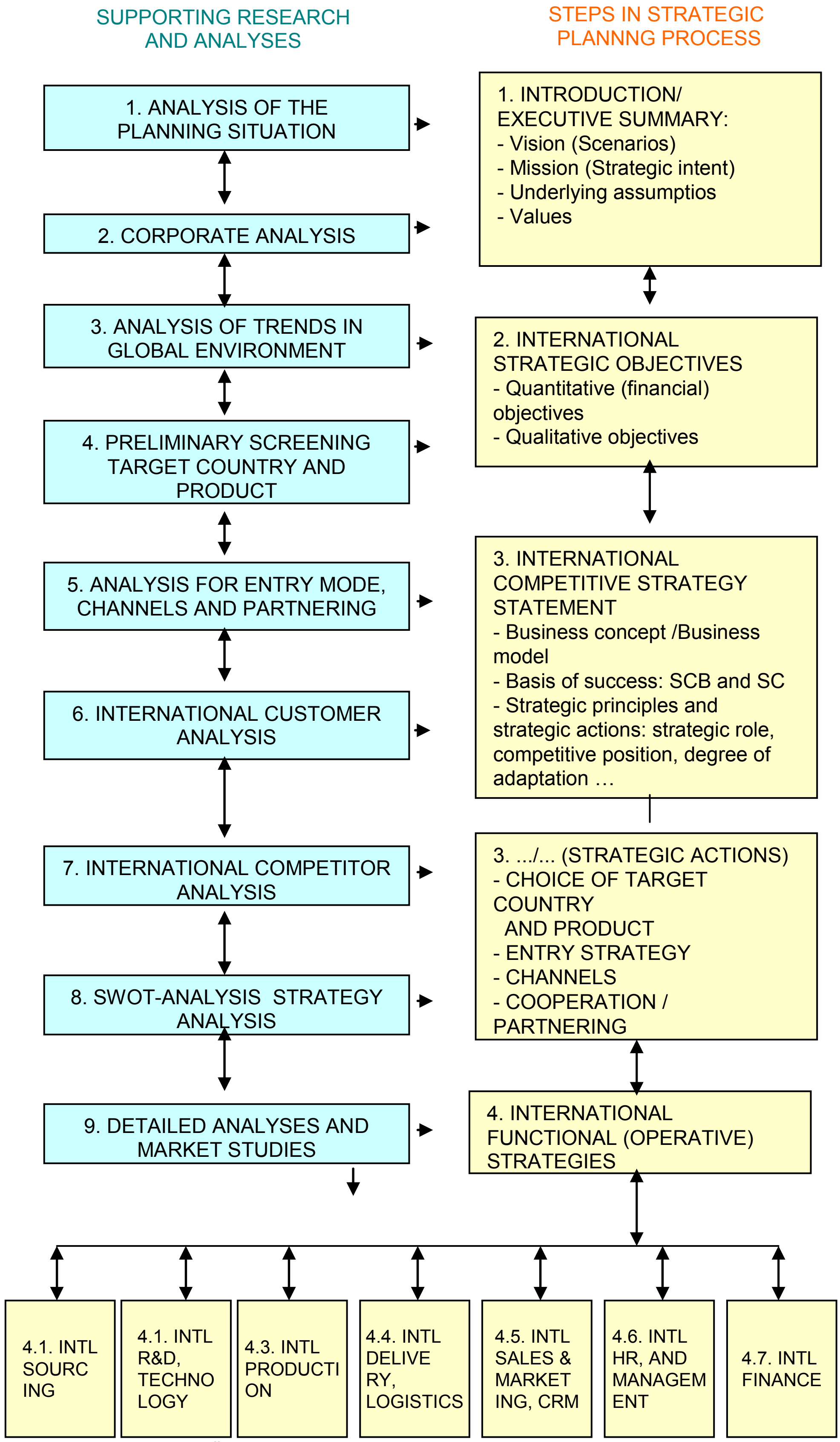
12. Risk Analysis, such as:
    Risk overview, Critical success factors, Alternative scenarios, Specific risks and coverage

13. Business Controls, such as:
    Information technology, Financial, Sales and marketing, and Operations controls

14. Appendices, such as:
    Glossary of terms, Market research, Consultants' reports, Product specifications, Promotional material, Orders, Organization chart, Curricula vitae, Technical data, Details of patents, copyright

Source: Based on Stutely 2002

10.2. Summary: Strategic Planning for International Business



Source: Modified from Äijö 2001

Sources

Alajoutsijärvi Kimmo, Kari Mannermaa, and Henrikki Tikkanen. (2000). Customer relationships and the small software firm A framework for understanding challenges faced in marketing. *Information & Management*, 37, 153-159.

Andersen, O. (1993) On the Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies*, Second Quarter, 209-231.

Bell, Jim (1995). The internationalization of small computer software firms. *European Journal of Marketing*, 29, 60-75.

Bell, Jim, Dave Crick, and Steven Young (2004). Small Firm Internationalization and Business Strategy: An Exploratory Study of 'Knowledge-Intensive' and 'Traditional' Manufacturing Firms in the UK. *International Small Business Journal*, 22 (1), 23-54.

Bell, Jim., Rod McNaughton, and Steven Young (2001). "Born-again global" firms – an extension to the "born global" phenomenon. *Journal of International Management*, 7, 173-189.

Bell, Jim., Rod McNaughton, Steven Young and Dave Crick (2003). Towards an integrative model of small firm internationalisation, *Journal of International Entrepreneurship*, 1, 339-362.

Cusumano, Michael (2004). The Business of Software – What every Manager, Programmer, and Entrepreneur Must Know to Thrive and Survive in Good Times and Bad. Free Press, New York, NY.

Finnvera (2001). [1] Kansainvälistyvä yritys 1: Kansainvälistymisen aloittaminen. 2nd edition.

Finnvera (2001). [2] Kansainvälistyvä yritys 2: Kansainvälistymisen toimintamuodot. 2nd edition.

Friedrich, Kerstin., and Lothar Seiwert (1994). Basics of a Successful Business Strategy. Kogan Page, London.

Helokunnas, Tuija, Maarit Laanti (2003). Johtaminen – viestintää ja verkottumista. In Hyvönen, Eero (ed) Ohjelmistoliiketoiminta, 141-151. WSOY, Vantaa.

Hoch, Detlev, Cyriac Roeding, Gert Purkert and Sandro Lindner (1999). Secrets of Software Success: Management Insights from 100 Software Firms around the World. Harvard Business School Press, Boston, Massachusetts.

Hollensen, Svend (2004). Global Marketing - a decision-oriented approach, Prentice Hall, England.

Issac, George, Chandrasekharan Rajendran, R. N. Anantharaman (2004). Significance of Quality Certification: The Case of the Software Industry in India. *Quality Management Journal*, 11, 1; 8-32

Jacobsen, Kenneth, William L. Paulin, Victor V. Vurpillat, Jussi Nukari, Eero Peltola and Juhani Saukkonen (2001). Launching Your Software Business in America – A Handbook for Finnish Entrepreneurs. Tekes, Helsinki.

Jokinen, Jani-Pekka, Juhana Hietala, Markus Mäkelä, Petru Huurinainen, Markku Maula, Jyrki Kontio and Erkko Autio (2005). Finnish Software Product Business: Results from the National Software Industry Survey 2004. Helsinki University of Technology. Software Business and Engineering Institute: Institute of Strategy and International Business.

Luostarinen, Reijo (2001). Outward Foreign Direct Investment – Country Study: Finland. In Outward internationalisation facilitating transformation and EU accession; The case of Czech Republic, Hungary, and Slovenia. Phare ACE Project no. P97-8073-R.

McHugh, Peter (1999). Making it Big in Software – A guide to success for software vendors with growth ambitions. Rubic Publishing, England.

Melin, L. (1992). Internationalization as a Strategy Process. *Strategic Management Journal*, 13 (Winter), 99-118.

Mohr, J. and Spekman, R. (1994). Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques. *Strategic Management Journal*, 15(2), 135-152.

Moore, Geoffrey A: Darwin and the Demon (2004). Innovating Within Established Enterprises. Harvard Business Review, July-August 2004

Möller, Kristian, Arto Rajala and Senja Svahn (2001). Strategisten yritysverkkojen tyypit ja johtamisen haasteet – STRATNET 2001. In Uusisuo, Maija (ed.) Laatu Verkostotaloudessa – teknologiaohjelma 1998-2001, loppuraportti. Teknologiaohjelmaraportti 14/2001, 7-17. Tekes, Helsinki.

Oesterle, M-J (1997). Time Span Until Internationalization: Foreign Market Entry as a Built-In Mechanism of Innovation. *Management International Review*, 37, 125-149.

Paaso, Marja-Reetta (2004). Ohjelmistoyritysten kansainvälistymisohjelmia. Ohjelmistotuoteliiketoiminnan osaamiskeskus. 14.4.2004.

Paulk, Mark C., Bill Curtis, Mary Beth Chrissis, Charles V. Weber (1993). Capability Maturity Model^{SM} for Software, Version 1.1. Technical Report. Software Engineering Institute, Carnegie Mellon University, Pittsburgh, PA.

Rajala, Arto (1997). Marketing High Technology. Organising Marketing Activities in Process Automation Companies. Helsingin Kauppakorkeakoulun julkaisuja A-123, Helsinki

Ruotsalainen, Seppo (2005). Discussion, 2.2.2005.

Ryynänen, Leila-Mari (2004). Kehittämisestä kasvuun. KTM Julkaisuja 26/2004. Elinkeino-osasto.

Saukkonen, Juhani (2004). Discussion, 15.12.2004.

Sheth, J. and R. Sisodia (2002). The Rule of Three: Surviving and Thriving in Competitive Markets, Free Press.

Solberg, Carl. (1997). A Framework for Analysis of Strategy Development in Globalizing Markets. Journal of International Marketing, 5, 9-30.

Stutely, Richard (2002). The definitive business plan, Financial Times – Prentice-Hall, London 2002.

Tapscott, Don, David Ticoll and Alex Lowy (2000). Digital Capital – Harnessing the Power of Business Web. Harvard Business School Press.

Tähtinen, Jaana and Petri Parvinen (2003). Ohjelmistojen markkinointi. In Hyvönen, Eero (ed.) Ohjelmistoliiketoiminta, 41-76. WSOY, Vantaa.

Varis, Jari, Olli Kuivalainen and Sami Saarenketo. (2005, forthcoming). Partner Selection for International Marketing and Distribution in Corporate New Ventures. Accepted for publication in the Journal of International Entrepreneurship.

Varis, Jari, Veli-Matti Virolainen and Kaisu Puumalainen (2004). In Search for Complementarities – Partnering of Technology Intensive Small Firms. International Journal of Production Economics, 90, 117-125.

Warsta, Juhani (2005) Discussion 14.1.2005.

Äijö, Toivo (2001). Internationalization Workbook. Unpublished training material.

Äijö, Toivo (forthcoming). Latest Management Ideas and the Business Paradigm Shift – Concepts and Gurus That Shape the World.

Appendices

Appendix 1: Life-cycle models

Appendix 2: Case examples on internationalization

- Appendix 2.1: Case Sumea
- Appendix 2.2: Case Smartner
- Appendix 2.3 Case Blancco
- Appendix 2.4 Case CRF

Appendix 3: Introduction to additional sources of resources and information

Life-Cycle Models

In this chapter, three different life cycle models relevant to software firms are introduced in a more detailed manner than that in Part I.

1.1. Adizes: From courtship to prime, and to death

Adizes (1988) introduced a ten-stage model of a corporate life cycle from pre-formation ("courtship") to death. His life cycle stages are relevant to many entrepreneurial start-ups in the software industry. It is equally relevant to companies in the later stages. In each stage he describes the typical characteristics, strengths and weaknesses, requirements for success, and reasons for failure. The model will be described here briefly. Those interested in further details should consult Adizes' original publication.

In Adizes' model companies go through ten stages (see Figure 1): 1. Courtship; 2. Infancy; 3. Go-Go stage; 4. Adolescence; 5. Prime stage; 6. Stability: 7. Aristocracy; 8. Early bureaucracy: 9. Bureaucracy; and 10. Death.

1. In the **courtship stage**, before the company is born, the founder sells the idea of "how great is going to be." Commitment building is a critical key to success. The main risk is that the company is being built on unrealistic promises. Failure comes when the idea remains a fantasy, lacking operationalization and/or when there is s lack of commitment and risk taking,

2. The **infancy stage** begins after the birth of the company. Now the focus shifts from ideas and possibilities to producing results. There is no time to talk, only to act. Everybody is out doing and selling and fighting for survival. Decision-making is highly centralized and personal with no delegation, being handled exclusively by the founder. The organization is like an infant who requires its "milk," cash, and capital infusion, at regular intervals. The main risks stem from having no or little experience, which often lead to mistakes (in product design, service, or finances) that can even prove to be fatal. An early negative cash flow can lead to action-oriented opportunism. The tendency is to project high success and low capital need, which leads to undercapitalization. Failure at this stage may occur if the founder becomes exhausted and gives up. Workdays from 12-14 hours with low rewards, high stress and family pressures, can change the dream into a nightmare. In addition, the available capital may dry up or there may be fatal mistakes due to inexperience.

Appendix 1
Life-Cycle Models

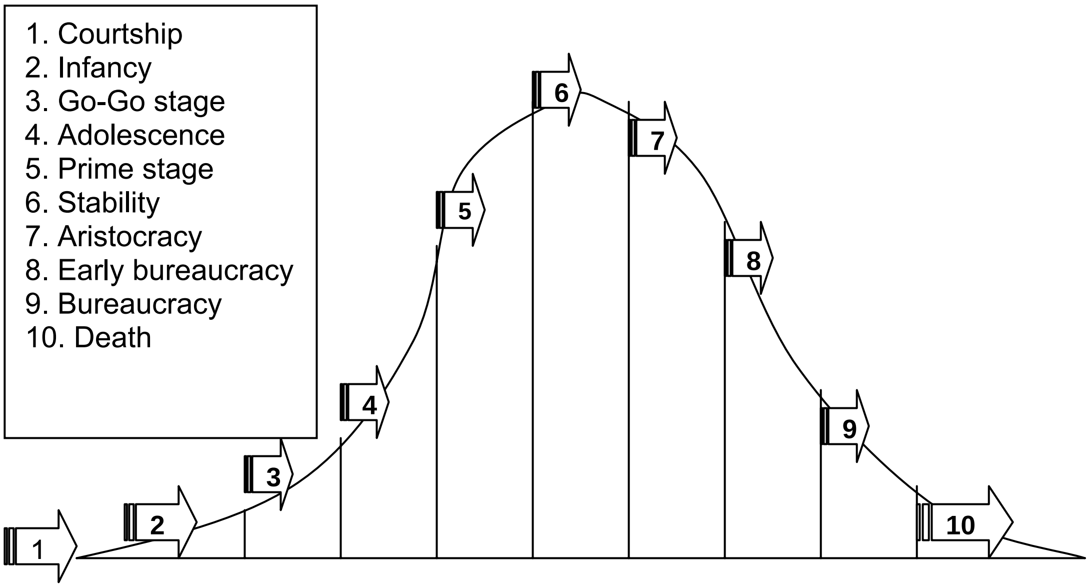


Figure 1: Ten-stage Model of Corporate Life-Cycle (Adizes 1988)

3. In the **go-go stage** the company has survived and is beginning to flourish. The plan is working, and the founder's dreams are being realized. There are no problems only endless opportunities. Selling has become addictive and getting better. Sales equal success. There are fast growth and change within a trial-and-error learning process. The founder is still basically the company, its biggest asset and biggest risk. At this stage, arrogance is a big risk, both that of the founder and that of the organization as they begin to feel invincible. The company may be going in too many directions at once: every opportunity is a priority. Diversification can lead to being spread too thin, and going into new, unfamiliar businesses. Failure may stem from uncontrolled diversification and risk-taking. Also, there is a potential family trap: if the founder abdicates or dies, incompetent family members might take over and kill the company.

4. In the **adolescence stage** the company learns from its go-go years and moves from absolute monarchy to constitutional monarchy with true delegation and professional management. Often the founder hires a professional general manager and assumes a board role. The right time to do this is when the company is still doing well. Systems, policies, strategies and administration are introduced and the focus switches from working harder to working smarter. The risks relate to transition pains, conflict and inconsistency between the old and the new, "us versus them," and possible cliques. If the founder cannot assume his new role, his behind-the-scenes control may lead to the "revolving door or hired managers." Failure may stem from a divorce: the founder is squeezed out, entrepreneurs or senior partners leave, and bureaucrats stay, which might lead to internal paralysis

5. In the **prime stage** the company has made it. It has the vision and aggressiveness of a go-go company, but with control and predictability. The organization excels in performance, it can afford growth in both sales and profitability. The organization knows what it is doing, where it is going, and how to get there. A company in its prime may spin off new infant organizations. The risks and potential failures are related to premature complacency and bureaucracy, loss of momentum and entrepreneurship. There may also be destructive infighting, not enough well-trained, skilled people. Or, fast growth might lead to cash shortage.

1.2. McHugh: From roll-out to high growth

McHugh (1999) presented a life-cycle model for a software firm. This model is explained below. It has contributed to the pathways model in this book. According to McHugh, most software firms expand gradually from the early software "version number one" to become more established after they have overcome their early threats to survival.

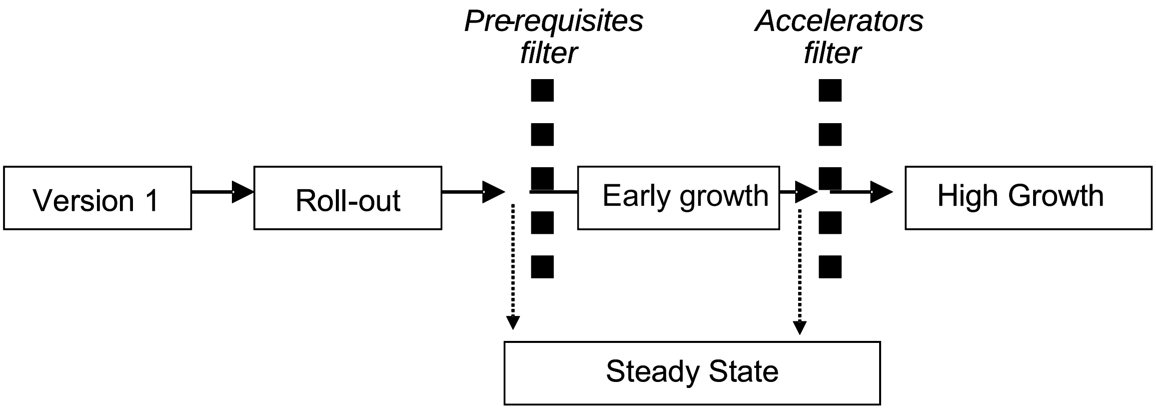


Figure 2: Early Growth Phases of the Software Firms (McHugh 1999)

The *version 1* phase lays the firm's foundation stones. Its product or service is developed at this time and major decisions, with long-term implications, are being made regarding the choice of enabling technology such as development tools. The choice of the product-concept is an important issue.

The phase after version 1 is the *roll-out* stage, in which the product is delivered to the firm's first customers. The key strategic decisions are related to the business model and the initiation of the sales:

What are the market possibilities and how could this potential be reached?
What type of collaborative network is needed?

If the roll-out stage is successful, a firm often gradually builds its customer base and reaches a point where it is viable and established. At this stage, the product development is stable and the production process is systematic. At this stage, the firm’s future directions are determined: either it drops into the so-called *steady state* stage or it begins to grow. McHugh lists four prerequisites for success that the firm needs to possess to overcome this stagnation:

- **Ambitions** to grow the business dramatically
- A strong **product** offering
- An effective **management** team
- Access to sufficient **funding** to support growth

Similar drivers of growth have been presented in many other studies and have been observed in many firms. In this book we present a more detailed list of requirements, challenges, solutions and actions for a firm aspiring to become a high growth international software firm. However, it is important to notice that firms that can constantly build up and leverage on the strengths in the above-mentioned areas may be able to enter the *early growth* stage in its life cycle. This means that a firm must develop both a product concept and customer benefits that are superior in comparison to those of their competitors. Other important capabilities are an entrepreneurial risk-taking mindset and the ability to respond to the challenges

McHugh notices that the early growth stage could be achieved through domestic sales. However, this is not always possible in small markets such as those in Finland. It seems that Finnish software firms need to seek growth through internationalization, which in McHugh's model belongs to the final, *high growth* stage. A successful breaking into the high growth zone requires even more from the software firm. Two principal success factors, so-called accelerators, in his model are:

- A winning **business model** or **business concept,** which almost invariably requires collaboration, partnerships and possibly the use of indirect marketing and distribution channels. The business model needs to be flexible and dynamic; it should allow the firm to do business profitably in a variety of market segments and target countries.
- A clear **export strategy,** such as **internationalization.** The decision to go after export markets in a serious way kicks off the high growth phase. A deep commitment to export, a global mindset and significant effort are required to catapult a firm into the high growth stage.

According to McHugh, all software market leaders pass through a high growth phase, which is a stage wherein revenues and headcount begin to take off. A firm with a software product at this stage should be able to benefit from economies of scale.

1.3. Moore: Technology and product adoption life-cycle

In his book, McHugh discusses software product strategies in relation to customers in different stages. One of the key issues is that the product should be "customer-centric," often developed with the customer. Early customer references are important for a firm to be able to get market developing. This idea of market development resembles the ideas of Geoffrey A. Moore (1991). He has adapted the theory of Technology Adoption Life Cycle (see Rogers 2003) to apply to high-tech computing products in business-to-business markets.

Moore (1991) classifies the phases and adopters of high-technology products as:
1. Innovators = technology enthusiasts at introduction and early market stage
2. Early adopters = visionaries in early markets
3. Early majority = pragmatists at mass market adoption and growth stage
4. Late majority = conservatives in mainstream mass markets
5. Laggards = skeptics in end-of-life markets

These phases and adopters are presented below in Figure 3.

Appendix 1
Life-Cycle Models

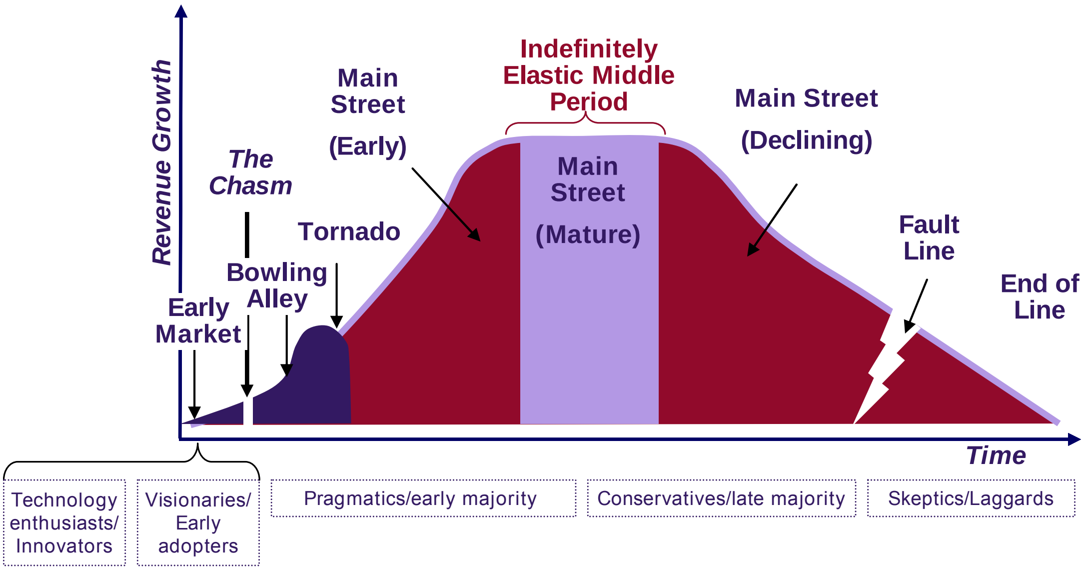


Figure 3: Product and technology adoption life cycle for high-tech products and customer types (Source: Moore 1991, 1995, 2004)

In the adoption life-cycle there are four cracks between the different phases and adopters. Regarding these, Moore (1991) identifies two chasms for high-technology start-ups which need to be crossed before the high growth and mainstream market can be reached.

Firstly, there is a chasm (or crack) between the innovators and the early adopters. Here the needs and wants of the innovators are different from those of the early adopters.

Secondly, there is a deeper chasm in between visionaries and pragmatics. Moore notices that “the key in all this is crossing this chasm – making that mainstream market emerge.” However, the transition from one group to the next is not easy as the chasm rises from critical differences.

- Visionaries want to be first in bringing new ideas to the market; they often see pragmatists as pedestrian or dull.
- Pragmatists are careful and want to stay within the confines of reasonable expectations and budgets; they want to go steady and even consider that visionaries are dangerous.
- Therefore, it is often so that the early adopters’ market is saturated but the mainstream market is not yet ready to accept the innovation.

The chasm applies to both products and technologies. In the world of technology, a competitor frequently comes along and takes the high-growth part of the life cycle from the firm that introduced the innovation.

According to Moore (1991), the so-called whole product model provides a key insight into the chasm phenomenon, i.e. the single most important difference between early and mainstream markets is that the former are willing to take the responsibility to offer the whole product. Here a "whole product" refers mostly to a finalized and completed total product concept. The reason for this willingness to help is that by doing this firms should have an opportunity to get a jump on their competition. A superior customer benefit or a competitive advantage in the chasm and the bowling alley stages are normally based on product leadership and customer intimacy.

This idea of the whole product has been presented earlier by Theodore Levitt and Bill Davidow. The idea behind this concept is that a firm needs to offer a minimum set of products and services necessary to ensure that the target customer would have a compelling reason to buy. Especially in the software industry, the core product or service is not likely to fulfill all of the end-user's needs. Typically, customers want complementary products such as additional software and hardware or services such as consulting and system integration.

In addition, for complex products, pre- and post-sales support may also be needed to make sure that the product is properly configured to meet the customers' needs and upgraded as required. Supporting services such as financing, delivery and billing, may also be expected to be part of the total product.

Moore's central message is that in different stages of the life cycle, the company needs to understand that it serves different types of customers who have different needs. In fact, different stages call for different strategies. To understand how your strategy must change, the buyer motivation at each stage of the cycle must be understood. Because of the different buyer characteristics, the requirements for the whole product tend to be different. This, in turn, relates to other strategic decisions within the firm regarding e.g. channel strategy and partner selection.

Case Examples on Internationalization

Introduction

Four case examples on internationally operating Finnish software firms are presented below. The examples provide a description on the most significant requirements and challenges that have influenced the progress of each of the firms on their internationalization path.

Table: Internal and external requirements and challenges

Internal requirements and challenges
HUMAN RESOURCES: OWNERS / MANAGEMENT / PERSONNEL Characteristics, needed knowledge: • Experience: business & internationalization experience Competences & capabilities: • Language skills, planning skills, technological skills, innovativeness, sales and marketing skills Depth of knowledge: • Tacitness and transferability of knowledge, dependency on a few key people
DESIRE / NECESSITY OF CONTROL
RELATIONSHIPS & NETWORKS • Supplier, customer and other cooperative relationships/partnerships • Other stakeholder relations
IMAGE, CREDIBILITY, REFERENCES
FINANCIAL RESOURCES AND SKILLS & COMPETENCES • Ability to use foreign financial sources / to attract foreign funding • Willingness and ability to take risks
SIZE OF THE FIRM AND OTHER RESOURCES • Number of personnel • Equipment, software product tools
PRODUCT • Different types of software: software product/shrink-wrap/cellophane, tailor-made software, software as a service • Stage of the product life-cycle • Degree of 'productization'
PRODUCTION • Production process • Maturity/development state, how systematic, documented etc. • R&D

External requirements and challenges
PRODUCT / TECHNOLOGY MATURITY AND LIFECYCLE • Speed • Stage (See Geoffrey Moore for detailed analysis)
GLOBALIZATION OF MARKETS • Global demand • Homogenization of markets • Trade barriers • Standards (official / de facto)
REGULATION • Rising or changing level of regulation • Degree of free competition, deregulation, liberalization
• BUSINESS/ECONOMIC CYCLES
CUSTOMERS, PARTNERS AND NETWORKS • Degree of concentration • Degree of internationalization
COMPETITION • Structure of competition • Size classes (e.g. few international players, large number of local competitors) • Typologies: role in the value chain/network, focused or multiproduct firms etc. • Direct / indirect competition: Has a customer an option not to buy? • Level of competition: how good the competitors are? Their competences? How tight the competition is? Are competitors more experienced?

Appendix 2.1
Case examples on internationalization - Smartner

Smartner Information Systems Ltd

Abstract
In four years, Smartner has grown from a domestic company that employs four people to an international company with 40 employees. The founders of Smartner already had their focus on global markets when planning their business. Initially they presented their business idea to some 50 people for feedback, iterated the plan accordingly, and did some studying among some 40 heavy industry companies before the business plan got its final form and the first product concept was launched.

The business plan changed a few times before it got its final form and the company started to operate. From the very beginning the company language was English because the company was looking for additional markets abroad. For this reason, Smartner deliberately recruited foreign employees at a very early stage. A business angel, Ralf Saxen, joined Smartner as chairman, which increased the company's visibility and recognition among industry experts and potential customers. He played a vital role when closing the first round of funding. With the financing, Smartner speeded up product development and the building of an international partnership network. Venture capitalists (VCs) also contributed significantly to the business plan and helped the company to better understand the market.

Smartner acquired Commtag, an UK-based wireless technology company and expanded to the UK markets. Through an international partnership network Smartner has gained subscribers from close to 70 operators in most of the countries in the world.

The most important stages and their effects on Smartner's internationalization path are presented in
Figure 4 below.

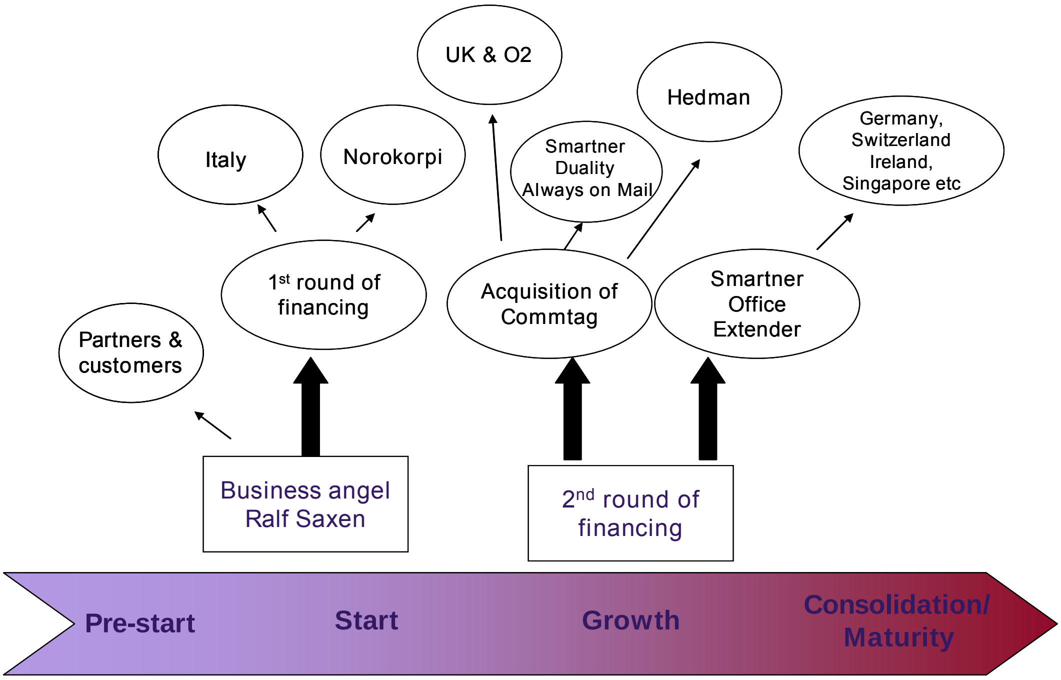


Figure 4: Stages on the internationalization path of Smartner

1. Background

Smartner Information Systems Ltd was established in Helsinki, Finland in 1999. At that time it employed only four employees, now around 40, most of them in Finland. The company has offices also in Cambridge, UK; Paris, France; Madrid, Spain; Gothenburg, Sweden; Munich, Germany and Singapore. In 2004 the turnover of the company was EUR 0.2-0.4 million (Blue Book). Smartner is the European leader in mobile email and office solutions and provides operators, enterprises and individuals with leading mobile software solutions. Its total global market share in Telco based mobile middleware was approximately 5% in 2002.

2. Customers and products

Smartner Information Systems' goal is to expand the range and possibility of mobile communications across the globe with intelligent user-friendly solutions. Smartner provides operators, device manufacturers, enterprises, mobile professionals and individuals with leading mobile software solutions. The product *Smartner Duality Always-On Mail* provides real-time access to Microsoft Outlook, IBM Lotus Notes or personal emails from the user's smart phone or PDA. This service has been advertised to be easy, secure and affordable to use. Smartner Duality is available in three formats: Enterprise Edition, Professional Edition and Internet Edition.

Smartner presents a typical example of a Finnish growth-oriented ICT company. The Finnish market is too small for long-term growth and so the company has had to look for customers internationally. Smartner has attained the backing of solid investors and partners extending from the IT and wireless industries to device manufacturers. Major customers and premier partners include: Vodafone, IBM, Microsoft and Nokia.

3. Market niche and competition

The main competitor to the Smartner solution is probably the BlackBerry software produced by Waterloo Research in Motion (RIM), but Blackberry has yet to make the kind of impact in Europe that it has made in North America. RIM focuses on larger companies and its solutions require customization and resources by the client company. Smartner's target market is the small and medium-sized enterprises (SMEs), where all the technology is hosted and managed by the operator. This means that small and medium-sized businesses can provide mobile access to all of their employees without large up-front investment costs. Smartner's strength comes from close cooperation with a growing network of industry leaders and operators.

4. Internationalization path

The following steps demonstrate Smartner's stages of internationalization. The summary of these steps is presented in Table 1 below.

4.1. Pre-start and start 1999-2001

In 1999, when Smartner was established, everybody was talking about the mobile revolution in Finland. The goal of the founders of Smartner was to ease the progress of field maintenance for various industries by mobilizing their workflow management with mobile middleware. From the very beginning the company language was English. The firm deliberately recruited foreign employees at a very early stage because they were looking for additional markets abroad.

The founders, *Mika Uusitalo* and *Jussi Räisänen*, who knew each other from the Helsinki University of Technology (HUT) and had worked together in Sedecon and Digia, presented their business idea to some 50 people for feedback and iterated the plan accordingly. They also studied some 40 heavy industry companies. About a half-year after they began, the business plan started to reach its final form and the first product concept “Mobile Access” was launched.

The first foreign customer was the Swedish ERP software vendor. Soon after that a new product Smartner Airis 1.0 enterprise application integration platform was released. By early fall 2000 founders of the company realized that enterprises were not ready to buy mobile middleware and Smartner decided to focus on just one application, and one market segment; Mobile e-mail to telephone companies (telcos). Thus Smartner created a software product, MoMail, which enabled employees to read, send and reply to e-mail with a regular GSM phone. The first foreign telco customer in 2001 was from Italy. Soon after that Smartner released a new application: Smartner Email and Calendar Extender, which is a wireless ASP solution for wireless business services.

Early in 2000 Ralf Saxen, a professional in the field of information technology and investment, who through his company IT Venture Finance invested in Smartner and joined as chairman. He introduced Smartner to industry experts and potential customers. This played a vital role closing the first round of funding with Eqvitec Partners and Sitra and a little later with Tekes. With the financing, Smartner speeded up product development and the building of an international partnership network. Venture capitalists (VCs) also contributed significantly to the business plan and helped the company to understand the market better. Smartner recruited *Jukka Norokorpi* as Senior Vice President of International Operations for introducing the products to the international markets, above all to the Nordic countries but also to the rest of Europe.

At this stage Smartner’s partners were Nokia, Modultek, BEA Systems, Oracle and Celltribe. Smartner also belonged to Hewlett-Packard’s Mobile E-Services Bazaar and the Mobile Applications Initiative program of Ericsson.

4.2. Growth 2001-

The rapid growth of internationalization started after the second round of financing. In line with Eqvitec, the Swedish venture capital advisory company, IT Provider, and Sitra, the Finnish National Fund for Research and Development provided funding for Smartner. In addition, Tekes, the National Technology Agency of Finland supported Smartner's product development by means of grants and capital loans.

A new edition of the Smartner Office Extender was released. At the end of 2001, Smartner was listed among the 50 hottest start-up companies in Finland. Smartner had Finland's Radiolinja and DNA Finland as customers and with success in domestic market, the time was now right to grow across Europe.

The following year Smartner drove to the European mobile office market. It sealed its first major contracts in continental Europe with Swisscom Mobile, and BLU Telecomunicazione (Italy). With these contracts the aim of the company now focused on attracting operators in Europe's major wireless markets, including the UK, Germany, and Italy. Smartner, partnering with IBM, won a contract with Vodafone (Ireland) for mobile e-mail data services. Smartner also made a good move in acquiring the UK-based wireless technology company, Commtag, in an all share transaction. This transaction created the new European market leader for mobile office solutions. After the acquisition, Smartner has had a sales and technology office in Cambridge. Thus, Commtag's investor, Amadeus Capital Partners, became a new owner of Smartner. The venture capital companies backing Smartner - Amadeus, Eqvitec, IT Provider and Sitra - also made 5 million euros further investments to Smartner.

The result of the acquisition to Smartner's product line was that it wrapped Commtag's Duality Always-On Mail technology into its mobile office suite, Office Extender, and marketed the combined product as Smartner. Duality Always-on Mail was now reaching a larger customer base as Commtag technology enabled increasing amount of configurations through its support for PDAs and smart phones. Before that, Smartner supported WAP and SMS technologies.

Soon after Smartner had acquired Commtag, *Paul Hedman* joined Smartner in September 2003 as CEO. He brought over 20 years of international experience in IT and telecom industry. Originally from Sweden, Hedman had vast international experience working in different counties including the UK, France, Norway, the U.S., and Saudi Arabia. Smartner also signed up to O_2's accelerator program in the UK and entered the O_2 incubator process. That enabled the product to be sold by the O_2 sales network. What is more, Smartner joined Microsoft's Mobility Partner Advisory Council, so the software giant actively promoted the Smartner Duality solution. In addition, Smartner launched Smartner Duality mobile e-mail solution for Symbian OS smart phones.

Smartner announced the global availability of Smartner Duality Professional for individual users. This new solution was available by credit card purchase in most countries in the world, and for mobile subscribers, close to 70 operators in Austria, Belgium, Denmark, Finland, France, Germany, Italy, Ireland, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, UK, Australia, China, Malaysia, Philippines, Singapore and Thailand. The coverage was growing rapidly. Furthermore, Smartner signed a partnership with Manx Telecom, which brought Smartner Duality push email to the business users of the Isle of Man. That also strengthened their co-operation with O_2.

Earlier the same year Smartner had expanded its European operations and brought more experience into sales and management. It opened new offices in Sweden, France and Spain, and signed an agreement with Vodafone Italy, E-Plus (Germany) and entered a strategic partnership with Telefonica Moviles España. Smartner offered mobile email on Sony Ericsson P900 and expanded Duality Always-On Mail for internet e-mail and mass-market phones. Together with StarHub (Singapore) Smartner's solution amongst enterprises and business professionals was available for the first time in Asia Pacific. Smartner licensed Smartner Duality to Fujitsu and at the same time released a new Smartner Duality 4.0, which was the first solution to enable over-the-air push of calendar functions on Symbian smart phones. This new solution worked in all language environments ranging from Russian to Arabic and Chinese. Since 2004, Smartner duality has been available for Orange smart phones and soon for Nokia 80 mobile devices.

Appendix 2.1
Case examples on internationalization - Smartner

Table 1: Smartner internationalization stages

Smartner (founded 1999)	**Pre-start (1999)**	**Start (2000-2001)**	**Growth (2001-)**
Company (turnover, personnel)	4 employees		40 employees Turnover 0.2-0.4 million euros (total global market share in Telco based mobile)
The degree of internationalization (countries/ customers)	Swedish ERP software vendor	Italy	Italy, Switzerland, UK (Commtag), Germany, Ireland
Locations	Helsinki		Cambridge, UK; Paris, France; Madrid, Spain; Gothenburg, Sweden; Munich, Germany; Singapore
Entry modes and channels		International partnership network	
Product life cycle		New product, Telco system	Combination Commtag and Smartner product
Management resources and skills	Founder team was educated in management and entrepreneurship in HUT Company language: English	Finnish experts in international markets: Jukka Norokorpi and foreign employees	CEO Paul Hedman (Swedish / 20 years of international experience)
Product	-Mobile Access -Smartner Airis 1.0	-MoMail -Smartner Email and Calendar Extender	- Smartner Office Extender - Smartner Duality Always-On Mail - Smartner Duality Professional for individual users
Financing		- Business angel: Ralf Saxen - 1st round: Eqvitec Partners and Sitra and Tekes	2nd round: Eqvitec, IT Provider, Sitra, Tekes (loans) Amadeus Capital Partners, Eqvitec, IT Provider, Sitra (5 million euros)

Sumea Interactive

Abstract
Sumea Interactive is a game development and publishing company whose product is targeted for consumers (not businesses). At the beginning, Sumea's group of game developers produced all kinds of digital entertainment from games to commercials until Ilkka Paananen, a business-analyst from Tecnomen joined the Sumea team as the CEO of the company. Sumea found its market niche and specialised in downloadable games for mobile devices. Sumea's internationalization accelerated after the release of its most successful and lucrative game to date, Racing Fever. Sumea's games were available through a wide network of distinguished partners, leading telecom operators and independent portals in more than 50 countries worldwide. At the end of June 2004 an American developer of innovative applications for mobile phones, Digital Chocolate Inc., acquired Sumea. At that time, Sumea ended its life cycle as Sumea Interactive and embraced its consolidation/maturity stage in its internationalization. Sumea became the European headquarters of Digital Chocolate, and Paananen continued as the European CEO of Digital Chocolate.

The most important stages and their effects on Sumea's internationalization path are presented in Figure 5 below.

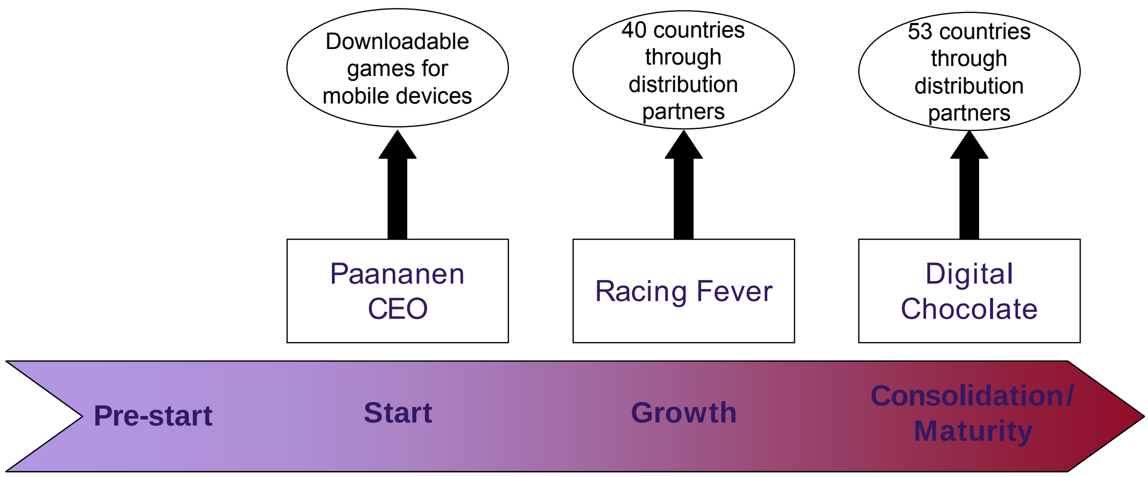


Figure 5: Stages on the internationalization path of Sumea Interactive

1. Background

Sumea was founded in 1999 by Jarkko Salminen and Sami Arola. In the beginning Sumea produced a wide range of digital entertainment from games to commercials. Sumea had employed a group of game developers, who who were lacking in marketing skills and business knowledge. This changed in the summer of 2000 when Paananen joined the Sumea team as CEO. Sumea found its market niche and specialised in downloadable games for mobile devices. Sumea's financing was based on income financing.

Sumea is a game development and publishing company specialising in downloadable high-quality mobile games. The advertisements claim that the games are difficult to master, but intriguing to play. They demand intuitive decision making. The company's mission is to offer instant fun for everyone – meaning a wide array of downloadable mobile games available on multiple technology platforms. Sumea supports both J2ME and BREW technologies and a wide range of mobile devices from various handset manufacturers.

2. Products

During the years, Sumea has put together a portfolio of 17 games, many of which have reached the status of (self-titled) *mobile classics*. Many products are produced in external studios. The Sumea line of award-winning mobile games is available through a wide network of distinguished partners, leading telecom operators and independent portals in more than 50 countries worldwide, including Vodafone, O_2, T-Mobile, Orange, AT&T Wireless, Cingular Wireless, Verizon Wireless, Wind, Telefonica, Swisscom, Mobilkom, TeliaSonera, Jamba!, and Nokia Shops. Sumea is based in Helsinki, Finland, but 95% of its downloads come from abroad. The usual download price is from three to five euros.

Sumea has received some game development awards including winner of the Hutchison 3G game development competition, Runner-up in the Nokia series 60 competition, Handango Java developer of the year 2003. Sumea is a Studio Affiliate of IGDA and in summer 2004 Sumea joined forces with U.S. mobile application developer Digital Chocolate.

3. Delivery channels and partners

“The right products combined with the right delivery channels makes it a real business.” says Paananen. See the following website: http://www.rekaksois.com/research_artikkeli.html/id/616. Sumea's games are offered by global leaders in wireless communications and value-added mobile services. The key customers include leading telecom operators, media companies, and entertainment portals in Europe, the U.S. and Asia. Sumea's Java games are available through several channels all over the world, including O_2 (UK), AT&T (USA), WIND (Italy), CSL (Hong Kong), Sunday (Hong Kong), Singtel (Singapore), Sonera (Finland), Orange (Denmark) and Sonofon (Denmark).

4. Customers

For its global customers Sumea advertises to offer more than just games: “Market know-how and extensive marketing materials, flexibility and down-to-earth, no-nonsense attitude are benefits that most of Sumea's customers value. When the customer looks good, the company looks good is the philosophy.”

5. Internationalization path

The following steps demonstrate Sumea’s stages of internationalization. The summary of these steps is presented in Table 2 below.

5.1. Pre-start 1999-2000

Sumea was founded in 1999 in Helsinki, by Jarkko Salminen and Sami Arola, for the purpose of producing different kinds of digital entertainment from games to commercials. Their developers at that time lacked marketing skills and business experience.

5.2. Start 2000-2002

In summer 2000 Ilkka Paananen became CEO of the company. Other major additions to the personnel were CTO Mika Tammenkoski (from the game development company, Remedy) and producer Mikko Kodisoja. At this point Sumea found its niche. It specialised in downloadable games for mobile devices. Sumea's financing was based on income financing. In 2001 the company employed 8 people.

5.3. Growth 2002-2004

06/02 Racing Fever, an action-packed racing game for Java-enabled mobile phones that received rewards for its graphics, playability, and market success, was released. In a year 250,000 games were sold in 40 countries. (450,000 Racing Fever -games were sold by the year 2004)

In 2003 turnover of this profitable company was EUR 1.4 million and it had 15 employees (25 employees in 2004). Sumea had distribution contracts with 30-40 operators. The company's most important customers were ATT and Cingular Wireless (U.S.) and in Europe: O_2, Orange, Wind and Sonera. Sumea was awarded First Prize (EUR 44,000) in the Hutchison 3G Java competition.

During the years Sumea has produced a number of games. Sumea has also been using external studios to produce games. Sumea has had an entire catalogue of top-rated games: a portfolio of 17 games. The Sumea line of award-winning mobile games were available through a wide network of distinguished partners, leading telecom operators and independent portals in more than 50 countries worldwide, including Vodafone, O_2, T-Mobile, Orange, AT&T Wireless, Cingular Wireless, Verizon Wireless, Wind, Telefonica, Swisscom, Mobilkom, TeliaSonera, Jamba! and Nokia Shops on the web across the Europe. Thanks to O_2, Orange and Vodafone, Sumea's games were available for 12.5 million T-Mobile (the second largest mobile operator in Europe) customers in the UK. Sumea was a member of Sony Ericsson Developer World and became the first Finnish game company to affiliate with the International Game Developers Association (IGDA).

5.4. Consolidation / maturity 2004 -

At the end of June 2004 an American developer of innovative applications for mobile phones, Digital Chocolate Inc., acquired Sumea. According to Trip Hawkins, CEO of Digital Chocolate: *Acquiring Sumea provided Digital Chocolate with strong, established partnerships with major global carriers, broad geographic distribution, an entire catalogue of top-rated games and talented management team that had built a profitable and innovative company.* Sumea became European headquarters of Digital Chocolate, and Paananen continued as the European CEO of Digital Chocolate. This merged entity had relationships with over 110 distribution partners in more than 53 countries on five continents. The Sumea brand for existing Sumea titles was retained and the distribution of those titles were expanded in the U.S..

The merger offered increased access to new financial and development resources. Digital Chocolate received 10 million euros mainly from American venture capitalists for employing more staff in Finland and increasing sales in Europe.

Appendix 2.2
Case examples on internationalization - Sumea

Table 2: Sumea internationalization stages

Sumea Interactive Founded 1999	**Pre-start (1999-2000)**	**Start (2000-2002)**	**Growth (2002-2004)**	**Consolidation / maturity (2004-**
Company (turnover, personnel)		8 employees	Turnover 1.4 million euros and 15 employees (03) 25 employees (04)	Sumea was acquired by Digital Chocolate Sumea became the European headquarters of the company
The degree of internationalization (countries/ customers)			30-40 distribution partners in 40 countries	110 distribution partners in 53 countries
Locations	Helsinki			
Entry modes and channels		Operators as partners, games are offered by global leaders in wireless communications and value-added mobile services		The Sumea brand for existing Sumea titles was retained and the distribution of those titles were expanded in the U.S..
Product life cycle		Product in existing developing markets (market niche)		
Management resources and skills	Game developers	Paananen (HUT) as CEO (former business- analyst in Tecnomen)	Highly talented management team	CEO of Digital Chocolate: Trip Hawkins, European CEO of Digital Chocolate: Ilkka Paananen
Product	All kinds of digital entertainment from games to commercials	Downloadable games for mobile devices	”Racing Fever” (02)	Portfolio of 20 games (04)
Financing	Income financing			Digital Chocolate secures USD 8.5 million before purchasing Sumea. EUR 10 million from Digital Chocolate’s American VCs

Blancco

Abstract
Blancco is a good example of a born global company. After the first commercial version of its product, Blancco Data Cleaner, was introduced the founders of the company wanted to gain market leadership in their main market area, Northern Europe, and later globally. At the beginning, those countries that were similar to Finland (Scandinavia, Northern Europe, Benelux countries and Germany) were selected as target markets. After selecting the target markets and key segments the company focused on creating well-functioning partnerships with the local dealers. Blancco developed a unique franchising model. Partners would sell not only their own products under their own name also Blancco's products under Blancco's name. Partners would take the risk for the business while Blancco concentrated on developing the product and delivering all the materials to the partners.

A customer relationship with Goldman and Sachs, one of the world's leading investment banking and securities companies, was extremely important for Blancco's international expansion. The contract covered all 20,000 Goldman Sachs workstations in 23 countries. The significance of referrals in business-to-business markets cannot be underestimated. Such referrals facilitated the marketing efforts of the company immensely.

The most important stages and their effects on Blancco's internationalization path are presented in Figure 6 below.

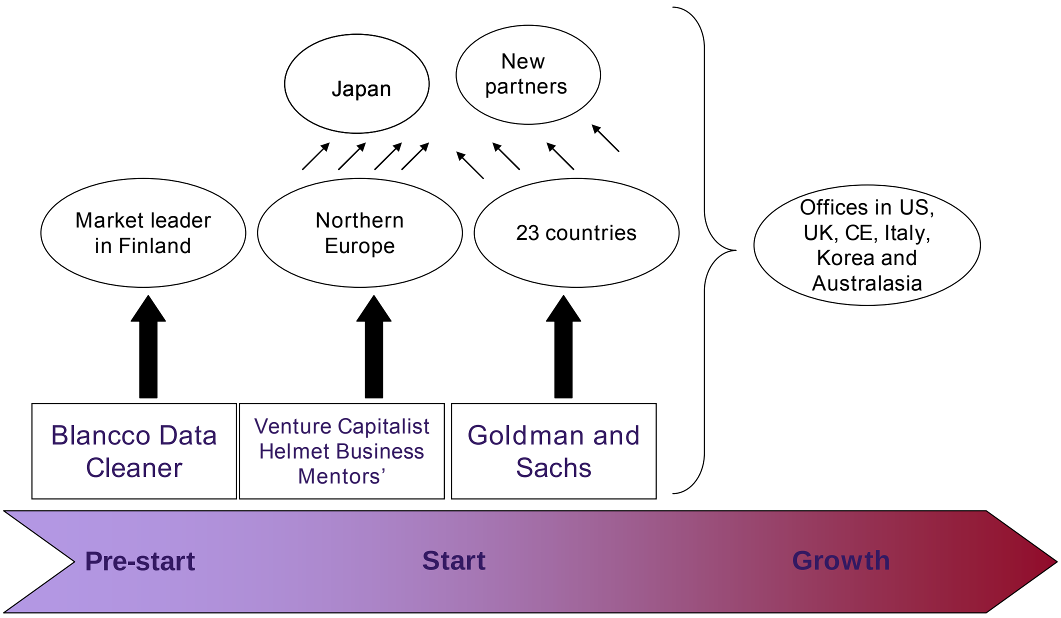


Figure 6: Stages on the internationalization path of Blancco

1. Background

Blancco Ltd (formerly named Carelia Innovations Oy) was established in 1997 in Joensuu, Finland. The company is an international data security company specializes in data erasure, which ensures the complete and secure cleaning of hard disks, and computer Life Cycle Management solutions. Blancco's experience in software-based data erasure is recognized by companies of all sizes and organizations of all types and it has achieved security awards worldwide.

Blancco has quickly become a market leader in its major market areas. It seeks to remain flexible while providing user-tailored solutions. Its turnover is over EUR 1 million with 10-19 employees (Source for number of employees from Blue Book). All the employees have some form of international experience.

Blancco Ltd works closely with its customers and it has partners on all continents, altogether in more than 20 countries (partners include Canon, Fujitsu Siemens, Hitachi and Omnico). The dealer network in Western Europe is quite dense. The largest markets, such as North America and Japan are covered as well as the fast growing Asian markets. Blancco has headquarters in Joensuu, Finland and several international offices: U.S. West (Chico, CA) and East (Bronx, NY), UK (London), CE (Ludwigsburg, Germany), Italy (Torino), Korea and Australasia (Australia). Around 65 to 80% of the turnover comes from international markets, most of it from Germany, the Benelux countries and the UK, but only 10% from the U.S.

2. Products

Blancco's main product is Blancco Data Cleaner, which has several versions (Blancco-Lite, Blancco-Data Cleaner+, Blancco-Pro). Blancco Data Cleaner has been accredited as a "HMG Infosec Approved Product" and is the first and only disk erasure product that has passed the enhanced standard. One license costs approximately EUR 25. Deliveries are made either by mail (on CD) or through the Internet. This software is also available as an ASP service and has been translated into Finnish as well as into various other languages (Swedish, English, German, French, Spanish, Japanese and Hungarian). Blancco also offers a Blancco–Local Server solution, which is a browser-based application that can be installed under a Windows server. Blancco data erasure products have been designed to meet and exceed both the NATO and the U.S.'s DoD 5200 standards.

3. Markets

Regulation encouraging thorough data erasing activities will and has already been introduced in several countries. For example, according to the Finnish legislation, registers including personal data have to be destroyed after use. Actually, all companies that have a lot of computers are potential customers for Blancco. However, because of limited resources the company has focused mostly on industries in which the protection of information is of crucial importance. These include banks, insurance companies, IT companies, governmental organizations (such as ministries, universities, hospitals and police forces), municipalities and research institutes.

4. Competitors

Competition for Blancco is mostly indirect. Blancco has identified at least 50 competitors. Most of them are small companies, freelancers or departments of corporations. Competitors also include large multinationals and companies that offer shareware or freeware solutions for free. Currently, Blancco is not proactively searching for new markets. Blancco's main objective at the moment is to grow its market share, to increase its profits.

5. Internationalization path

The following steps demonstrate Blancco's stages of internationalization. The summary of these steps is presented in **Table 3** below.

Appendix 2.3
Case examples on internationalization - Blancco

5.1. Pre-start (1997-1999)

The company was founded by *Janne Tervo* and *Kim Väisänen* who were both studying at the University of Joensuu. Blancco was originally named Carelian Innovation Ltd and focused on R&D projects in the field of electronics as well as on computer peripheral devices. At the beginning, company cooperated closely with a local business incubator in Joensuu. Financially, two of their first products were considered to be “flops,” but the third one led to commercial success.

The first commercial version of Blancco Data Cleaner was introduced in July 1999. The software was based on the Septem OverWrite method, which had been developed by the company. The program destroyed data by overwriting it with random data seven times. Carelian Innovation sold its other product lines and R&D projects to third parties. The company focused on professional data erasure products that could be used by average PC users. After launching the first version of Blancco Data Cleaner the company started growing rapidly. During the first year the number of licenses sold exceeded 60,000 and after 18 months the number of licenses totaled around 100,000. Most of these were sold in Finland.

5.2. Start (2000-2001)

In February 2000 the name of the company was changed to Blancco Ltd, in order to better support the Blancco brand. The company soon became the market leader in Finland. Sales in the domestic market taught the company who the major players were as well as what the most important issues were that concerned the structure of the market. Since domestic operations were going well, this privately owned company decided to expand into Northern Europe, and later globally. At first, they focused on countries that were similar to Finland like those in Scandinavia, Northern Europe, the Benelux countries and Germany. After the selection of these markets, Blancco created country-specific strategies for each target market. They also named one person from the company responsible for each market. After selecting the target markets and key customer groups the company focused on creating well-functioning partnerships with the local dealers. Partners were carefully chosen. Some had to be replaced by either more effective or more reliable people.

The fast growth of the company had put pressure on their finances. Blancco expanded internationally after the Venture Capitalist Helmet Business Mentors’ investment in 2000. A representative of the VC brought his expertise in the IT business and his knowledge of sales and marketing in Northern Europe to the board of Blancco. In September 2000 the company started a customer relationship with one of the leading investment banking and securities companies in the world: Goldman Sachs. The agreement covered all 20,000 Goldman Sachs workstations in 23 countries. This was extremely important for Blancco. The significance of referrals in business-to-business markets is crucial. Such referrals facilitated the marketing efforts of the company immensely.

The largest Japanese software distributor Sourcenext Corporation licensed the Blancco Data Cleaner program under its own trademark Sourcenext (7/2001-7/2003). In addition to the sales of licensed product, the co-operation of Blancco Ltd and the Sourcenext Corporation included sales of ASP-services to Japanese multinationals. Blancco also had other internationally well known customers: Dun & Bradstreet, AXA, Fujitsu Siemens, TietoEnator; governmental organizations (in Finland and Hong Kong); and U.S. Army and other military and defense organizations.

Blancco–LAN Server was launched in order to facilitate the PC life cycle management. The product has been a huge success within volume PC handlers, such as recycling and refurbishing centers, auction houses, leasing companies, and large-scale corporations. In 2001 the turnover of Blancco was approximately 760,000 euros (doubled from previous year) and it had 13 employees. At that time their proportion of exports exceeded 40% of their annual sales.

5.3. Growth 2002-

Rapid international growth started at the beginning of 2002. In 2002 the number of Blancco Data Cleaner licenses sold exceeded 500,000 and after a year the milestone of one million Blancco users was surpassed. By the end of year 2003, Blancco had established seven new area offices around the world in order to guarantee better customer service for its increasing number of international, globally operating customers. The locations were: UK, U.S.: Blancco U.S. West and U.S. East, Italy, Blancco-CE in Germany, Blancco Asia in Korea and Blancco-Australasia together with ComSec Enterprises Pty Ltd in Australia. With new offices, led by local managers, Blancco was able to provide the best possible customer service “on-the-spot” in Blancco’s major markets areas in the UK, Central Europe, the United States and Asia.

In order to better meet customer needs Blancco developed a product, the New Blancco 4.0 series, which was launched in January 2004. This series helped corporations to reduce reuse costs and increase revenue for used PC assets. The marketing efforts were based on a careful collection of market information. For example, the company conducted country specific market studies in Germany and in France. In addition to the studies, Blancco had acquired information from Finpro, private consultants and the Internet.

Blancco won several awards and received many certifications. For example, D&B, the leading provider of global business information, gave Blancco its maximum credit rating, the AAA category. Only 5% of Finnish enterprises belong to this top credit-rating category.

Appendix 2.3
Case examples on internationalization - Blancco

Table 3: Blancco internationalization stages

Blancco Founded 1997	**Pre-start (199-1999)**	**Start (2000-2001)**	**Growth (2002-)**
Company (turnover, personnel)	Carelia Innovations Oy	Changed name: Blancco Oy Ltd. turnover 760,000 euros and 13 employees (exports 40% of sales)	turnover over 1 million euros, 10-19 employees (65-80% of turnover from international markets)
The degree of internationalization (countries/ customers)	Domestic markets	Scandinavia, Northern Europe, Benelux countries and Germany (Goldman Sachs), Sourcenext Co (Japan)	All continents, more than 20 countries
Locations	Joensuu		Headquarters: Joensuu, offices: U.S. west (Chico, CA), U.S. east (Bronx, NY), UK (London), CE
Entry modes and channels		Partnerships with local dealers	Partners, dealer network
Product life cycle	New product, small markets (indirect competition)		
Management resources and skills	University of Joensuu		All the employees have some form of international experience, offices have local managers
Product			
Financing		Venture Capitalist Helmet Business Mentors	

Appendix 2.4
Case examples on internationalization - CRF

CRF Inc

Abstract
CRF Inc, known as CRF Box until October 2003, is a good example of a born global company. From the very beginning the company focused on reaching global markets, its aim being to quickly open offices in Europe and in the U.S. Three months after the company was founded it introduced its first product. It had found a market niche in electronic patient diaries. The company's financial goals have been clear and well defined. Soon after the company had launched its first product, it got three customers and got its first round of external funding. So far, CRF has attracted three rounds of funding to support its international expansion within its current customer base. CRF has made a strategic decision to be located in the U.S., where its most important customers, the top pharmaceutical companies are based. While most Finnish companies have struggled in the U.S. markets, CRF has been an exception. Half of its turnover comes from the U.S. (CRF's U.S. entry is presented at the end of this case)

The most important stages and their effects on CRF's internationalization path are presented in Figure 7 below.

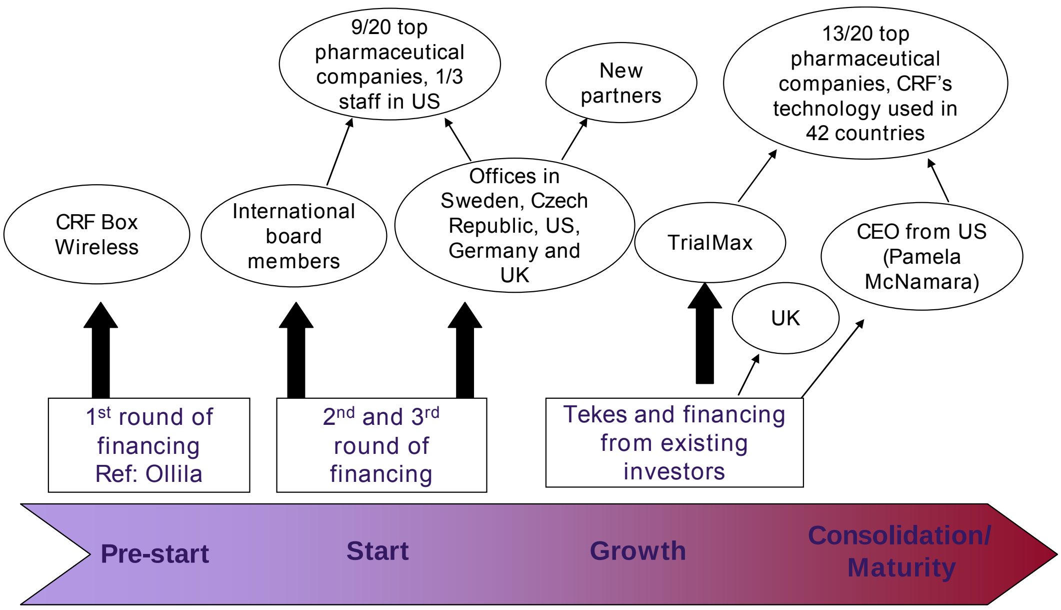


Figure 7: Stages on the internationalization path of CRF Inc

1. Background

CRF (Case Report Form) is an old way of collecting patient data, but today, according to CRF Inc, the letters now stand for Care, Reliability and Flexibility.

CRF Box was established in Helsinki by Timo Ahopelto, Jaakko Ollila and Jarkko Joki-Tokola in summer 2000. Ahopelto's background comes from Nokia, Orion Pharma, Ollila's from Orion Pharma and Joki-Tokola's from both Sonera and Nokia. Since the company was founded, it has been able to achieve remarkable results in a relatively short period of time. The company has been growing rapidly and has been profitable with a turnover of 2-10 million euros and 20-49 employees. (Blue book)

Appendix 2.4
Case examples on internationalization - CRF

CRF Inc is a medium-sized software company with a specific product targeted to a narrow market segment. The company provides the bio-pharmaceutical industry with its eDiary products, which are electronic patient diaries and wireless data collection solutions in all therapeutic areas (HIV, Allergy, Vaccines, etc). CRF is one of the top three leaders in its market. Their major competitors are PHT and Invivodata. These international, U.S.-originated competitors are approximately the same size as CRF in relation to their market shares and revenue growth. In fact, CRF is the global market leader in validated electronic patient diaries and multi-channel data capture for clinical trials. The success factors behind this market leadership are a thorough understanding of the pharmaceutical industry and mobile computing as well as utilization of academic research in incorporating the use of technology in clinical trials.

2. Management team

CRF's international management team (Pamela McNamara, CEO), the industrial advisory board and the management board (Carl Yankowski, Chairman) provide balanced, in depth expertise in the areas of clinical development, scientific research and profitable international business operations. These three teams have experience in both the telecommunications industry and the pharmaceutical industry. The industrial advisory board is composed of pharmaceutical experts. It was assembled to ensure that CRF processes and technology would be applicable, usable, and relevant to present users as well as those in the future.

3. Products

CRF makes electronic patient diaries as the standard part of its global clinical programs. Its products are: TrialMax™, eDiary Patient Edition™, and eDiary Site Edition™, TrialMax™, launched in October 2003, is an easy to use integrated toolkit; eDiary Patient Edition™ is designed to capture clinical trial data from patient populations using PDA devices; and eDiary Site Edition™ is a handheld, mobile electronic data capture (MEDC*)* product for clinical trials that take place at the investigative site. The company's eDiary products support patient and site connectivity using a variety of landline and wireless data transfer technologies.

4. Markets

CRF Inc's data collection solutions are compliant with U.S. and international standards for data quality and integrity. The telecommunications infrastructure has been validated in over 40 countries in Europe, North and South America, Africa, Australia, and in the Asia-Pacific area. As a result, CRF operates exclusively in global markets. Today, 50% of their turnover comes from European markets; the other 50% from U.S. markets. Their customers include 13 out of the 20 top pharmaceutical companies. One of CRF's strategic decisions was to be located in the U.S. near so many of its customers and pharmaceutical companies.

5. Customers

The most important part of CRF's business is the end-users of their software: patients, clinical research professionals, site coordinators and data managers. Their customers include Abbott Laboratories, BioTie Therapies, GlaxoSmithKline, Novartis Pharma, Octapharma AG, Orion Pharma, Watson Laboratories Inc, Wyeth Inc, and others. Nearly 70,000 patients in 42 countries and 1,280 research sites worldwide have used CRF Inc's technology. The company's European headquarters are in Helsinki, its U.S. headquarters in Waltham, MA. Other offices are situated in San Diego, CA,, Luton, UK, and Stockholm, Sweden.

6. Distribution channels and partners

CRF uses its products to deliver projects for clinical trials, cooperating in sales and services with partners such as Covidence (2002), EDM Forum, InferMed, and TechTeam (2002). The company has partnered with a number of hardware and software vendors including Bea, Handspring, IBM, Nokia, Oracle, PalmOne (2002), SSH, and Sun Microsystems. They have also partnered with a number of medical device technology companies, and are constantly seeking for new integration opportunities to better meet the therapeutic area-specific needs of the clinical trial teams of its clients.

7. Finances

CRF is a revenue generating privately held company that has attracted three rounds of investments to support its international expansion with the current customer base. The investors include 3i, Stratos Ventures and Nordic Venture Partners. The National Technology Agency of Finland (Tekes) has also provided funding for the R&D of TrialMax™. The published investments have amounted to USD 3.4 million in 2004, USD 1.6 million in 2003, and USD 6.2 million in 2002.

8. Internationalization path

The following steps demonstrate CRF's stages of internationalization. The summary of these steps is presented in the Table below.

8.1. Pre-start 2000-2001

Everything happened so fast that within three months after the company was founded it had its first product. It soon had three customers and its first funding. The company expanded its ownership through private placement to a group of investors, Stratos Ventures being the lead investor. According to Tiainen (Tietoviikko 20.6.2002) these venture capitalists became interested in CRF because one of the founders of the company, Jaakko Ollila was the son of Nokia's director Jorma Ollila. With the first round of financing, CRF Box planned to speed up its product development, sales, and international expansion. It then launched its flagship product, CRF Box Wireless™, an integrated service and technology platform for capturing patient reported outcomes data in clinical trials for the European and U.S. clinical trial market. From the beginning the aim of the company was a rapid international expansion. into Europe and the U.S..

8.2. Start 2001-2002

Soon after the first round financing, CRF Box received the 2nd round of financing from 3i and Stratos Ventures. The investors were satisfied with the international development of the company: *"CRF Box has advanced extremely fast to the position where they are recognized globally by the pharmaceutical industry, and are capable of serving the top pharmaceutical companies in their clinical trials both in Europe and in the U.S. We see this being the result of a* ***scalable business model****,* ***capable executives****, and the fact that the* ***market sees the benefits*** *of CRF Box Wireless™ clearly,"*, says Mr. Markus Pyhältö, Venture Manager from Stratos Ventures (2001). CRF Box used that funding to expand its service capability in Europe and U.S. At the time it had headquarters in Helsinki, Finland and also offices in Stockholm, Sweden; Prague, Czech Republic and Cambridge, MA, U.S. It employed over 30 people.

To gain more international experience (especially in the U.S. markets) and to further establish CRF Box's global leadership position, the company appointed new board members. James E. Niedel, M.D. Ph. D., FRCP, former Chief Science and Technology Officer of GlaxoSmithKline joined the company's Board of Directors. Niedel had more than 30 years in academic medicine and in the pharmaceutical industry. While at Glaxo-Wellcome, Niedel was the principal board director responsible for research and development, information systems, and product strategy. Carl Yankowski, former CEO of Palm and president & COO of Sony Electronics, and Mark Skaletsky, CEO of Essential Therapeutics Inc joined the Board of Directors, bringing experience from global pharmaceutical, biotechnology and IT industries. By the end of the year 2002 (2 years after the company was founded) it had raised 6 MEUR in its third round of funding. Investors included 3i, Stratos Ventures and Danske Venture Partners.

In December 2002 CRF Box operated globally with offices in Boston and San Diego, Helsinki, Düsseldorf, Stockholm, and London. The turnover of the company was expected to grow from 5 to 6 million euros and the personnel from 60 to 80 people. Every third one of them was operating in the U.S. The CEO expected the company to realize its first positive cash flow in November. During 2002 over 33,000 patients and 980 research sites in 31 countries and 32 therapeutic areas used CRF Box technology worldwide, with more connecting every day. The company had three major competitors all of them in the U.S.

8.3. Growth 2003-

Tekes, the National Technology Agency of Finland, awarded CRF with EUR 1.4 million of research and development funding for TrialMax™, which won the "Most Productive Idea" award in the Business category of the 26th annual Junior Chamber International-Finland Productive Idea competition in 2004.

The company’s name was changed from CRF Box to CRF Inc What is more, CRF announced Pamela McNamara as their CEO and as a result expanded their clinical competency in the U.S. A new Director for Clinical Operations, Juliet Moritz, was added to the staff. The company also expanded its UK facilities. The new office was located in Luton and was ideally situated to service CRF's current UK customers and its rapidly growing international business.

CRF Inc secured 2.75 million euros of financing in all. All of CRF’s investors participated. The turnover of the company was expected to grow to 12 million euros and in the following couple of years up to 50 million euros.

Appendix 2.4
Case examples on internationalization - CRF

Table 4: CRF internationalization stages

CRF Box Founded 2000	**Pre-start (2000-2001)**	**Start (2001-2002)**	**Growth (2003-)**
Company (turnover, personnel)		30 people (growth to 2002: revenue 5-6 million euros & 60-80 people) 1/3 of staff in the U.S.	Name changed to CRF Inc, turnover of 8 million euros (revenue: 50 % U.S. the rest from Europe)
The degree of internationalization (countries/ customers)	Aim to open offices in Europe and U.S.	Over 33,000 patients and 980 research sites in 31 countries (market share 20 %) 9/20 top pharmaceutical companies use CRF's technology	13/20 top pharmaceutical companies, 70,000 patients in 42 countries use CRF's technology
Locations	Helsinki	Headquarters: Helsinki, Finland; Waltham Ma, U.S. Offices: Boston, San Diego, U.S.; Stockholm, Sweden; (Prague, Czech Republic,) Düsseldorf, Germany and London, UK	New office: Luton UK
Entry modes and channels	Partner Clinsoft co	Partners	
Product life cycle	New product, small markets (competitors in the U.S.)		
Management resources and skills		international board members: Niedel and Yankowski	CEO from U.S. (Pamela McNamara)
Product	First product - CRF Box Wireless		- TrialMax
Financing	- 1st round: Group of investors Stratos Ventures (the lead)	-2nd round: 3i and Stratos Ventures -3rd round: 3i, Stratos Ventures, Danske Venture Partners (6 million euros)	-Tekes: 1.4 million euros - 3i Group, Stratos Ventures, Nordic Venture Partners

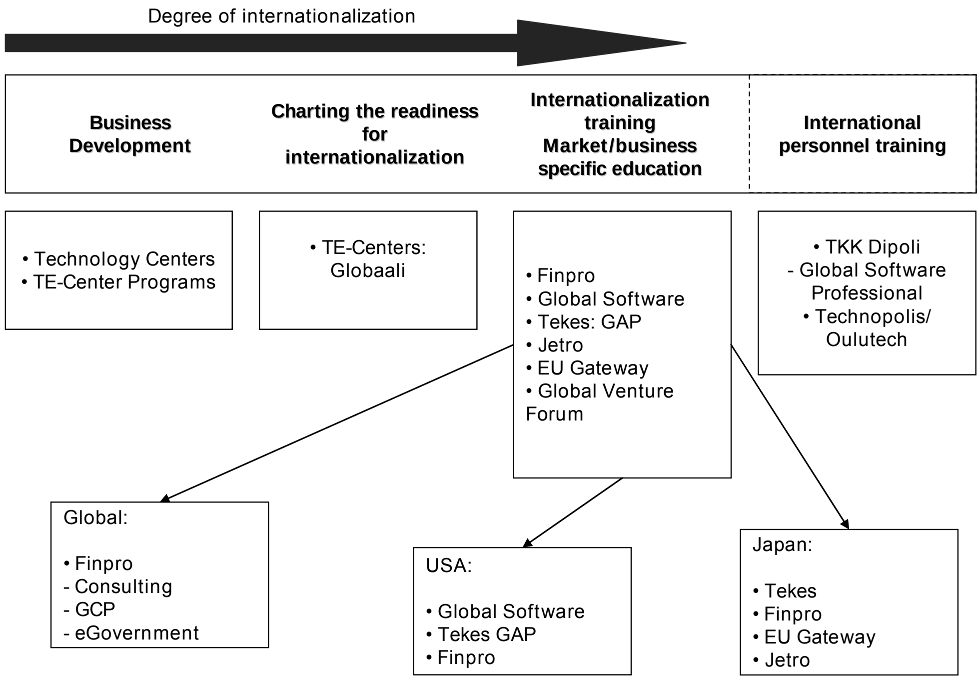
Appendix 3
Introduction to additional sources of resources and information

Organizations Providing Support and Information in Internationalization of Software Firms

After the many analyses you have made on the preceding pages, you have seen the variety of challenges related to internationalization and have been able to reflect your firm's resources and capabilities to meet these challenges.

If you have noticeable gaps in your company's resources or skills that you would like to fix, then you may want to look into the additional resources presented below.

The first Figure below presents an overview on the training and service providers in the industry in the pre-start and start phases:



Source: Paaso 14.4.2004 (adapted)

The figure above does not illustrate the universities and polytechnics, which provide research and education in the internationalization and software business. They can support your company especially in terms of market research, productization and strategy formulation, but naturally serve as sources of HR as well. Some of the most important ones in the software business are:

- Helsinki University of Technology: *Software Business and Engineering Institute (SoberIT)*
- University of Jyväskylä: *Software Business Program*
- Helsinki School of Economics: *Center for International Business Research; Graduate School for Electronic Business and Software Industry* (with HUT)
- Lappeenranta University of Technology: *Technology Business Research Center*
- University of Oulu; *Oulu Advanced Research on Software and Information Systems (OASIS)*
- University of Helsinki: Specialization field of *Software Engineering, Helsinki Institute for Information Technology (HIIT)*

These organizations typically work in close collaboration with science parks and other public organizations, of which you may find more detailed information in the following pages.

Appendix 3
Introduction to additional sources of resources and information

Support for SW business development – Technology Centers	
These organizations provide support for start-up phase companies as well as for later stages of business development especially in the software business. More specifically, you may find support for business concept development, productization, financing and creating linkages to the neighboring companies and educational institutes. You may find the rest of the technology centers from the Finnish Science Park Association at http://www.tekel.fi	
Technopolis Ventures Espoo	**http://www.technopolis.fi/ventures** Technopolis Ventures is an incubator that has an emphasis on technology-driven business ideas and and their internationalization. Activities: - Evaluation, advisement, coaching and mentoring - Providing tools and skills for global competition. - Financial planning and implementation - Networking services (domestic and international) - Scalable services also for post-incubation companies Hosts *Centre of Expertise for Software Product Business*, which cooperates with companies and the universities and research centers of the Helsinki region, especially with the department of software and telecommunications technology at HUT. The objective of the activities is to develop competitive, innovative environments for the internationalization of new products and companies.
ICT Turku Turku Science Park	**http://www.turkusciencepark.com** For new companies, ICT Turku offers a service complex and premises in a business incubator, which aims at promoting the initiation and development of technology-based business operations. Hosts a development program *Software Development Centre,* which develops and productizes software and communications solutions as well as methods and practices for managing software projects according to the needs and commissions of companies.
Technology Centre Kareltek Lappeenranta	**http://www.kareltek.fi** Business incubator and business development center, which provides scalable support for graduated start-ups. Hosts *Menos* project, which concentrates on business development of software companies and content providers Hosts *eBusiness* portal, which connects software product and service companies with traditional industries. Supports internationalizing firms aiming to Russian markets.

Appendix 3
Introduction to additional sources of resources and information

Seinäjoki Technology Centre	**http://www.stoy.fi**	
	Seinäjoki Technology Centre supports and promotes starting and existing technology businesses through business incubator, premises, and development. Hosts Smart City – the *Centre of Expertise for Intelligence Technology*, which involves software engineering as one of its areas of expertise.	
Media Tampere	**http://www.mediatampere.fi**	
	Media Tampere is a digital media development organization that focuses on the development of content provider competences through company development and other measures. In addition, the organization specialises in developing online service systems. Media Tampere provides consultancy services and project leadership and also develops products and services in its specialist field.	
Jyväskylä Science Park	**http://www.jsp.fi**	
	Jyväskylä Science Park is a full-service science park, whose task is to refine ideas based on new knowledge into business activity. It covers several different technology areas including IT. In the IT sector the emphasis is on software production, network applications and digital media. Hosts Jyväskylä Region Centre of Expertise, which has collaborated with Oulu (Technopolis) in training program *Global Software*.	

Appendix 3
Introduction to additional sources of resources and information

Training providers in internationalization and their *focuses*	
Global Software * *Marketing & Selling* * *Channels* * *Finances* * *Legal* * *Customers* * *Competition* * *Networking & Co-operation* * *Market research*	**http://www.kotu.oulu.fi/globalsoftware** *Global Software* is the most comprehensive business development, marketing and networking program for the leading Finnish software intensive companies targeting or investigating global markets with a focus on **North America**. Provides insight into the U.S. markets and supports, especially in partnership, formation, marketing techniques and cultural understanding. Related organizations: T&E Employment and Economic Development Centre, Ministry of Trade and Industry, etc.
Fintra * *Management* * *Channels* * *Finances* * *Entry modes*	**http://www.fintra.fi** Fintra is Finland's leading trainer in international business management. They specialize in training services, creating tailor-made concepts to meet the development needs of companies and individuals in an increasingly global business environment. Fintra provides generic internationalization training. Much emphasis is set on intercultural communication and language training.
National Board of Patents and Registration of Finland * *Target market* * *Entry modes* * *Strategy formulation*	**http://www.prh.fi** NBPR advances technological and economic progress both in Finland and internationally. NBPR's regional service points are to be found at - Chambers of Commerce - Local Register Offices ("maistraatti") - Employment and Economic Development Centres (T&E Centres) - Enterprise Agencies - Tax Offices - Universities and other institutions of higher education (services offered by innovation agents). NBPR gives training in company law and IPR issues in international markets, including strategic role of patents.

Appendix 3
Introduction to additional sources of resources and information

Globaali * *Management* * *HR* * *Customer* * *Competition* * *Target market* * *SWOT*	**http://www.te-keskus.fi** *Globaali* is a full SME internationalization program, in which the companies' readiness and prerequisites for internationalization are evaluated. As a result, an internationalization development program is drawn up for all participants. Globaali provides also a workbook for evaluating your firm's internationalization readiness and for finding out development needs. You may find the workbook in: **http://www.yrityssuomi.fi/liston/portal/resource/fi/4462.pdf**
Tekes * *R&D* * *Finances* * *Entry modes* * *Co-operation*	**http://www.tekes.fi** Selective project funding is the basis of Tekes operations. Funding and expert services are channeled to technological R&D projects run by companies, research institutes, and universities. Tekes has a global network with the specific intention of bringing together world-class technology companies, universities and research organizations with Finnish counterparts. Tekes funds Finnish SMEs international co-operation activities in R&D, technology implementation and demonstration, and technology transfer. In addition, basic funding instruments of Tekes are mostly applicable for internationalization.
Finpro * *Management* * *Sales* * *Delivery* * *Target market* * *Entry modes* * *Market research*	**http://www.finpro.fi** Finpro is an expert and service organization whose mission is to speed up the internationalization of Finnish businesses. Finpro promotes Finnish Business Solutions Worldwide. Their clients are Finnish companies at all stages of their internationalization development. Finpro has trade centers around the globe and consultants specialized in software industry.

Appendix 3
Introduction to additional sources of resources and information

TKK Dipoli	**http://www.dipoli.hut.fi**
* *Management* * *HR* * *Sales and marketing* * *Products* * *Finances* * *Market research* * *Target market* * *Entry modes* * *Strategy formation*	Lifelong Learning Institute Dipoli, an adult education unit of Helsinki University of Technology specializes in technology and business know-how and produces lifelong learning and professional development courses and programs. Hosts a training program, *Global SW Professional,* on international skills for enterprises in the IT field, particularly in the software business.

Other sources of information	
Finnish Information Society Development Centre TIEKE	**http://www.tieke.fi**
	TIEKE has initiated and runs an open network of various players operating in information technology industry. Their services include: - PERTTI, a data base for companies to introduce their expertise to potential partners, both domestic and foreign. - International software agreement platforms with Finnish-language commentary offered to IT companies who need to operate on an international basis. - Rules in sub-contracting service module that introduces and explains examples of partnership and sub-contracting. The service includes guidelines and hints from learning by doing, models for co-operation, and a certificate of understanding rules.
SME Foundation	**http://www.pkt.fi**
	Provides a search engine for consultants in various fields
The Finnish Management Consultants LJK	**http://www.ljk.fi**
	Association for individual consultants, provides a search engine of its members
Kasetti	**http://www.teknologiateollisuus.fi/kasetti**
	Kasetti is an information service for internationalization, provided by Technology Industries of Finland. It provides a general framework for *pre-start* and *start* phases of internationalization. Kasetti provides a process model for internationalization, entailing detailed information on each part of the process and an extensive list of links, related to the process model, and by country.

Appendix 3
Introduction to additional sources of resources and information

Further training portal	**http://www.taydennyskoulutus.fi** **http://www.avoinyliopisto.fi**
	Search engines for further training courses in Finnish universities and institutes

INTERNATIONALIZATION HANDBOOK FOR THE SOFTWARE BUSINESS

"'Internationalization Handbook for the Software Business' is a useful 'how to' book for small and medium software enterprises considering expansion into overseas markets. It includes a workbook that software firms can use to ask critical questions and design their own, unique approach to internationalization. There is no such handbook that I'm aware of available to software firms."

Sanjit Sengupta, Ph.D.
Professor and Chair, Marketing Department
San Francisco State University, U.S.

"Increasing number of Finnish software firms are searching for growth from international markets, but only few of them know how they should proceed. This handbook offers them a 'toolbox' which they can use to guide and facilitate their expansion. It provides the managers with useful and critical questions but offers no ready-made answers - thus allowing them to learn during the process."

Niina Nummela
Professor, International Business
Turku School of Business and Business Administration, Finland

Top Trainers Group
Transformation & Strategy in Action
Vista, California • Antibes, France • Helsinki, Finland

TECHNOPOLIS
Technopolis Ventures Ltd.

Centre of Expertise for Digital Media, Content Production and Learning Services

ESF

Centre of Expertise for Software Product Business

muusa2
markets for digital innovation

LAPPEENRANTA UNIVERSITY OF TECHNOLOGY

TBRC Technology Business Research Center

URL: http://www.swbusiness.fi

ISBN 952-99529-1-0
ISBN 952-99529-0-2 (PDF)