



This is an electronic reprint of the original article. This reprint *may differ* from the original in pagination and typographic detail.

Author(s)	Ojala, Arto;	Nahar,	Nazmun
-----------	--------------	--------	--------

Title: IT-Supported International Subsidiary Establishment Process for the Japanese Market:

A Case Study on Finnish High Technology SMEs

Year: 2005

Version:

Please cite the original version:

Ojala, A., & Nahar, N. (2005). IT-Supported International Subsidiary Establishment Process for the Japanese Market: A Case Study on Finnish High Technology SMEs. In Proceedings of the APDSI.

All material supplied via JYX is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of the repository collections is not permitted, except that material may be duplicated by you for your research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered, whether for sale or otherwise to anyone who is not an authorised user.

IT-supported International Subsidiary Establishment Process for the Japanese Market: A Case Study on Finnish High Technology SMEs

Arto Ojala

Department of Computer Science and Information Systems University of Jyväskylä, Finland arojala@cc.jyu.fi Nazmun Nahar

Department of Computer Science and Information Systems University of Jyväskylä, Finland naznaha@cc.jyu.fi

Abstract

The large size of the Japanese IT market makes it attractive to and important for foreign high technology companies. However, the Japanese market is very challenging, highly competitive, and difficult to penetrate for foreign small and medium-sized enterprises (SMEs). Most SMEs fail to penetrate into the Japanese market effectively by using modern IT-tools in the international subsidiary establishment process. No earlier in-depth empirical research exists on the IT-supported international subsidiary establishment process for this market. This study investigated and analyzed how a Finnish high technology SME implemented the ITsupported international subsidiary establishment process for the Japanese market. In this study, a case study method was used to execute the research. This study validated and refined a conceptual model of the ITsupported international subsidiary establishment process by using empirical data. The research findings revealed that by using various IT-tools high technology companies can improve their internationalization process, penetrate the Japanese market rapidly and effectively, and manage global information exchange. This study demonstrates that the use of IT-tools in the international subsidiary establishment process includes some limitations and not all tasks can be performed using ITtools alone. The research findings in this study are useful for both practice and further research.

Keywords: internationalization, IT, IT-support, Japan, establishment of subsidiaries, small and medium-sized enterprise

1. Introduction

Internationalization of SMEs is increasingly becoming important due to their niche strategies and a limited domestic market [2] [3]. In many cases these high technology SMEs produce tailor-made embedded and/or integrated software solutions that require more intensive support and service than packaged software. This increases the need for close cooperation with customers and requires an effective presence in the market [10]. Researchers [15] indicate that high technology companies should enter the leading markets of the world if they want to survive in the long run and make a profit. Japan is the second largest IT market in the world, just after the U.S. The Japanese market offers high potential opportunities for foreign companies to increase their

business [11] if they can be established and managed successfully [17]. Moreover, several studies indicate that there is a high growth potential in the Japanese IT market [11] [16]. The large size of the Japanese market offers good opportunities to foreign high technology SMEs to conduct business and expand their market significantly.

In addition to the large size of the Japanese market, a variety of other factors make the Japanese IT market very attractive and important for foreign high technology companies, such as the increasing usage of PCs and the Internet [19], reduction of Internet, service provider, and telecommunication expenses, the Japanese government's proactive policies for the IT sector [8] and a very progressive telecommunication market [9] [20]. Due to the aforementioned reasons, Japan is a very important market for foreign high technology companies.

Entering and doing business in Japan has always been difficult for foreign companies. In the Japanese market, e.g. the building of long-term relationships with customers is important and time consuming [21]. Japanese customers also want high quality after-sales services and support. Due to the aforementioned reasons, to maximize the company's chances for growth and success, it is essential to have a strong and very effective presence in this market. Through establishing a subsidiary in the Japanese market, foreign high technology companies can increase their capabilities of developing relationships with customers, deliver their products and services, provide after-sales support, as well as control the market [5] [17].

Effective and innovative usages of advanced IT-tools offer extensive assistance to companies to support their internationalization process, allowing cross-border assistance in a variety of areas and ways [4] [14] [17] [18]. By using these IT-tools SMEs can conduct in-depth research in the Japanese software market and make the right decisions. IT can assist foreign SMEs to enter the Japanese market cost efficiently, allow for the provision of cross-border assistance as well as allow effective services to this market [16].

Due to the aforementioned reasons, research is needed on how foreign high technology SMEs could establish a subsidiary in the Japanese market through IT-support and manage their business in Japan. In this study we present a Finnish SME high technology firm's IT-supported international subsidiary establishment process for this market. The research question addressed in this study is: "What are the phases in the establishment of a subsidiary through IT-support for the Japanese market and how have the phases been executed?" This research attempts to provide an answer to this question by analyzing empirical data of the case company. This research validates the conceptual model of the IT-supported international subsidiary establishment process developed by Ojala and Nahar [17].

This paper proceeds as follows: The research method applied in this study is described in Section 2. Section 3 describes the IT-supported international subsidiary establishment process of the case company and validates the conceptual model. Section 4 draws the conclusions and implications. The limitations of this study and future research directions are also suggested in Section 4.

2. Research Method

This study describes a real-life situation by conducting an in-depth empirical study and tries to make a holistic conception of IT-supported international subsidiary establishment process. No earlier empirical research has been done on this topic and it is a new phenomenon, also very limited literature exists on this topic. When only limited research has been done and very limited literature exists on some problems, a qualitative case study method is suitable for investigating the problem. The qualitative case study method is also suitable for describing the new phenomenon [6].

Yin [22] suggests that the case study is a preferred strategy when the investigator has little or no control over the contemporary set of events. The case study investigates a real-life context when the boundaries between the new phenomenon and the real-life situation are not clearly evident. Considering the characteristics of this study, we utilize an exploratory single case study approach [22] due to the massive amount of data needed in order to investigate the research topic thoroughly. Special care has been given to maximize access to evidence and to avoid misinterpretations of the research data. The selection criteria of the case company focused on the following issues: who a) has a subsidiary in Japan, b) has earlier experience in IT-supported implementation of a subsidiary, and c) are willing to share their knowledge, experience and opinions. Through the assistance of the Finnish Chamber of Commerce in Japan it was possible to identify a suitable high technology SME that fulfilled these criteria. The following professionals were interviewed in the case company: a) managers who have in-depth knowledge regarding subsidiary establishment process, b) employees who have participated in the establishment process of a subsidiary, and c) managers and employees who have in-depth knowledge of the Japanese market.

The data collection process of a case study can include six sources of evidence. These sources of evidence are documentation, archival records, interviews, direct observations, participant observation and physical artifacts [13] [22]. Considering the purpose of the study, in-depth interviews were conducted with the case company people. The total amount of interviewees was

eight. In the interviewing process, open-ended interviews were conducted focusing on the questionnaire guide. In addition to this, several e-mail and telephone interviews were used in collecting additional data. Each interview was recorded and very carefully listened to, and transcribed verbatim following a second listening to assure correspondence between the recorded and transcribed data. In this study, the data analysis was executed by using the following steps: 1) data reduction, 2) data display, and 3) drawing conclusions and verification [12]. A complete case report was sent to the case company to ensure the validity and authenticity of the data. If the interviewees in the case company found some errors or misinterpretations in the text, these were corrected following their comments. The same questionnaire guide was used and the same questions were asked of all interviewees. The collected data were compared with other sources, such as internal publications and documents, as well as other interviewees. These measures increase external validity of the research and overcome the specific criticism that single case studies are not easily open to generalization

3. Case Description and Analysis

3.1 Background of the Case Company

In this study, the real name of the case company has been altered for reasons of confidentiality. Company X is one of the world's leading wireless multimedia companies. This company's products portfolio consists of both hardware and software video codecs. The video codecs enable video capturing, play backing, messaging, streaming and video telephony applications. The company's products are in a key role for handheld device- and semiconductor manufacturers, who develop battery-operated video-capable products, such as cell phones, still cameras, personal digital assistants, camcorders, PC cameras or Web pads. Company X's parent company is located in Oulu, Finland and its subsidiaries are in: a) Espoo, Finland, b) Saratoga (California), the U.S., c) Seoul, Korea, and d) Tokyo, Japan.

3.2 Phases of the IT-supported Subsidiary Establishment Process of Company X

This section describes the nine phases of the IT-supported international subsidiary establishment process and validates the conceptual model (see Figure 1) developed by Ojala and Nahar [17] by using empirical data. The key actors in the conceptual model are the parent company and the foreign subsidiary. The nine phases of the IT-supported international subsidiary establishment process are demonstrated between the parent company and the foreign subsidiary. Suitable IT-tools and services for each phase have been selected by considering the tasks in a specific phase and the IT-tools that are capable of performing these tasks [17].

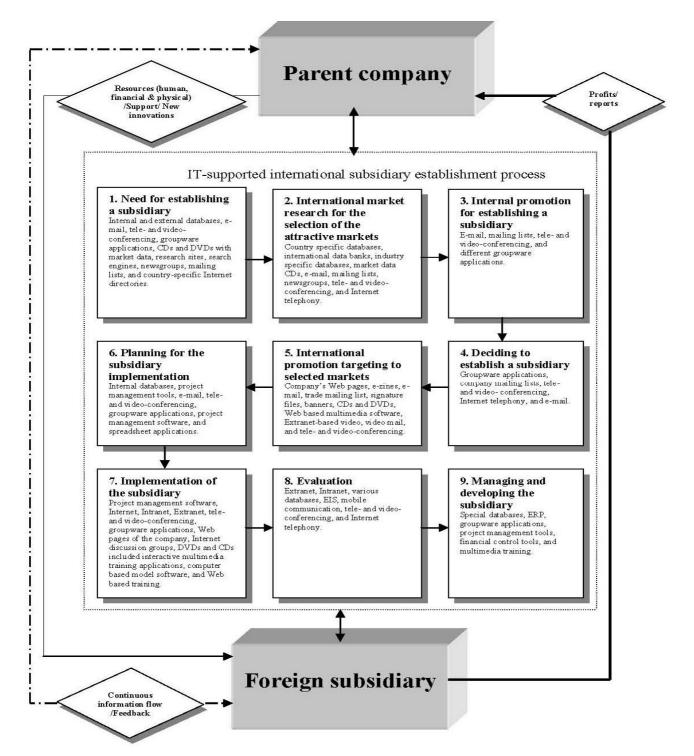


Figure 1. A conceptual model of IT-supported international subsidiary establishment process [17].

3.2.1 Need for Establishing a Subsidiary

The Company X's need for establishing a subsidiary came with new business opportunities in Japan. Their main customers are large handheld device- and semiconductor manufacturers, and these companies market their products worldwide. Company X's domestic market was limited and saturated. The large market and companies in this field in Japan enabled new opportunities and growth potential for the company.

Company X's products are very complex and products need to be tailored according to the requirements of customers. Before starting business with potential customers in Japan, face-to-face contacts and negotiations played an important role and these tasks could not be handled only via e-mail or telephone (President, Vice President and Field Application Engineer, Company X, Finland 2003).

One interviewee explained this in the following manner:

"Especially in the Japanese market, presence has a big role. It is almost impossible to do any kind of business only via telephone or by making occasional visits. Business is very strongly based on building personal relationships and that is why we must be there" (President, Company X, Finland 2003).

These findings support the earlier literature of Wakasugi [21], which suggests that foreign companies should put a lot of effort into personal contacts and relationships with customers in the Japanese market. These findings are also consistent with the literature of Bell [2], Nahar [14] and Ojala and Nahar [17], which suggest that all tasks cannot be performed by using IT alone and face-to-face meetings are also necessary.

3.2.2 International Market Research for the Selection of the Attractive Markets

Company X's market research is based on the global market analysis, not on the geographical segments, because their customers are global companies that sell their products around the world. Global market analysis is handled by following the specific websites, bulletins and new publications of the field (Director, Sales & Business Development, Company X, Japan 2003). The company was not interested in the macro environmental factors of the Japanese market, because their business is industry specific and changes in global industry level factors and global economy determine the markets for their products

One interviewee highlighted the following issue:

"We are more interested in the economic situation of cell phone industry globally. All our customers are global players and they make decisions according to how the global economy changes" (President, Company X, Finland 2003).

This finding the concept that supports internationalization of high technology SMEs is influenced by global industry trends [3]. Company X handles the main evaluation of foreign markets remotely from its business development department, located in Finland. Evaluation of the foreign markets and actions of competitors are handled by following the specific websites, bulletins and new publications of the competitors. The company analyses the value chain, companies in the value chain and what kind of products other companies have. Through this information Company X can evaluate the suitability of their product strategy for the value chain and evaluate potential markets. The usage of these IT-tools enables fast and low cost collection of relevant, up-to-date information. The information collected also helps to develop business relationships with Japanese customers. When the market research is done, Lotus Notes application is used to evaluate the possible costs and the price of the products for the market (Director, Sales & Business Development, Company X, Japan 2003).

3.2.3 Internal Promotion for Establishing a Subsidiary

Company X is an SME, which enables faster decision-making inside the company. Internal promotion is done on the basis of the information obtained from the potential customers of the Japanese market and the company's internal capabilities. The decision for the establishment of a subsidiary was negotiated among the management group, where internal and external possibilities were evaluated.

One of the interviewees commented on this in the following manner:

"It is so big investment to go to the Japanese market that whole management team has to agree with the decision" (President, Company X, Finland 2003).

Company X's internal capabilities were evaluated by using Lotus Notes application and a financial management program. Negotiations were mainly conducted through face-to-face meetings. These findings support the literature of Douglas and Craig [7], which suggest that consensus among top management is vital when a company is making a decision regarding the subsidiary process.

3.2.4 Deciding to Establish a Subsidiary

When Company X decided to establish its own presence in the Japanese market, managers made a comparative analysis of different entry modes. In this phase the analysis was made mainly between different subsidiary modes (representative office, branch office, and corporation) and the exporting mode. Exporting mode via a distribution channel might offer various benefits, such as existing contacts with customers and wide marketing channels. Acting through an exporting mode was problematic due to the complexity and high technical level of Company X's products. Training of the distributors may require a lot of time and effort, also technical capabilities and know-how of the distributors might not be sufficient to market and sell Company X's products (Director, Sales & Business Development, Company X, Japan 2003).

After a comparison was made between the subsidiary modes and the exporting mode, the managers made the decision to establish a subsidiary. Each subsidiary mode has its own strengths and weaknesses. Company X made a comparison between a corporation mode and a representative office. The company decided to establish a representative office for promotion purposes, because it was the most suitable for their business model and enables fast moves on the market. The representative office mode also gave better possibilities to calculate budget and estimate costs of operation in more detail in the Japanese market, and also enabled low-cost penetration into the Japanese market (Director of Corporate Finance, Company X, Finland 2003, Director, Sales & Business Development, Company X, Japan 2003). This finding is consistent with the earlier literature of Bell [1], which suggests that high technology SMEs typically establish sales and marketing subsidiaries for the foreign market. In this phase the company used e-mail and telephone communication, as well as Lotus Notes application and a financial management program. This enables faster decision-making and a detailed estimation of the cost of the subsidiary establishment process.

3.2.5 International Promotion Targeting to the Selected Markets

Company X's promotion for the Japanese market, as well as globally, is mainly targeted at departments of the handheld device- and semiconductor manufacturers who work with multimedia solutions. Promotion is easily targeted toward them, because the company knows all the major companies in this field (President and Vice President, Company X, Finland 2003).

One interviewee explained this issue in the following way:

"It is one of our advantages that we are in the business-to-business (B2B), that means we do not need to conquer the whole world. We know quite well our potential customers who are in this field, it is not a hopeless mission" (Vice President, Company X, Finland 2003).

This finding is consistent with the earlier literature of Bell [2], which suggests that software companies in the niche market have a clear idea of who are their potential customers. Company X noticed that good relationships with other companies and previously satisfied customers are a very important issue in the Japanese market and these contacts are help in the promotion activities. Previous customers can give references if they are satisfied with the products. References from large companies are very essential and have a huge impact on the potential customers' decision-making regarding the products. In many cases, Company X also tries to get permissions from customers to publish the business deals on Company X's website and also in some publications (President, Company X, Finland 2003).

In many cases the customers read information from Company X's website that includes electrical brochures and multimedia videos about the company's products. The usage of Company X's own website for advertisement enables effective and low cost promotion of the products to potential customers. Usually, customers contact the company through e-mail or telephone. Sometimes communication is handled only via e-mail, if the customer's English proficiency is not good enough to communicate via the telephone. When negotiations with a specific customer go further, then the detailed negotiations are made through face-to-face meetings and showing multimedia presentations and demos of how the product works in real life. Due to the complexity of the company's products, face-to-face meetings are conducted with the customers (Field Application Engineer, Company X, Finland 2003).

3.2.6 Planning for the Subsidiary Implementation

Company X made the decision to use a representative office mode in the Japanese market. Therefore, it did not require a wide planning capacity that would require developing a corporation mode. The main planning activities were made by evaluating a budget for the subsidiary project. The budget includes the sales forecast and an evaluation of the business opportunities in the Japanese market. One of the company's employees, who already worked with Japanese customers, was selected to manage the representative office. (Director of Corporate Finance, and Human Resource and Administrative Assistant, Company X, Finland 2003; Director, Sales & Business Development, Company X, Japan 2003).

In this phase Company X used e-mail, telephone communication, and teleconferencing to communicate with various stakeholders, as well as a financial management program. The usage of these IT-tools enabled adequate and effective communication among managers, employees, and external specialists, and also enabled faster decision-making.

3.2.7 Implementation of the Subsidiary

Implementation of the subsidiary includes acquiring an office premises, the Internet connection between the parent company and the subsidiary, an employee visa and a work permit. In Japan, there are a lot of companies who rent offices to foreign companies and Company X found a place for their office quite easily. Although the price level in Tokyo was very high, a good location of the subsidiary is still essential, because it enables rapid visits to customers and connections to the railway and airport.

One interviewee explained this issue in the following way:

"Although rent of the office is high, but services and location are good. I have fast connections to separate ways, not need to waste working time sitting in the train" (Director, Sales & Business Development, Company X, Japan 2003).

The office hotel that has rented an office to the company X, also offers network services. The quality of the network services is high and reliable, but very expensive. The quality of the IT infrastructure in Japan is at the same level as in Finland and Company X does not face any technical problems with networks in Japan. In this phase the company used services of the Japanese computer network provider and installed firewall and data security programs. A remote login program was used to solve problems from Finland to the Japanese subsidiary if needed. E-mail. telephone, and face-to-face communication were used to communicate with stakeholders and employees (IT manager, Company X, Finland 2003).

3.2.8 Evaluation

In this phase, Company X did not use any specific evaluation method for the subsidiary establishment process. They made a budget for the establishment

process, and the process was evaluated against the budget. After the establishment process, productivity of the subsidiary is evaluated as its own cost unit and it has its own budget and profit goals. Lotus Notes application and a financial management program were used to evaluate the budget and estimate the profitability of the subsidiary. Evaluation of the business operation is also made on the basis of feedback obtained from the customers through email, telephone and/or face-to-face communication, as well as on how many new business contacts the subsidiary has made with customers. This helps monitor the profitability and enables a prompt reaction if some problems occur (Vice President, Director of Corporate Finance, and Human Resource and Administrative Assistant, Company X, Finland 2003).

3.2.9 Managing and Developing the Subsidiary

Company X set profit goals for the subsidiary in Japan and the manager of the subsidiary is responsible for meeting these goals. The managers of the company have weekly meetings through teleconferencing, where sale and other activities are evaluated on a global basis (Director, Sales & Business Development of the company, Japan 2003, Director of Corporate Finance of the company, Finland 2003).

Information sharing between the parent company and the subsidiary is mainly handled via e-mail, telephone and teleconferencing. Company X also uses the Intranet to share documents between distant locations. Documents include information about new products and the status of the different projects. Projects are managed by using a project management application. Company X also tried to use videoconferencing between Finland and Japan, but the technical capacity of videoconferencing is not yet up to par (Director, Sales & Business Development, Company X, Japan 2003, R & D Manager, Company X, Finland 2003). This finding echoes the earlier finding of Nahar [14] that the quality of the videoconferencing is not yet good enough. The usage of these IT-tools enables transfer information about new products and projects between Finland and Japan, as well as improved control and coordination of projects.

Company X's physical presence in the Japanese market has also made it easier to serve other East- and Southeast Asian markets. Although customers in Asia could be handled remotely from Finland, having their own subsidiary enables faster visits to customers and helps overcome the difficulties in communications associated with time zones (Director, Sales & Business Development, Company X, Japan 2003).

Table 1 summarizes the IT-supported international subsidiary establishment process of Company X. Many of these phases were executed in chronological order, whereas a few of them were executed concurrently.

Table 1. IT-supported international subsidiary establishment process of the company.

The phases of IT- supported international subsidiary establishment process	The key tasks involved in the different phases	IT-tools and services used in the different phases	Advantages/Benefits obtained
1. Need for establishing a subsidiary	 Evaluate the new business opportunities and growth potential for the company business. Analyze the benefits of the subsidiary. 	E-mail and telephone communication.	Enable faster firsthand contacts with customers.
2. International market research for the selection of the attractive markets	 Recognize suitable international market areas and value chains. Acquire information from attractive markets. Evaluate the price of the product for the market. 	Websites, electrical bulletins, e-mail, teleconferencing, telephone communication, groupware application and financial management program.	 Global market analysis of cell phone industry. Effective communication with various stakeholders. Evaluate possible costs and the price of the products for the market.
3. Internal promotion for establishing a subsidiary	 Promote the idea inside the company. Get acceptance and consensus from managers of the company for establishing a subsidiary. 	Groupware application and financial management program.	Evaluate internal capabilities for establishing a subsidiary.
4. Deciding to establish a subsidiary	 Analyze and compare different entry modes for the Japanese market. Estimate costs of the different entry modes. 	E-mail and telephone communication, groupware application, and financial management program.	 Enable faster decision-making process. Provide strict estimation of the projects' costs.

5. International promotion targeting to selected markets	 Make customers aware of the company, its products and services in the Japanese market. Develop business contacts with potential customers. 	Websites, e-mail, telephone communication, multimedia presentations and demos, multimedia videos, and electrical procedures.	 Effective and low cost international promotion. Enable faster firsthand contacts with customers.
6. Planning for the subsidiary implementation	 Make a decision for the most suitable entry mode. Evaluate the budget for the project. 	E-mail, telephone communication, teleconferencing, and financial management program.	 Enhance adequate and effective communication among managers, employees, and external specialists. Allow better and more immediate decision-making.
7. Implementation of the subsidiary	 Acquire premises for the subsidiary. Assure functionality of computer network, e-mail and data security in the subsidiary. 	Network service providers, firewall and data security programs, remote login, e- mail, and telephone communication.	 Secure reliability of the computer network. Enable problem solving remotely from Finland to Japan.
8. Evaluation	 Evaluate process against the budget. Evaluate customer feedback and number of new business contacts. 	E-mail, telephone communication, teleconferencing, groupware and financial management program.	 Increase capacity to monitor results. Provide rapid feedback and reaction to the problems. Provide effective communication with employees.
9. Managing and developing the subsidiary	 Set profit goals and responsibilities. Develop business contacts with customers and other companies. Serve customers located in other East- and Southeast Asian markets. 	Teleconferencing, e-mail, telephone communication, Intranet, and project management software.	 Assist transfer ideas and experiences between distant locations. Improve control and coordination of activities. Provide fast and up-dated information about new products and status of different projects.

3.3 Discussion of the Research Results of the ITsupported Subsidiary Establishment Process of the Company

All phases of the conceptual model of the ITsupported international subsidiary establishment process (see Figure 1) occur in Company X's international subsidiary establishment process, but the contents of the phases and usage of various IT-tools vary slightly compared with Ojala and Nahar [17]. One reason for that may be that the conceptual model of IT-supported international subsidiary establishment process tries to cover the requirements of SMEs, as well as large companies. The usage of IT-tools in Company X's case was limited compared with the capabilities of crossborder IT-support to business operations [14] [17] [18]. However, the findings of Nahar [14] were on the basis of large high technology companies and it can be supposed that large companies need to invest in IT-tools for a variety of reasons, such as to coordinate their global activities more effectively. Company X used mainly common technologies, such as e-mail, telephone and groupware. Company X is an SME and they may not need such extensive IT-tools for their business operations compared with large companies. The research findings also suggest that Japanese customers appreciate face-to-face communication more than e-mail or telephone communication.

The research findings show that high technology SMEs that sell products to global markets are not interested in the environments of some specific countries. Their analyses are based on the global value chains and other companies in the value chain. In B2B markets, high technology companies have to follow the global market situation and make decisions quickly, if the market situation changes. In Company X's case, a new business opportunity in the foreign market was a trigger point to penetrate the new market area. Based on the case description a representative office seems to be a suitable subsidiary mode when an SME enters into the new market. The representative office enables a fast and a low-cost entrance to the target country. Research findings also suggest that an exporting mode or e-commerce is not suitable if a company's products are complex and require close cooperation with customers.

4. Conclusions

Nowadays internationalization is very important for high technology SMEs due to their niche strategies and the limited domestic market. The large size of the Japanese IT market offers high potential for foreign SMEs to increase their businesses. To maximize a company's chances for growth and success in the Japanese market, it is usually essential to have a presence in Japan. A strong and effective presence in there is important to develop business relationships with customers, other companies and distribution channel entities. The Japanese market may appear complex and different compared to Western countries. It is important that the company has adequate knowledge about the Japanese culture beforehand and is capable of adapting to Japanese business practices.

Utilizations of a variety of IT-tools and services assist SMEs to support their globalization process and enable cross-border management of information between a parent company and its subsidiaries. It is also important to understand how various IT-tools can be utilized in the international subsidiary establishment process. The usage of IT-tools assists companies to enter the Japanese market rapidly, profitably and enhances cross-border assistance, as well as allows serving and managing the Japanese market effectively. Research findings also demonstrate that an excessive usage of IT-tools with Japanese customers in a negotiation process may be harmful for business in some cases. Companies have to know how much they can use e-mail or telephone communication with their Japanese customers and when face-to-face negotiations become necessary. This empirical study also reinforces earlier findings of Ojala and Nahar [17] that traditional methods, e.g. face-to-face communication and meetings are also needed to complete the international subsidiary establishment process, as all tasks cannot be performed by using ITs alone.

Very limited research has been done earlier on how foreign high technology SMEs could seek out the Japanese market potential and almost no empirical research has been done on how foreign SMEs could establish subsidiaries in Japan through IT-support. The research results are novel, as no prior empirical research has been conducted on the IT-supported international subsidiary establishment process for the Japanese market. This research validates a conceptual model of the ITsupported international subsidiary establishment process [17] through an in-depth empirical study. This conceptual model will help SMEs establish subsidiaries through ITsupport to the Japanese market. The research findings will also help SMEs manage and develop their business in Japan further. The conceptual model and research findings will also help foreign SMEs enter other nearby market areas (e.g. South-Korea, China, Taiwan) that are going to be very important market areas in the world.

This study deals with a single case study, thus the research findings and results may not be fully generalized. The case description and analysis based on one case company that was an SME, thus the research findings might be different if the same questions were asked of a

large sized company. The case company in this study acts in B2B market, thus research findings may vary if the same questions were asked of a company that sells software products directly to consumers. The conceptual model of the IT-supported international subsidiary establishment process presents nine separate phases. Each of these phases needs to be investigated in-depth. It is also important to do research on how these phases appear in different sized companies or companies with different operation models, such as business-to-consumer model. This study has been performed using a single case study method. Further research using a multi-case study method is also necessary. This research deals only with the high technology SME's IT-supported international subsidiary establishment process for the Japanese market. In the future, it is also important to process how this conforms internationalization process in other countries. In this study, the case company used a representative office subsidiary mode to increase their business opportunities and customer support in the Japanese market. Further research is needed to investigate and evaluate how the phases of the IT-supported international subsidiary establishment process vary if a company uses other subsidiary modes (branch office or corporation) or internationalizes by exporting or a joint venture through IT-support.

Acknowledgement

Financial support from the Jenny and Antti Wihuri Foundation for this study is gratefully acknowledged. Also thanks to the case company and all the interviewees that participated in this study for great cooperation.

References

- [1] Bell, J. "The Internationalization of Small Computer Software Firms: A Further Challenge to "Stage" Theories," *European Journal of Marketing*, 1995,29(8), 60-75.
- [2] Bell, J. "A Comparative Study of the Export Problems of Small Computer Software Exporters in Finland, Ireland and Norway," *International Business Review*, 1997,6(6), 585-604.
- [3] Bell, J., McNaughton, R., Young, S. & Crick, D. "Towards an Integrative Model of Small Firms Internationalisation," *Journal of International Entrepreneurship*, 2003,1(4), 339-362.
- [4] Blaine, J. M. & Bowen, J. "The Role of Information Technology in International Business Research". In E.M. Roche and J.M. Blaine (Eds.), *Information Technology in Multinational Enterprises*, Eward Elgar Publishing Limited, UK, 2000, 21-56.
- [5] Buckley, P.J., Mirza, H. & Sparkes, J.R. "Direct Foreign Investment in Japan as a Means of Market Entry: The Case of European Firms," *Journal of Marketing Management*, 1987,2(3), 241-258
- [6] Creswell, J.W. Research Design: Qualitative and Quantitative Approaches, Thousand Oaks, Sage Publications, California, 1994.
- [7] Douglas, S.P. & Craig, C.S. *Global Marketing Strategy*, McGraw-Hill International Editions, Singapore, 1995.
- [8] *e-Japan Strategy*, Prime Minister of Japan and His Cabinet, IT Strategy Headquarters, Japan, 2001.

- [9] Funk, J.L. Mobile Disruption: The Technologies and Applications Driving the Mobile Internet, A John Wiley & Sons, Inc, the USA, 2004.
- [10] Kuivalainen, O. Knowledge-Based View of Internationalization: Studies on Small and Medium-Sized Information and Communication Technology Firms, Lappeenranta University of Technology, Acta Universitatis, Lappeenrantaensis 156, Lappeenranta, 2003.
- [11] Matsubara, T. "Japan: A Huge IT Consumption Market," *IEEE Software*, 2001,9-10, 77-80.
- [12] Miles, M.B. & Huberman, A.M. *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd edition, Thousand Oaks, Sage Publications, California, 1994.
- [13] Merriam, S.B. Case Study Research in Education: A Qualitative Approach, Jossey-Bass Inc, California, the USA, 1989.
- [14] Nahar, N. Information Technology Supported Technology Transfer Process: A Multi-site Case Study of High-tech Enterprises, University of Jyväskylä, Jyväskylä Studies in Computing 9, Finland, 2001.
- [15] Nahar N., Käkölä, T. & Huda, N. "Diffusion of Software Technology Innovations in the Global Context," *Proceedings of the Hawaii International Conference on System Sciences*, IEEE, Hawaii, 2002.
- [16] Ojala, A. Establishment of Ventures in Japan by Finnish Software Companies through IT-support, University of Jyväskylä, Finland, 2004.
- [17] Ojala, A. & Nahar, N. "A Conceptual Model for IT-supported International Subsidiary Establishment Process," *Proceedings of the Managing New Wave Information Systems: Enterprise, Government and Society*, The 15th Annual ACIS Conference, Australia, 2004.
- [18] Ojala, A. & Nahar, N. "Cross-border IT-support to the International Subsidiary Establishment Process: The Diffusion of Innovations Based Conceptual Model," *Proceedings of the 36th Annual SWDSI Conference*, the USA, 2005.
- [19] Smith, N.P. "Computing in Japan: From Cocoon to Competition," *Computer*, 1997,30(3), 26-33.
- [20] Uchida, T. & Pursula, M. *Japanese ITS Strategy and 3G Mobile Communication in ITS*, Ministry of Transport and Communication, Finland, 2002.
- [21] Wakasugi, R. "Why foreign firm's entry has been low in Japan: an empirical examination". In M. Yoshitomi and E.M. Graham (Eds.), *Foreign Direct Investment in Japan*, Edward Elgar Publishing Limited, UK, 1996, 111-135.
- [22] Yin, R.K. Case Study Research: Design and Methods, 2nd edition. Thousand Oaks, SAGE Publications, California, 1994.