CHAPTER FIVE

FROM REGULATORY BARRIERS TO BUSINESS MODEL REQUIREMENTS – CASE OF FINNISH SOFTWARE FIRMS IN JAPAN

ARTO OJALA AND PASI TYRVÄINEN

Preface

In the existing literature, the Japanese market is often characterized with different barriers to entering and doing business. Although these barriers are well documented and researched, earlier investigations focus mainly on barriers related to manufacturing firms, conflicts with distribution channels or give only a general description of the barriers. Most of the previous studies are also cross-industrial and they lack an industry-specific focus. However, almost no research exists on what kinds of challenges foreign small and medium-sized software firms have encountered in the Japanese market. In this research, a multi-case study method was used to investigate the kinds of challenges four small and medium-sized Finnish software firms have encountered in the Japanese market. The findings of this research suggest that it seems to be more reasonable to analyze entry barriers in the software industry at the micro-level rather than using macro-level analyses, as proposed in earlier studies. In this study, a new framework has been developed to analyze the entry barriers. The new framework suggests that barriers for entering and operating in the market are related to the organization, sales process, and the target industry segment. Thus, there seems to be switch from regulatory barriers to requirements set by the business model used.

Background

In economic and business literature, the Japanese market is generally blamed for being a very difficult market to enter for foreign firms. Due to
various barriers, the Japanese market has gained a relatively low rate of foreign direct investments (FDI). Although these barriers in the Japanese market have been actively researched and well documented in existing literature, these investigations focus mainly on large manufacturing firms\(^1\), their conflicts with distribution channels\(^2\) or give only a general description of the entry barriers\(^3\). Despite a great number of investigations on the barriers in the Japanese market encountered by large-sized firms, almost no research exists on the kinds of challenges foreign small and medium-sized enterprises (SMEs) encounter when they are entering into the Japanese market. Due to the business model differences between large-sized firms and SMEs\(^4\), we cannot assume that barriers which SMEs have encountered in the Japanese market are similar to the barriers of large-sized firms. The lack of studies related to entry barriers encountered by SMEs in Japan is surprising if we consider the increasing importance of SMEs in world markets. For instance, in the OECD countries, over 95 percent of firms are SMEs and they generate 60 – 70 percent of employment\(^5\). In addition, the involvement of SMEs in international markets has increased rapidly in the past decades. This trend has been very fast especially among SMEs in fast growing high-technology industries. Drivers for increasing involvement of high-technology SMEs in the world markets have been, for instance, increasing domestic and international competition, small domestic markets, and the development of information and communication technologies, to name a few. In countries with very small domestic markets, such as in Finland, internationalization is generally a common growth strategy of SMEs in high-technology industries. These high-technology intensive firms are realizing competitive advantages in leading markets, such as the USA and Japan, which offer better possibilities for marketing and selling their niche products\(^6\).

If we consider the size and importance of the information and communication technology (ICT) industry in Japan, the Japanese market can be characterized as one of the world’s most attractive markets for foreign high-technology SMEs. Japan has the second largest market for ICT and software products and the Japan External Trade Organization has ranked the ICT-industry in Japan as the most attractive sector for foreign

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1 Yamawaki, 2004
2 Min, 1996
3 Mason, 1992
4 Coviello & Munro, 1997; Crick & Spence, 2005
5 OECD, 2000
6 Bell et al., 2003
firms\textsuperscript{7}. The Japanese government has also worked actively to develop and support the ICT-industry\textsuperscript{8}. In addition, the Japanese government has launched many policies to remove entry barriers, encouraged imports, and promoted FDI in general and at the local government level\textsuperscript{9}.

As the discussion above suggests, the Japanese ICT-market is important for foreign high-technology SMEs. However, there seems to be a lack of studies investigating what kinds of entry barriers SMEs encounter when they are entering the Japanese market. This study aims to fill this gap by focusing on entry barriers encountered by Finnish small and medium-sized software firms in the Japanese market. In particular, the purpose of this study is to examine what kind of entry barriers these firms have encountered in the Japanese market and suggest a framework to categorize barriers in the market. This framework is derived from the observations of the firms studied. It helps us to get a better understanding of the reasons behind the barriers and how these barriers have changed in the past decades.

This chapter proceeds as follows: First, the theoretical part of this study reviews three frameworks used to analyze entry barriers in the Japanese market. After that, the methodology used is described and empirical findings of this study are presented, followed by an evaluation of earlier frameworks. The last section discusses the research results and conclusions.

**Frameworks for Analyzing Barriers in the Japanese Market**

In their study, Samiee and Mayo\textsuperscript{10} focused on social and cultural influences behind the trade barriers in Japan. They divided the barriers in the Japanese market into visible and invisible ones. Invisible trade barriers were either related to social and cultural conditions or based on the government’s policy. Social and cultural conditions included buyer behavior towards foreign products, special characteristics of the Japanese distribution networks, and oligopolistic competition due to the keiretsu groups in Japan. Government-led policies included industrial targeting, procurement codes, regulations and standards, intellectual property rights, and custom valuation codes. Visible trade barriers concerned the tariff and

\textsuperscript{7} JETRO, 2005  
\textsuperscript{8} e-Japan Strategy, 2001, OECD, 2005  
\textsuperscript{9} Fujita, 2006; OECD, 1997  
\textsuperscript{10} Samiee and Mayo, 1990
non-tariff barriers, which were also influenced by social and cultural values as well as the government’s policies. Tariff barriers were related to high tariff rates of some products. Non-tariff barriers included quotas, technical norms and consumer protection measures. In his study, Rapp\textsuperscript{11} investigated invisible trade barriers in Japan. The common invisible barriers in the Japanese market were standards, custom-valuation, establishment of transparent import-licensing, government-procurements, intellectual property, and academic discounts.

Mason\textsuperscript{12} classified the reasons for the low rate of U.S. multinational firms’ investment to the Japanese market into home country factors and host country factors. The home country factors included the U.S. firms’ lack of understanding of specific characteristics of the Japanese market, unsuccessful choice of entry strategies, focus on short-term profits, as well as lack of patience, knowledge and effort. The host country factors included the Japanese government’s restrictions on FDI, inadequate protection of intellectual property, the high cost of land, and difficulties of hiring skilled local employees. In the book “Foreign Direct Investment in Japan”, Yoshitomi\textsuperscript{13} summarized the articles by using a similar division into home and host country factors. The first category included political and business barriers in Japan for foreign firms. The second category contained the incapability of foreign firms to adapt to the Japanese market characteristics and mould their business to suit the Japanese market.

The Eclectic paradigm has been used to classify the barriers in the Japanese market. The framework consists of categories in the Eclectic paradigm that are: ownership advantages, location advantages, and internalization advantages. In the study of Dunning\textsuperscript{14}, these advantages were described as disadvantages in the Japanese market. Ownership disadvantages were related to the high cost of establishing a subsidiary, high fixed costs, competition assets of the Japanese firms, keiretsu groups, and limited possibilities to acquire or merge with Japanese firms. Location disadvantages were high production costs, high costs of land in Japan, consumers’ ‘buy Japanese’ attitude, and government restrictions on foreign direct investment. Internalization disadvantages were foreign firms’ incapability to adapt to local business practices and integrate their international operations efficiently with local operations.

In conclusion, these frameworks are strongly oriented towards investigating macro-level variables and entry barriers originating from the

\textsuperscript{11} Rapp, 1986
\textsuperscript{12} Mason, 1992
\textsuperscript{13} Yoshitomi, 1996
\textsuperscript{14} Dunning, 1996
Japanese market but do not investigate the strategies or resources of firms entering the market.

**Research Method**

The multiple case study method was selected to this study due to the explanatory nature of the research question. The case study method enables explaining the significance and cause-and-effect relationships of the phenomena under investigation\(^\text{15}\), which would not be possible by using quantitative research approaches. Guidelines proposed by Eisenhardt\(^\text{16}\) were followed as closely as possible using the “no theory and no hypotheses” -origin in the research process. The data analysis was executed by using the following steps: 1) data reduction, 2) data display, and 3) drawing conclusions and verification to identify and match relevant patterns of encountered barriers of the case firms\(^\text{17}\).

The case firms selected fulfilled the following criteria: they a) had their headquarters in Finland, b) had direct business operations in the Japanese market, c) operated in the field of software, and d) had a maximum of 500 employees worldwide. Suitable firms for this study were identified by using websites of the Finnish Chamber of Commerce in Japan and Finnish Software Business Clusters, as well as a list of firms in the publication “Software Product Business Cluster in Finland 2005”. By using these sources, altogether nine suitable firms were identified and four of them were chosen for this study. These firms were contacted with an e-mail request to carry out the research. All four firms answered and were willing to share their knowledge and experience of the Japanese market.

The semi-structured open-ended interviews were conducted with a total of eight managers in firms’ headquarters in Finland and their units in Japan. All executives (including the following titles: Chief Technical Officer, Director, Executive Vice President, President, Managing Director, Sales Administrator) interviewed had an in-depth knowledge of their firms’ operations in the Japanese market. The 60-90 minute-long interviews were digitally recorded, carefully listened to, and transcribed verbatim by using a word processor. A second listening was performed to ensure correspondence between the recorded and transcribed data.

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\(^{15}\) Yin, 1994  
\(^{16}\) Eisenhardt, 1989  
\(^{17}\) Yin, 1994
Complete case reports were sent back to the interviewees to ensure the validity and authenticity of the collected data. If interviewees in the case firms found some inaccuracies in the text, these were corrected based on their comments. In addition, some telephone and e-mail interviews were used to collect further information from the interviewees. The collected data was also compared with other sources, such as websites and annual reports of the case firms.

**Research Findings**

In order to give a clearer description of the entry barriers in the Japanese market and due to space limitations, the findings are presented by grouping together firms that encountered similar barriers rather than describing each individual case separately. Table 5-1 gives an overview of the case firms.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Number of employees (globally)</th>
<th>Age of the firm</th>
<th>Years of operation in Japan</th>
<th>Number of countries in which located</th>
<th>Operation mode in the Japanese market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm A</td>
<td>100</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td>Sales subsidiary</td>
</tr>
<tr>
<td>Firm B</td>
<td>300</td>
<td>39</td>
<td>6</td>
<td>12</td>
<td>Sales subsidiary</td>
</tr>
<tr>
<td>Firm C</td>
<td>30</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>Representative</td>
</tr>
<tr>
<td>Firm D</td>
<td>90</td>
<td>14</td>
<td>4</td>
<td>6</td>
<td>Representative</td>
</tr>
</tbody>
</table>

Table 5-2 presents the barriers encountered by each of the software firms. Based on the research findings in this study, it seems to be reasonable to analyze the barriers using categories grounded on the interview data\(^{(18)}\) rather than using frameworks of earlier analyses. In Table 5-2, the barriers are divided into three categories: barriers related to the organization, to the sales process, and to the target industry segment.

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\(^{(18)}\) Strauss & Corbin, 1990
### Table 5-2 Framework of the Entry Barriers in the Japanese Market

<table>
<thead>
<tr>
<th>Category</th>
<th>Firm A</th>
<th>Firm B</th>
<th>Firm C</th>
<th>Firm D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>• Recruitment of employees with required English proficiency</td>
<td>• Recruitment of employees with required skills and English proficiency</td>
<td>• Customization of the products</td>
<td>• High price level in Japan</td>
</tr>
<tr>
<td></td>
<td>• Localization and customization of the products</td>
<td>• Localization and customization of the products</td>
<td>• High price level in Japan</td>
<td>• Lack of credibility</td>
</tr>
<tr>
<td></td>
<td>• Convincing the development team of the market requirements</td>
<td>• Convincing the development team of the market requirements</td>
<td>• Convincing the development team of the changes in the market</td>
<td>• Convincing the development team of the changes in the market</td>
</tr>
<tr>
<td>Sales process</td>
<td>• Length of the supply chain</td>
<td>• Finding the right contact persons</td>
<td>• Finding a suitable distribution channel</td>
<td>• Common language of communication with customers</td>
</tr>
<tr>
<td></td>
<td>• Common language of communication with customers</td>
<td>• Competition with the distributor</td>
<td>• Finding the right contact persons</td>
<td>• Finding the right contact persons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Distributor gave little information about their customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target industry segment</td>
<td>• Slow purchasing process</td>
<td>• Slow purchasing process</td>
<td>• Slow purchasing process</td>
<td>• Slow purchasing process</td>
</tr>
<tr>
<td></td>
<td>• Customers’ disregard of the security risks</td>
<td>• Industry-specific requirements</td>
<td></td>
<td>• Favoritism of local production</td>
</tr>
<tr>
<td></td>
<td>• Loyalty to a supplier</td>
<td></td>
<td></td>
<td>• Loyalty to a supplier</td>
</tr>
</tbody>
</table>

**Organization-specific Barriers**

Barriers relating to the organization were localization and/or customization of the software products, recruitment of employees with required English proficiency, convincing the development team of the
market requirements, the high price level in Japan, and small-sized firms’ lack of credibility.

Localization of the software products for the market was a problem in cases A and B due to short product life cycles. Original products of these firms were targeted to the industry segments that used English and it took additional resources to make needed changes to the products for the Japanese users. Firms C and D did not face this kind of problem, because their target customers used products in English. There were also some customer-specific requirements that required customization of products in cases A, B, and C. Firm D did not face these barriers, because their products were always tailored to customer needs and their customers were in sectors where product standards are usually global.

To convince the development team in Finland of the specific requirements of the customers was a challenge in cases A, B, and D. Japanese customers have high quality requirements and strict delivery times for the products. If some requirements were not met or the product development ran late, it easily inflicted a negative impact on firms’ business. In many cases, firms’ development teams in the headquarters needed to estimate the kinds of changes they could make to the product and the costs and benefits of these changes.

Recruitment of English-speaking employees in Japan was a challenge in cases A and B. Firms C and D did not face this barrier because they did not need to hire employees in Japan. The high price level in Japan and lack of credibility were mentioned to be problems in cases C and D. However, these were problems only at the market entry phase.

In summary, the organizational factors mainly related to the resources of the firm that produce software products for the target industry segment. Resources of the firm (financial and human resources, intellectual property, etc.) have an important role in the internationalization of small and medium-sized firms. Localization and/or customization of the products can be seen as a specific characteristic of the software industry. Depending on the product strategy of the firm, software requires more localization and/or customization according to customers needs than merely translating product manuals as in other industries.

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19 Bell, 1997
20 Rajala et al., 2003
Sales Process-specific Barriers

Barriers relating to the sales process of the software products were difficulties in finding a common language with the customer, finding the right contact persons in the customer’s side, finding a suitable distribution channel, the length of the supply chain, and competition with the distributor. Finding a common language was a barrier in the entry phase in cases A, C, and D. This problem was solved by recruiting Japanese employees in cases A and D. Firm C used the help of the local distributor in communicating with customers in Japanese and firm B already had Japanese employees in the entry phase. Due to the large size of the target customers, the case firms B, C, and D had difficulties in finding the right contact persons on the customer’s side. These firms sold their products directly to end users although firms B and C also used a distributor. Firm A, which sold all its products through the distributor, did not encounter this kind of barrier. Problems with the distribution channel were the length of the supply chain in case A, competition with the distributor in case B, and finding a suitable distributor in case C. Firm B also had difficulties in getting enough information on the distributor’s customers due to the competitive situation. Sales process barriers can be perceived as marketing process and supply chain related problems. The study of Bell\textsuperscript{21} also reveals that marketing-related problems are common in the software industry.

Target Industry Segment-specific Barriers

Target industry segment related barriers were the slowness of the purchasing process, loyalty to the earlier supplier, favoritism for Japanese products, confidence in the loyalty of employees, and industry-specific requirements. The slow purchasing process of the customers seems to be common in all cases. This was mentioned to originate from the Japanese culture, but also characteristics of the software product and special industrial issues, such as the long budgeting cycle in case B, affected the slow purchasing decision. Loyalty to the current supplier was a barrier for gaining new customers in firms A and D that had competitive products in the market. Firm D also mentioned that customers in Japan favored other Japanese firms because they can offer technical support within a shorter period of time. In case B there were some industry-specific regulations due to their target segment in Japan. Firms A, C, and D did not face any

\textsuperscript{21} Bell, 1997
product regulations because their target industry segments usually followed international requirements for the products. Customers’ disregard of the security risks inside a firm due to loyalty to their own employees among firm A’s customers hindered sales in some cases; this was also related to the industry segment of the product. Target industry segment related barriers included some common characteristics of the Japanese culture, such as loyalty and length of the decision making process. In any case, there were also industry-specific variables such as industry-specific requirements for the software. Due to the niche market strategies of small and medium-sized software firms, special characteristics of the target industry are remarkably important.\(^{22}\)

### Evaluation of Earlier Frameworks

It is rather difficult to find an appropriate match between the barriers presented in the case analyses above and the earlier frameworks. These frameworks focus mainly on macro-level variables, whereas the findings of this research suggest that it seems to be more reasonable to analyze the entry barriers in the software industry by using micro-level factors. Micro-level analysis gives more detailed information on the entry barriers and the reasons behind them.

Dividing the barriers into home country factors and host country factors\(^{23}\) is difficult in these cases because there are barriers that can be classified in either category depending on the point of view. Firstly, localization and customization of the software products can be seen as a host country factor due to the customers’ high requirements for the products or as a home country factor due to the unwillingness or lack of resources to localize the products for the market. Secondly, the recruitment of employees is another example where division into home and host country factors is not unambiguous. If there are no available employees in the market this can originate from host country factors\(^{24}\). In cases where there are available employees in the market, but a firm is incapable of recruiting suitable employees due to, for instance, lack of resources, recruitment can be classified as a home country factor. Thirdly, if foreign firms are unable to network with local distributors in the market, this seems to be a home

\(^{22}\) Ibid.

\(^{23}\) Mason, 1992; Yoshitomi, 1996

\(^{24}\) Mason, 1992
country factor rather than a host country factor as classified in Mason due to the complex distribution system in Japan.

Samiee and Mayo have mainly investigated the barriers encountered by firms that export physical products to the Japanese markets rather than firms that are establishing physical presence in the market. Software products are mainly immaterial and in many cases can be delivered through the Internet. Thus for instance tariff barriers do not have as significant a role as in the case of physical products. This framework does not include any characteristics related to the firm that is entering the market and all barriers seem to originate from the Japanese market. By using the aforementioned frameworks it is difficult to classify the research findings in this study. There are no categories for placing barriers such as recruiting capable employees, possibilities of localizing and customizing products for the market, or communication problems inside a firm, such as convincing the headquarters of the market requirements.

The Eclectic paradigm has originally been developed to explain the internationalization of large multinational enterprises. Although the Eclectic paradigm is a commonly accepted and used theory in the economic sciences, it is not widely applied in analyses of entry barriers in the market. In his study, Dunning divides barriers in the market into ownership, location, and internalization disadvantages by using the Eclectic paradigm. However, following this framework is insufficient for the case results in this study. Firstly, this framework does not take into consideration the special characteristics of the target industry segments, such as the slowness of the purchasing process of the customers. Secondly, communication difficulties between the subsidiary and the headquarters are difficult to categorize. Thirdly, finding a common language of communication with customers can be seen as lack of resources (ownership-disadvantage) needed for recruiting employees capable of communicating with customers. Alternatively, it can be categorized as a location disadvantage due to the physical distance variable.

**Discussion and Conclusions**

The Japanese market is very attractive for foreign software firms due to the advanced industry structure in the ICT field. In earlier studies related to the Japanese market, researchers have found several barriers that

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25 Ibid.
26 Samiee and Mayo, 1990
27 Dunning, 1996
challenge foreign firms’ success in Japan. These studies have focused mainly on large-sized manufacturing and low-technology firms’ market entry into the Japanese market, whereas very little empirical research exists on what kinds of barriers foreign software firms have encountered in the Japanese market.

Earlier frameworks that have been used to investigate barriers in the Japanese market have mainly emphasized macro-level variables, such as government regulations for foreign firms. The findings of this research propose that it seems to be more reasonable to analyze barriers in the software industry by using micro-level factors. Micro-level analysis gives more detailed information on entry barriers and the reasons behind them. This view supports the findings of Bell28 suggesting that the entry challenges of software firms are mainly industry-specific micro-level factors.

Common barriers in these four cases were the slowness of the purchasing process, finding a common language of communication with customers, finding the right contact persons, and customization of the products. A slow purchasing process in these industry segments was common to all cases. This might be related to the Japanese decision-making process called “ringi”29. However, some firms also highlighted that slow decision making was part of the product evaluation process. Thus there might be some industry segment-specific differences in decision-making processes. Finding the right contact persons in the customer’s side was a challenge to three of the firms. The reason for this might be the small size of the case firms compared to their large-sized customers, and the management style of the Japanese firms30 that is different from their Western counterparts. Communication difficulties that three of the firms encountered due to the language difference are widely documented in earlier literature 31. Customization of the software products was a barrier in three cases, two of which also reported problems relating to localization of the software. This seems to be a software industry-specific barrier and not reported in earlier studies concerning the entry barriers in the Japanese market. The small software firms usually target their product development strategies to niche market segments and tailor their products due to customers’ specific requirements. Depending on the industry segment of the customers in Japan, requirements for the products can originate from the customer, the industry or the international level.

28 Bell, 1997
29 Nonaka & Johansson, 1985
30 Ibid.
31 see e.g. Karppinen, 2006
Unlike in earlier studies regarding manufacturing and low-technology firms’ entry barriers in Japan, the case firms in this study did not face problems with tariffs\(^{32}\), intellectual property protection\(^{33}\), keiretsu groups\(^{34}\), or the Japanese government restrictions for FDI\(^{35}\). Reasons for this might lie in the industry background of the case firms, which are different from firms in earlier studies and changes in the business claim in Japan due to economic recession in 1990s. In addition, harmonization of tariff and intellectual property regulations achieved in the Uruguay Round, GATT agreements, and the establishment of the World Trade Organization, might have some influence on the findings.

To sum up, there seems to be a switch from regulatory barriers to requirements and challenges related to the business model used by each individual firm in Japan. This means that from the perspective of the case firms, the government based restrictions for foreign firms operating in the Japanese market have mostly vanished, at least those related to foreign high-technology SMEs. Instead entry barriers concerning the modification of products and sales processes are still present. However, the firms have better control over these business model-related entry barriers which are more controllable and easier to avoid than regulatory barriers. This suggests that the Japanese government’s new policies to encourage foreign firms into the Japanese market and lower government based entry barriers have been effective and removed most of the macro-level barriers. In the end, the authors would like to remind that this study included only four case firms and thus the findings in this study cannot be reliably generalized much beyond the target group of the study, although the results give some indication of the contemporary trends and reasons.

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32 Samiee & Mayo, 1990  
33 Anchordoguy, 2000  
34 Min, 1996  
35 Mason, 1992
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