

- **Internationalization Challenges of Small Finnish Software Firms – Comparing Theory and Practice**

- 1) Motivation and research question
- 2) Existing research on firm internationalization
- 3) Research approach
- 4) Results
- 5) Discussion and future research

Current research on firm internationalization is focused on finding challenges and patterns of internationalization

- What practitioners think about internationalization is not studied
- The research focuses on issues that academics find interesting and largely disregard the views of the practitioners

Research question

- "How do the challenges of internationalization as portrayed by the scientific research compare with the beliefs of the industry"

Our research has potential impact for both research and practice

- To correct misconceptions by practitioners
- To propose avenues of research that are most interesting for practitioners



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Growth Forum '08

- Objective is to promote growth and internationalization of Finnish software industry
- Based on co-operation between entrepreneurs, directors and researchers in the software field
- Participants worked in five groups and results of each working group were presented in three seminars
- Established by Ohjelmistoyrittäjät ry and Microsoft oy.

Our role in the project

- Active participation to meetings
- Collecting information in order to support the work of Growth Forum' 08 members
- Participating to writing process of final report of Growth Forum '08



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Firm internationalization research

1. Internationalization process
 - When firms internationalize?
 - How firms internationalize?
 - Where firms internationalize?
 - Why firms internationalize?
2. Determinants of internationalization
 - What provokes firms to start their international operations?
 - What kind of challenges are related to internationalization of software firms?
 - What are the determinants of success in internationalization



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Research on Internationalization Processes

Uppsala model

- Mature companies
- Internationalization stage depends on collected knowledge
- First to psychically and geographically close markets
- For steps of involvement:
 1. No international activities
 2. Indirect export
 3. Direct export
 4. Production
- Johanson&Wiedersheim -Paul(1975)
- Johanson&Vahlne(1977)

Network model

- Internationalization of the company is affected by its relationships to other companies
- Software companies follow their domestic clients to international markets
- Large hardware manufacturers
- Request from overseas
- Johanson&Mattson (1988)
- Bell (1995)
- Coviello & Munro (1997)
- Leonidou (2007)

INV theory

- New companies
- ICT and globalization have made internationalization easier for smaller and younger companies
- Willingness to grow
- TMT's international experiences, innovative and marketing capabilities
- Capabilities to use resources
- Knowledge is the primary resource
- Oviatt&McDougall(1994)
- Luo et al. (2005)



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What kind of challenges are related to internationalization of firms?

- Lack of funding (Bell 1997)
 - Competitive pricing
 - Communication with clients
 - Development of suitable product for international markets
- Liability of foreignness (Arenius 2005)
 - Lack of legitimacy and influence
 - Need to learn new roles and establish relationships
- Foreign customer habits (Leonidou 2004, Bin et al. 2004)
- Marketing (Alajoutsijärvi et al. 2000)
 - Lack of marketing capabilities
 - Especially in the transitional phase from project business model to product business model



Internationalization process

- Internationalization of software companies is faster and starts sooner than is represented in traditional internationalization models
- Importance of psychical and geographical distance have changed
- Network relationships are important for internationalization

Determinants of internationalization

- Finland's small market area encourages software product companies to internationalize
- Niche product encourages to internationalize (Ojala 2008)
- Amount internet users, quality of technological infrastructure, IPR protection and government transparency (Luo et al. 2005)
- Lack of funding makes it difficult to invest to internationalization
- Software companies often lack of marketing capabilities



• Empirical study

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Research Approach

Qualitative material from Growth Forum '08

- Active participation in working groups and seminars
- Interview material to support the work at the working groups
- Main data analysis method content analysis

Supportive analyses performed by the National Software Industry Survey –project

- Survey data from Finnish software industry
- Analyzed with multivariate methods
- Reported in detail elsewhere

Rich was data collected

- Seminars, meetings, working groups interviews

Type of event	Number attended	Description of data
Steering committee meeting	4	Field notes
Seminar	3	Field notes of presentations and discussions
Working group	3	Field notes, slide materials
Interview	7	419 minutes of tape and 24 pages of field notes



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Informants were highly experienced

- CEOs, entrepreneurs, directors
- Experience from many international companies

Informant	Title or status	Organization
A	Technology Director	Public listed company
B	Managing Director	Privately held company
C	Deputy Managing Director	Business park
D	Chairman	Privately held company
E	Partner	Venture capitalist
F	Research Manager	Research institute
G	Managing Director	Privately held company



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Data coded with Weft QDA¹ and analyzed using content analysis

- Open coding word by word
- Some categories used in the coding derived from the extant literature but some arose from the qualitative material

Data summarization with tables

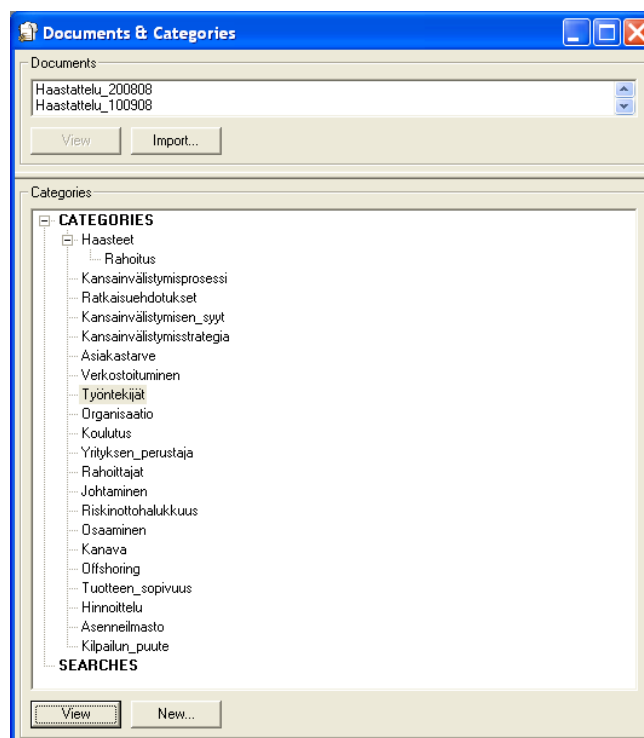
- We tabulated the evidence from interviews against the current theories



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[1] <http://www.pressure.to/qda/>



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• Results

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Summary of Key Results

Comparison tables show mainly support or inconclusive evidence between existing theory and practitioner opinions

- Funding is seen as an important factor by practitioners and supported by theory and survey study
- Researchers and practitioners weight issues differently
 - Practitioners emphasize product and marketing related issues more
 - Researchers focus on organizational factors
- The role of risk taking as a facilitating factor a novel finding not well documented in the extant literature

Next two slides will present the comparison tables

Theory vs. Practice

Challenges of internationalization in theory	Key references	Opinions by the practitioners	Sample quotes	Survey results	Conclusion
Lack of funding	Bell (1997)	Common problem, need for early investors & coherent public funding	"Venture cap - investors are no longer risk takers. They don't support start-ups." (Interviewee E)	Supported (Venture capital investor increases internationalization)	Partially supported
Communication with clients	Bell (1997) Leonidou (2004)	Common problem, caused by technological bias	"Clients behavior can be easily misunderstood" (Interviewee C)	Not tested	Partially supported
Product suitability	Bell (1997) Leonidou (2004)	Sometimes a problem, caused by technological bias	"Good product fills client's needs"	Not tested	Partially supported
Competitive pricing	Bell Leonidou	Sometimes cause problems	"Finding right pricing model is challenging" (Interviewee C)	Not tested	Partially supported
Lack of marketing skills	Alajoutsjärvi et al. (2001)	Sometimes seen as a problems	"Common problem is the lack of marketing skills" (Interviewee B)	Partially supported (Telephone interviews indicated this as a problem)	Partially supported
Creating new relationships EBRF 2008	Arenius (2005)	Important issue	"Building new network is expensive" (Interviewee C)	Not tested	Supported

Practice vs. theory

Challenges according to practitioners	Sample quotes	Existing theory	Key references	Survey Result	Conclusion
Understanding customer needs	"The most challenging thing in internationalization is to understand client's needs" (Interviewee A)	Important issue in marketing and product suitability	Alajoutsjärvi et al. (2000) Ruokonen (2008)	Not tested	Partially supported
Building new relationships	"For internationalizing company it is difficult to find right partners" (Interviewee C)	Recognized as a problem	Arenius (2005) Alajoutsjärvi et al. (2000) Scharf (2001)	Not tested	Supported
Lack of leadership skills	"It isn't easy to find good leaders" (Interviewee B)	Rarely seen as a problem	Oviatt & McDougall (1994)	Not supported	Inconclusive
Immaterial rights	"All developing countries don't recognize IPR laws" (Interviewee A)	Important issue in protecting knowledge	Oviatt & McDougall (1994)	Partially supported	Supported
Getting funding	"Public funding options are too fragmented" (Interviewee D)	Recognized as a problem	Bell (1995)	Supported	Supported
Willingness to take risks	"It limits internationalization of Finnish companies" (Interviewee D)	Factor affecting firm growth	Autere & Autio(2000)	Supported	Inconclusive

Summary

- International software firms think it is difficult to understand customer needs and build new relationships in new markets
 - Even if understanding customer needs is an important part of marketing and product development academics have rarely thought it is a problem
- Difficulties to get funding and low willingness to take risks hinders the willingness to start international operations
 - Lack of funding have been recognized as a problem by researchers but reasons for it have got less attention
 - Lack of willingness to take risks has rarely been seen as a barrier to start international operation by academics



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Contributions of this study

- This study tries to get overall view of different kinds of internationalization challenges faced by Finnish software firms
- How well academic research have captured important internationalization challenges viewed by practitioners?
 - Risk taking and product related issues seem understudied

Limitations

- One has to be careful with generalization because research sample is small and study concentrates only on one industrial field

Tasks for further research

- Investigate the role of risk taking in internationalization
- Focus more on product related issues rather than organizational issues



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Thank you

Questions and comments are welcome!



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