

International orientation and innovation capabilities of Japanese industrial firms

Introduction

The geographical boundaries of the business world are becoming less important, prompting Japanese industrial firms to develop the relationship of international customers and performance based on an extensive international presence (Lin et al., 2011; Moen et al., 2016). Therefore, it is a growing consensus that understanding the role of international orientation (IO) to firms' international customer engagement strategies and firms' performance is necessary. Some studies have indicated that IO is linked to producing competitive advantages at the firm level and to superior financial success (e.g., Knight and Kim, 2009; Lin et al., 2011; Bagheri et al., 2019). However, other researchers have indicated that the expansion of foreign operations makes both costs and benefits and have recognized that internationalization can entail risk and failure (Mohr and Batsakis, 2017). Consequently, the literature contains mixed results.

The aim of this paper is to explore the relationship between IO and performance of industrial firms. In special, we focus on the effect of IO on customer engagement strategies. For our research purpose, our study focuses on the Japanese context, a context that has received less attention in the relevant literature. Many of the Japanese industrial firms have been challenged in turbulent international markets based upon high technological products so that they perceive high potential risks which may lead different degree of IO among firms. Moreover, we examine the moderating effects of firms' innovation capabilities drawing on the organizational learning theory (Crossan et al., 1999). Innovation capability is a core resource of firms because it can push firms' NPD performance (Salomo et al., 2008). Although different roles of two types of innovation capabilities are emphasized on previous studies, only specific type of innovation (e.g., technological innovation) is tested as a prompter (Bagheri et al., 2018). Therefore, we also test the moderating role of two different types of innovation capabilities -exploration and exploitation innovation- on the relationships between IO and customer engagement strategies.

The relationship between IO and firm performance

The 'international orientation (IO)' is described as a global mindset or globally minded behavior that firms actively explore the international market and develop the resources required for international activities (Knight and Kim, 2009; Bagheri et al., 2018). It

involves recognizing foreign opportunities, developing and/or acquiring the necessary resources and capabilities for international markets and choosing the most appropriate modes to penetrate of international markets (Bagheri et al., 2018; Moen et al., 2016).

Internationally oriented industrial firms are more likely to respond quickly to market changing and develop new goods and services first that can allow them to overpower a host market (Damunpour and Gopalakrishnan, 2001; Bagheri et al., 2018). Such firms have performed better than their competitors in foreign markets in terms of market share, customer satisfaction, sales revenue and profitability (Bagheri et al., 2018). Hence,

H1. IO positively affects industrial firms' performance.

The relationship between IO and international customer engagement strategies

Even though IO is perceived as a factor which is as important as being aware of international business opportunities that impact on firms' performance, it is still unclear how IO affects firms' performance. IO allows industrial firms to acquire varied customers and competitor knowledge in international markets (Griffith et al., 2006). In this research, we shed light on international customer engagement strategies as a key to understanding the effects of IO. In the literature on customer engagement strategies, two types of basic strategies are argued: customer acquisition and customer retention (Arnold et al., 2011). Arnold et al(2011) and Menon et al(1999) asserted that customer engagement strategy attempts to develop specific activities, tactics, and routines to acquire new customers with long-term value or maintain relationships with valuable existing customers. A customer acquisition strategy refers to a firm's focus on gaining information about potential customers, measuring their potential value, and allocating resources to acquire those with greater long-term value. A customer retention strategy, conversely, entails a focus on obtaining information about, differentiating between, and allocating resources to manage relationships between existing customers on the basis of their long-term value. Firms that highly IO oriented to tend to invest resources in finding new market information and foreign opportunities, which may improve firms' attempts that understanding and gaining information about potential customers. In a similar vein, IO may stimulate activities for maintaining relationships of valuable existing customers. Because highly IO oriented firms which possessing the necessary resources and capabilities for international markets can differentiate their products by comparing with foreign competitors', which leads continued relationship of valuable customers.

H2. IO positively affects customer acquisition strategy.

H3: IO positively affects customer retention strategy.

The moderating effects of innovation capability of Japanese industrial firms

International markets are turbulent and diverse with respect to customer needs, cultures, and competitiveness (e.g., Knight and Cavusgil, 2004). Innovation capabilities of firm can be a cornerstone to take advantage in some key benefits such as customers' brand loyalty and technology appliance, resulting in productivity and financial growth (Bagheri et al., 2018). Based upon the organizational learning theory of the firm perspective, there are two types of innovation, which firms respond to international market needs (March, 1991; Hortinha et al., 2011). Exploration innovation refers to a firm develop new competencies which result in its superior export performance by attaining position of market and technological leadership (March, 1991; Teece et al., 1997). When industrial firms identify new business opportunities in international markets, exploration innovation is required to develop innovative new products. By providing new products based on customized offerings, firms can provide a great deal of customer satisfaction which leads higher financial performance. However, firms which have low exploration innovation capability could not develop new products responding to new business opportunities. On the other hand, exploitation innovation refers to a solution searching in the existent competency base, and it improves a process efficiency and productivity of firms. This innovation ability plays also an important role, because firms could increase process efficiency through producing new products adapted current technologies constantly (Hortinha et al., 2011).

Firms that focus on their performance improvement in international market need to devote their innovation capability to develop essential market knowledge and expertise across diverse national markets. High IO industrial firms may broaden their target customer segment in international market. In this case, innovation capabilities may enact the relationship between IO and international customer acquisition strategy. A variety of products could be developed with low risk by the firms having high exploitation innovation capability, and these firms may try to engage new international customers because they can easily adapt their new product to new international customer needs.

H4. The positive relationship between IO and customer acquisition strategy is

moderated by the degree of exploitation innovation, such that relationship is stronger for a high degree of exploitation innovation.

Many of industrial firms collaborate with their high value-existing customer to proceed with NPD project (Stephan, 2010). In this case, the customers expect new products which are adapted a high exploration innovation, therefore, only industrial firms with a high exploratory capability will can provide new products according to customer requests. Hence, high IO industrial firms which have high exploratory innovation capability will choose long-term relationship management with international customers.

H5. The positive relationship between IO and customer retention strategy is moderated by the degree of exploration innovation, such that this relationship is stronger for a high degree of exploration.

Methodology

We tested our hypotheses with a sample of 148 Japanese industrial exporters, listed in the 2015 *Kaisha Shikiho* corporate directory of Japan. Prior to mailing to the respondents, two experts and scholars were asked to modify the questionnaire in the first pretest. Subsequently, the questionnaires were randomly mailed to managers of international business in different Japanese industrial companies and they were asked to fill in the questionnaires and to identify the ambiguities in terms, meanings and issues in the second pretest. After the second pretest, the sample was randomly selected from the 2015 *Kaisha Shikiho* corporate directory of Japan, and it covered the consumer electronics and electronic component, optoelectronic and communication, biotechnology and medical, food, and textile industries. These industries face the highly uncertain and competitive environment, where the need for relationship learning, absorptive capacity, innovation performance, and competitive advantage is intensive for manufacturing companies. To heighten the valid survey response rate, this research explained the objectives of the study and the questionnaire contents. Questionnaire items were measured using the five-point Likert scale, wherein the rating that ranged from 1 to 5 rating corresponded to a range from “strong disagreement” to “strong agreement.” A total of 1,000 questionnaires were sent. There were 148 valid questionnaires, and the effective response rate was 14.8%. Table 2 consists of the measures used in this analysis. In line with the research focus, these measures assess respondents’ perceptions about the company’s strategy, and the questions in the survey

were designed to capture firm-level phenomena.

Results

We conducted a moderated hierarchical regression analysis to test the hypotheses. The analysis revealed that IO increases firm performance (H1). Further, customer acquisition strategy is stimulated by IO (H2). In addition, exploitation innovation capability stronger positive relationship between IO and customer acquisition strategy (H4).

Table 1 Correlation matrix and descriptive statistics

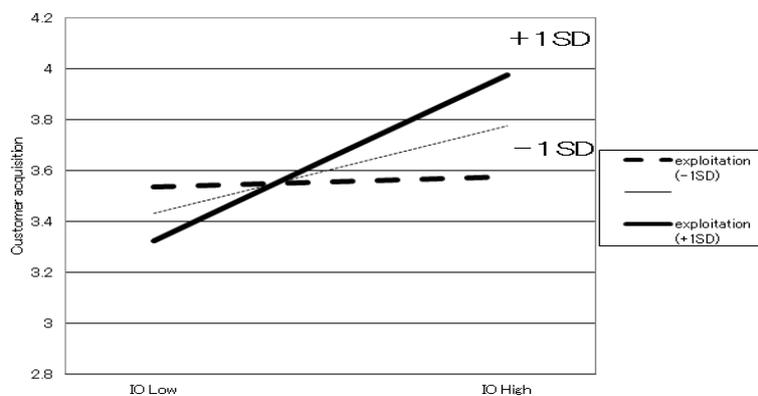
Variables	Mean	Standard deviation	1	2	3	4	5	6	7	8	9	10	11
1.Company size(log employed)	7.7	1.5	1										
2.Years of exporting 10~20	.14	.35	-.23	1									
3.Years of exporting 20~30	.13	.34	-.07	-.16	1								
4.Years of exporting 30~40	.22	.42	-.05	-.22	-.21	1							
5.Number of country exporting	.20	.40	-.23	.30	-.06	-.04	1						
6.OEM	.26	.44	-.16	.01	.11	-.003	-.01	1					
7.Technological turbulence	3.3	.86	.04	.13	-.003	-.05	-.06	-.08	1				
8.Complexity of demand	3.6	.65	.01	.1	-.07	-.05	-.04	.03	.59	1			
9.International orientation	3.8	.78	.37	-.27	.01	.02	-.38	-.01	.20	.21	1		
10.Exploration innovation	3.4	.80	.06	-.05	-.01	-.19	-.18	.003	.32	.12	.46	1	
11.Exploitation innovation	3.9	.58	.16	-.16	-.08	-.14	-.26	-.03	.22	.14	.51	.61	1

Table 3 Regression Results

		Customer acquisition strategy		Customer retention		Exporting performance
		Model 1	Model 2	Model 1	Model 2	Model 1
Company size(log employed)		-.038	-.026	-.001	-.009	.184*
Years of exporting 10~20		-.027	-.048	-.046	-.039	.057

Years of exporting 20~30	-.061	-.065	.005	.011	.015
Years of exporting 30~40	.083	.086	-.001	-.007	-.018
Number of country exporting	-.063	-.060	.025	.017	.012
OEM	.013	.004	-.001	.006	.106
Technological turbulence	-.103	-.109	.071	.060	.157
Complexity of demand IO	.172**	.173**	-.138	-.136	-.167*
Exploration innovation	.268**	.232**	.088	.103	.283**
Exploitation innovation	.058	.065	.486	.474****	.159
IO × Exploration innovation	.401***	.397***	.037	.027	.069
IO × Exploitation innovation		-.135		.082	
		.200**		-.013	
R^2	.421	.442	.319	.324	.284
ΔR^2		2.527*		.478	

****p<.001; ***p<.01; **p<.05; *p<.10.



Discussion

This study has sought to explore a relationship between IO and firm performance. In addition, we examined the link between IO and two types of customer engagement strategies with moderating effects of innovation abilities. In this research, we consider the organizational learning perspective to emphasize the effect of innovation capabilities in expanding scope of customer needs (Crossan et al., 1999).

The results revealed several key findings regarding the nature of IO and customer engagement strategies from Japanese industrial firms. First, results showed that IO stimulates firms' customer acquisition strategy, at the same time, it does not affect

customer retention strategies. Many of the Japanese firms face broadened domestic market with intensive competition so that tend to emphasize an integral feature of the innovation in terms of new product development. In such a domestic condition, many of the Japanese firms have started their international business on request from international customers. Because continued low IO may not relate to an organizational learning about new customer needs, such firms' marketing activities would be limited in maintaining relationships with existing customers.

Second, we found that exploitation innovation ability fosters positive link between IO and new customer acquisition. Interestingly, it reveals that Japanese industrial firms which possess more high exploration innovation ability and highly IO oriented to tend to pursue acquiring international new customers. Many of the Japanese firms are well-known for commercial successes in international market in the form of a growing market share in major industries by products based on the highly developed technology (Hurry et al., 1992). They possess abundant technological resources which could be adapted new products aimed at international customers.

Third, our finding indicates that exploration innovation ability is a key factor of increasing customer retention strategy. Many of the Japanese industrial firms are more concerned co- operation in NPD processes based on long term perspectives on customers. Firm such as Kawasaki Heavy Industries and Airbus Helicopters have achieved stronger competitive positions by engaging in NPD, which maintain successful relational exchanges. In such the NPD process, the ability that searching new technology information and developing innovative products become a core condition for retain existing customer relationship.

Despite the findings demonstrated the direction of high IO firms, this study has a limitation which must be fine-tuned in future research. Our empirical analysis adapted to separated two customer engagement style so we did not consider the interaction between customer acquisition and retention strategies, but two types of strategies could be coexist as Arnold et al (2011) pointed out.

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