

Taking care of a highly valuable resource throughout the value chain

- Lack of market orientation in red king crab export?

1. Introduction

Red king-crab (*Paralithodes camtchaticus*) is a limited, but highly valued species in the Norwegian fisheries, attaining high demand and extreme good prices in the market (Lorentzen et al., 2018). East of 26° the total Norwegian catch (TAC) for red king-crab has been around 2 000 tons the latest years, with a free harvesting zone to the west of the quota-regulated area to prevent further expansion of the crab. In spite of the limited quota, the fishery is lucrative for both vessels and processors involved. The fishery has become especially important for many people living in Finnmark, the Northern part of Norway. In 2018, the Norwegian export of king crab was 1961 metric tons, with a value of NOK 570 million (€ 62 million) (NSC, 2019). More than 70 percent of the Norwegian king crab is exported live, mainly to distant markets such as South Korea (NSC, 2019). In South Korea the red King Crab is the most highly valued crab species and it is sold live in seafood markets, supermarkets and restaurants, and is preferred steamed and served “as-is”, in a simple style as they find this the best way to enjoy the rich crab taste (NSC report, 2017).

After capture, the king crab is either processed immediately by cooking and freezing or kept alive. Live storage includes storage in water tanks near processing facilities and dry transport in polystyrene boxes to the destination market. To manage the transportation all the way from the Northern part of Norway to Seoul, the crab needs to be in good condition. This means high meat content (preferably over 80 percent) and absence of damages (Lorentzen *et al.*, 2019). The crab must also survive the storage and various transportation routes in the market as it is crucial that the crab is alive all the way to the end consumer, which may take several weeks. If the king crab is in poor condition when it arrives to the market, it will most likely die shortly after. Crab in bad condition will result in reduced prices and profit as it needs to be processed and sold in another segment. Dead crab is of no use and end up as waste, resulting in not just reduced prices but costs, both monetary and environmental costs. Such waste should be avoided for a number of reasons and is a break with FAO’s Code of conduct, urging for practices that maintain the quality of seafood and avoid waste and losses (FAO, 2019). Seafood is highly perishable and can spoil more rapidly than almost any other food, soon becoming unfit to eat and possibly dangerous to health because of microbiological growth (FAO, 2016). Therefore, post-harvest handling, processing, preservation, packaging, storage measures and transportation require

particular care in order to maintain the quality of seafood and avoid waste and losses (FAO, 2019).

In order to keep the crab alive and in good condition it is crucial that it is handled and transported appropriately in every step from catch operations, onboard storage, packing, and transportation to reaching not only the destination market, but the end consumer being in a restaurant, a supermarket or a seafood market. It is the responsibility of the companies involved in producing and exporting the crab that the crab is alive and in good condition when reaching its final destination and meeting the buyers' demands. It is then the buyers' responsibility to take proper care of the handling and transportation to the end consumer.

This study describes and explores the value chain for live red king crab from Norway to South Korea, the largest market for live red king crab from Norway. The main research question driving our research is whether the crab is handled appropriately throughout the value chain. Importantly, this question is not only about proper physical handling and transportation of crab. It is also about how actors in the different links of the value chain communicate with each other. For example, do fishers and processors (packers) know how South Korean consumers and importers/wholesalers perceive the quality of the crab? What aspects of quality is important in the market? Likewise, what do the buyers in the market know about the crab and its quality? For example, what do they know about the fishery, its sustainability, seasonality and other factors that might influence the quality (e.g. meat content)? Knowledge of such issues can be difficult to obtain in long and international value chains (Cadogan and Diamantopoulos, 1995). Conducting business and gathering trustworthy information about foreign customers and market environments can be much more challenging and time consuming than in a domestic and more familiar setting, amongst other due to cultural differences affecting ones' preferences (Voldnes, 2015).

In order to explore these questions, we apply a theoretical perspective based on the literature on market orientation. A company's market orientation (MO) involves their ability to generate, disseminate, and respond to market intelligence (Kohli and Jaworski, 1990), and is commonly cited as a critical prerequisite in creating competitive advantage, which in turn contributes to the company's profitability (Kirca *et al.*, 2005). The logic here is that for a company to have control over every step in the value chain to secure the quality of the crab and satisfied customers, the company need to generate, disseminate and respond to market intelligence back and forth in the chain. A special attention is set on satisfaction. Perceived satisfaction with the business relationship is important as this reflect the positive affective state resulting from the

appraisal of all aspects of an organization's working relationship with another organization (Geyskens *et al.*, 1999). Perceived satisfaction with the relationship is found to increase long-term orientation and continuity (Selnes, 1998). A complicating aspect of satisfaction is that what is perceived to determine it may vary across cultures, as cultural background influence peoples' perceptions (Mehta *et al.* 2006).

Thus, a MO strategy can be complex in an international value chain, especially for small, nature-based companies with limited resources. Many of the companies involved in the seafood business are small and have limited people and capacity to handle all parts of the business, thus also handling market orientation. Still, limited research has been devoted to MO research on small companies (Blankson *et al.*, 2006). Further, being nature-based means less control of the resource and for live crab, an urgent time pressure, makes it more complicated, especially so when exporting to far distant markets.

In the next section, we describe the red king crab industry and value chain to illustrate the complexity. We then give an introduction of the theory of market orientation, including intelligence generation, dissemination, and response. The methodology of our study is presented, followed by a description of the study results and a discussion of the results in light of the theory, the Norwegian chain actors' perceptions, the companies' resources and the South Korean buyers' perceived satisfaction.

2. The King Crab Industry and its Value Chain

The red king crab is a large, exclusive crab fished in Northern waters. It can get up to 12 kg and is sold at high prices in international markets in Asia and North America, as well as Europe. The total export of red king crab harvest of red king crab from Norway in 2018 was 1961 tons, of which 1416 tons were exported live. Of that, 864 tons were exported live to South Korea, the world's largest market for live king crab.

Norwegian seafood companies, in general, are traditional companies with a limited number of employees. Typically, the labor force is diverse in its skills base, honed to the multitask demands of the exporting operations, including buying, processing/production, selling, administration, and various ancillary tasks. Despite being small to medium sized enterprises, Norwegian seafood exporters participate in long and complex value chains with members that are often far removed from each other; yet, the chain is heavily dependent on each and every member to meet the end users' demands.

The value chain involved in the seafood industry is complex. For illustration, the king crab industry in Norway involves more than 600 small fishing boats catching crab along the northern Norwegian coastline. The crab is delivered to a production facility or to a landing station that keeps the crab alive and transports it to a production facility. In the production facility, the king crab can be kept alive in tanks and then either cooled down and packed live, or euthanized, cooked, and frozen. The frozen crab is transported by truck or shipped by boat to the destination, while live crab is transported by truck to a nearby airport. Sometimes, an airport can be up to 24 hours' drive away. It can then be stored in so-called crab hotels or sent directly by plane to South Korea- a minimum 12-hour flight. When arriving in Seoul, it is kept alive in tanks before being transported to customers or re-exported to other countries. A seller, with a license for export can be the same company as the processing plant/packing station or a totally different company. The seller controls the export procedure until the crab is delivered to the buyer in South Korea, who checks the products' conformity with the transaction agreement. The buyer may be an independent importer, wholesaler, retailer, specialized seafood market, or some combination of these, who then moves the products to the end buyers and consumers through retail and/or food service channels.

The Norwegian crab suppliers' main competitors in South Korea are Russian suppliers, and to some extent, Canadian and Alaskan firms. Russia has a competitive advantage based on proximity; it is able to supply live king crab directly to Korean harbors. Out of the total 3,785 tons of imported live king crab to South Korea in 2015, 88 percent came from Russia. Each country regulates its own discrete fisheries through quotas and seasonal regulations. These multifarious sources, with non-contemporaneous availability, influence market conditions. Variable volumes and changing quality characteristics linked to seasonal biological cycles, like molting periods (when a crab leaves its old shell and grows a new, larger shell), affect prices offered in the markets.

FIGURE 1

3. Market orientation – what is it?

To date, despite much research on the topic, there is no general agreement among scholars regarding how to define and measure market orientation (Dursun and Kilic, 2017). We choose to lean on Kohli and Jaworski's 1990 definition for this paper, which is "the organization-wide

generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it” (p. 6). The same authors emphasize, in their 1996 paper, that market orientation concentrates on a larger set of market forces and stakeholders, not just the customers. The gathered market intelligence is not just customer information; it addresses many exogenous factors regarding current and future customer wants and needs (Dursun and Kilic, 2017; Rodrigues and Pinho, 2012). Intelligence generated about customers’ wants and needs, competitors’ offerings, competitors’ strengths and weaknesses, and other environmental factors affecting the company – along with the ability to disseminate this information throughout the organization and respond to it – has an important impact on organizational performance (Rodrigues and Pinho, 2012).

It is found important to include not only the market orientation of the company, but of the value chain in its entirety, because a company interacts with other members of the value chain to create value for the end-user (Grünert *et al.*, 2002; Grundvåg Ottesen and Grønhaug, 2002). Intelligence gathering and dissemination is a resource-demanding task, intensified in industries with long and complex value chains, especially when involved in international business.

Intelligence generation in foreign markets can be constrained by the availability and quality of information, and a reliance on third parties (Cadogan and Diamantopoulos, 1995). Gathering trustworthy information about foreign customers and market environments is much more challenging and time consuming than doing so for domestic customers in near, more familiar settings (Voldnes, 2015). Further, the dissemination process may be slowed down by an overload of information to individuals and departments, a distortion of data, or organizational complexity (Pascucci *et al.*, 2016). Furthermore, companies dealing with uncertainty in the supply market also need to incorporate MO behavior toward their suppliers to manage that relationship (Ottesen and Grønhaug 2005).

3.1 Market intelligence—generation, dissemination, and response

For a crab exporting company, MO involves *gathering information* about a large variety of factors, including information about the international customers’ current and future wants and needs. In addition, it is important to attain information about the global competition and the regulatory environment, both nationally and internationally. In many cases, markets are not only geographically distant, but embedded in linguistic, social and cultural food preferences and practices that may present significant barriers to gathering and interpreting information (Bello *et al.*, 2003). In addition, companies need information and control over the logistics all the way from catching the crab until the crabs reach the target market. Facing uncertainties like

fluctuations in weather, stock, and availability, exporters must include their suppliers in the information flow; they must gather information from the fishermen about their fisheries, catches, conditions, abundance, and quality of crabs. In addition, information quality and reliability must be continuously evaluated.

To be market oriented, the information gathered must be *disseminated*, meaning a vertical and horizontal flow and sharing of information. Dissemination must happen both downstream (toward the end consumer) and upstream (toward the fishermen) along the whole value chain (Grünert *et al.*, 2002) and within the company itself. In our case, dissemination among other involves sharing information with fishermen about the customers' preferences and sharing information about seasonal variation and quality with the customers.

Finally, being market oriented is not just knowing one's customers and sharing information. It involves generating, disseminating and *responding appropriately* to valuable information in all stages in the value chain (Grünert *et al.*, 2005), so that the product offered attains end users' satisfaction.

4. Research Methodology

In this study, we explore the communication behavior or market orientation (MO) behavior of Norwegian seafood companies exporting live king crab to South Korea from the perspective of different representatives in the value chain, also included the buyers' perceived satisfaction. A qualitative approach was called for, due to the need for in-depth understanding of respondents' actions and thoughts that could not be covered in a single self-reported, quantitative survey (Woodside, 2011). There is much uncertainty about the methods to be employed for studies on market orientation in the marketing and management literature (Rong and Wilkinson, 2011). Despite this uncertainty, qualitative methods are used much less often than quantitative methods (Currey *et al.*, 2017), thus providing quantifiable data, but little in-depth understanding.

Representatives from the Norwegian part of the value chain were interviewed regarding intelligence generation, dissemination, and response, as well as their firms' available internal resources. Their perceptions of their own MO behaviors were compared with the perceptions of the South Korean customers. A special focus was devoted to customer satisfaction with the Norwegian king crab and the buyer–seller relationships. In South Korea, we interviewed industrial buyers—members of big importers and retail chains—who are important gatekeepers in making purchasing decisions that are highly involved in determining the array of products

available to millions of end users (Knight *et al.*, 2007). The importers' perspectives are important because they are the organizational customers of the exporters; hence, even if exporters and importers have different views regarding the business relationship, importers' opinions can be determinants for export success (Cannon and Perreault, 1999). Nevertheless, the importer's perspective is often a neglected counterpart of the international exchange dyad (Quintens *et al.*, 2006). This lead, in this study, to an examination of the degree to which the Norwegian companies have accurate perceptions of their responsiveness to market demands—a crucial condition for market orientation.

We analyze the Norwegian king crab companies' market orientation by comparing the self-reporting of the Norwegian company leaders to the opinions of the downstream and upstream actors in the value chain, using critical elements revealed in the interviews regarding information generation, dissemination, and response. The informants in South Korea were selected in cooperation with Norwegian crab producers and Innovation Norway in Korea, a government institution working to promote innovation and development of Norwegian enterprises and industry in Norway and abroad. Further, background data was gathered from trade statistics from the Norwegian Seafood Council.

Based on Lincoln and Guba's (1985) criteria for evaluating qualitative research, an assessment of the study's trustworthiness was performed. Table 1 provides an overview of the methods used to gage the trustworthiness of the study; the left column lists Lincoln and Guba's (1985) criteria for ensuring trustworthiness in qualitative research (credibility, transferability, dependability, and confirmability) and the right column provides a short description of how the criteria were met.

TABLE 1 HERE

4.1 Customer Interviews

The interviews in South Korea were conducted in Seoul in June 2016. We conducted ten in-depth interviews with six importers, two large retailers, and two central wholesalers in the capital city, which is also the main market within the country. Detailed information about the informants is difficult to provide as total anonymity was assured in order to respect commercial

confidentiality. The aim was to explore and evaluate the Norwegian crab exporters' MO behavior according to South Korean customers' perceptions. We wanted to reveal the information flow between the Korean buyers and the Norwegian sellers, the customers' preferred methods for conducting business, and their overall satisfaction with the product and business conduct with the Norwegians. This was revealed by, for example, asking questions about what kind of information they usually shared with each other and what kind of information they would prefer, but did not receive? The Korean informants contributed to validate the Norwegian exporters' perceptions of the business relationship and to reveal whether the exporters' perceptions harmonize.

The interviews were mainly conducted in Korean, which necessitated the use of an interpreter. A fluent English-speaking Korean interpreter was recruited who also had good knowledge of the research problem under scrutiny. The interviews, typically one hour long, were tape recorded and transcribed by a Korean company and then double-checked by our Korean translator. In addition, three of the interviews were sent to another translation/transcription bureau in order to compare and secure the validity of the translations we had received from the first bureau. The transcriptions were then carefully compared and analyzed and found to correspond.

4.2 Producer Interviews

The interviews in Norway were conducted during 2016 and the spring of 2017. We explored three companies' value chains. The exports from these companies amount to about 70 % of the total export of live king crab from Norway. Interview guides were designed by reviewing the academic literature on market orientation, cross-cultural business, and resource management and by using our own experience from conducting research in the Norwegian seafood industry for many years. The interview guide, intended for the company owners as informants, was extensive and detailed in order to reveal the different aspects of market orientation and their internal resources. A more simplified version was used to interview the fishermen, personnel from the landing stations and production facilities and exporters to reveal the information flow, as well as perception about the quality and management of the king crab. The less-detailed guide was used for these participants because we were mainly interested in their interaction with the seafood companies. The questions revolved around the information they receive and request and the adjustments that are imposed. Excerpts from the interviews are provided to provide further insight on our interpretations and conclusions (Kirk and Miller, 1986).

5. Interview Results

In this section, we present some of the main findings from the interviews with company owners/exporters, landing stations and dock workers, fishermen and South Korean customers. First, we list some of the prevailing elements that were found in the interviews to be important to a successful MO in this cross-cultural trade of live crab.

In the interviews we asked a lot of questions regarding what kind of information the different chain members gather, disseminate (within and outside the company) and respond to and whether they are satisfied with the type and amount of information given. If they were not satisfied, we asked what kind of additional information they would prefer to attain. Because of the cross-cultural business setting, a special focus was also applied to perceived cultural differences in ways of conducting business.

A special emphasis was set on satisfaction; perceived satisfaction with the quality of the products, and perceived quality of the business relationships. Perceived quality for the live crabs is highly related to the meat content of the crab, which impacts the condition and survival of the crab. Meat content is dependent on good sorting of the crab especially when the season is not ideal for fishing crab. Quality also involves lack of damage, which is highly dependent on proper handling of the crab. This necessitates proper information and training of the people handling it in the different steps before it reaches its end destination. South Korean business culture prefer a long-term orientation - thus there is a focus on the long-term orientation of the different chain members.

When dealing with natural resource-based industries, such as king crab exports, some parameters are out of human control, e.g., adverse weather conditions, stock abundance, physiological conditions, and natural changes in the resources, such as molting. Therefore, it is important that buyers are informed of the implications of purchasing a product of limited supply and variable quality. With king crab, it is especially important to understand the effect of molting on the meat content. Thus, it was important to discover whether information about seasonality was distributed upstream and downstream in the value chain.

According to the MO theory, a company should gather information about their competitors' offerings, and the competitors' strengths and weaknesses, as well as the overall global competition. Russian king crab, as mentioned above, dominates the Korean market and is therefore, the strongest competitor. Thus, the Norwegian producers' information about Russian strengths and weaknesses in the marketplace is an important element.

Regulations are especially important in a nature-based industry; in our case, it has an effect on the distribution of catches throughout the year and thus, resource availability. The yearly supply of king crab to South Korea is strongly affected by the seasonal regulations in Alaska, Russia, and South Korea, resulting in a lack of supply in January through May. This understanding led to a regulatory change in 2016, allowing the Norwegian quota year to shift its starting point from August to January, giving fishermen an incentive to harvest early in the year instead of in early fall. Even though molting season starts in March, the intention was that the fishermen would be able to sort by quality and be able to provide crabs with high meat content and without damage to their Korean customers, through a period with a shortage of crab. Thus, the point that there is a lack of crab supply in Korea in the period January to May due to the competitor's regulations means that the regulatory environment is correctly understood. Another important point was whether the quality of the Norwegian sorted crab caught in this period satisfied the Korean customers' current preferences and needs. It was also found important to reveal whether the Norwegian producers understand the market consequences of low meat content—that offering customers half empty shells result in weaker crabs and increased mortality rate, a crucial factor when dealing with live seafood.

Further, we explored elements related to the training of the people working at different steps in the crab value chain. We asked if producers and sellers manage to disseminate information to their staff and the fishermen on how and why to sort the crab based on meat content.

5.1 Norwegian company owners

The interviews with the company owners show that they clearly perceive themselves to be market oriented. They also perceive that their customers in South Korea are satisfied and that the quality of the crab they sell is good: there are few damaged crabs and the mortality is low. They further claim that everyone in the company is well informed about the customers' demands and how to handle the crabs to obtain superior quality. They also claim that they give proper training to the fishermen and landing stations on how to handle the crab correctly so that it does not get damaged.

On direct questions about how they collect, disseminate, and respond to market information, however, another picture emerges. Even though all companies have regular visits from and to importers in South Korea, they generally have little direct contact with the market itself. The exception is one company, which has established a sub-company in Seoul, headed by a Korean partner, but staffed with a part-time representative from the Norwegian company. The CEOs visits Korea once or twice a year to maintain contact in an effort to build a long-term business

relationship with the customers. Norwegian representatives also usually meet customers at the annual International Seafood Expo in Brussels. Still, the company owners' independent generation of information is limited, and they rely heavily on a few importers for information.

Information about competitors and the market are gathered rather randomly, but the Norwegian Fishermen's Sales Organization provides some information on its web page and sends out newsletters about the international crab market. The companies are accustomed to collecting information about fisheries regulations from the authorities and are well informed about them.

Regarding seasonality and quality of the crab, they explain that the quality is good from July/August until February, but after that, it deteriorates for about four months. They claim that the market still demands the crab year-round. On a question related to their customers' satisfaction with the quality, the response was: "Well, you know the market is special. When there is a limited amount of crab in the market, the quality demands decrease—so they accept lower meat content, but they pay the same."

The company owners say that dissemination of information throughout the value chain is important. As for how they communicate the importance of quality and method of proper handling to the fishermen, one company owner stated that the fishermen already know how to treat the crab. However, he said if he spotted someone not treating the crabs correctly, he would open up his office window facing the harbor, and shout "that is not the way to treat the crab!" Another explained: "quality is important, so they (the fishermen) have to understand. And, if you deliver good quality, you get a good price. So, the boats delivering here know how to check the crab, how to hold the crab, and how to preserve it on the boat." The company owners further stated that they train all fishermen new to the crab fishery. This training and dialog with fishermen are most often left to the people on the dock, people who does not meet the customers and do not necessarily know the quality specifications from the market.

Within the company, the dissemination of information is done in an informal way. Sometimes, there are more formal information update meetings, but mostly, the information flow is random and occasional when employees run into each other. They reported having daily phone calls with the leaders at the landing facilities, but the discussion is mostly about how much crab they have to offer and pricing.

Regarding dissemination of information, we asked if they shared the information received from various points to the workers in the production. One informant answered: "Yes, if they ask...sometimes they come to me and ask if I have heard this and this. Then yes, I explain to

them.” We also asked if they told the workers who the customers of the crab are. One company owner replied: “They can see the labels on the boxes. They are not so interested who it is.” On questions related to sharing information with their customers, one informant expressed: “I spend many hours on the phone...they want to know about quotas and management, but they do not always understand.”

5.2 Landing stations and dock workers

Key personnel working in two different landing stations and at the dock in the processing facilities were interviewed. The informants say they get very limited information about the customers’ wants and needs. They do not get information about where the crab is sold and none had ever been to visit the market. The interviews also revealed a limited interest in getting this information. One of the workers said: “If visitors from the market come, I run off, I hide, I don’t want to speak with them.”

Knowledge about seasonality and quality were limited. No given routines for training were mentioned by the people responsible for receiving the crab. Often, knowledge is gained by one’s own initiative from the controlling authorities that visit the facilities regularly. A worker said: “they answer all my questions.” To be MO, the company is supposed to share information with the staff. One dock leader explained that there are mostly foreign workers at the facility, and that this definitely complicates the communication, saying: “The biggest problem is that they say they understand, but they really do not. So, we soon learned that we have to run after them and check if they really have understood.” As for training the fishermen delivering to the landing stations, the informants say that the fishermen learn by themselves from their own mistakes, and eventually do it the right way. The workers do not actively train them as previously stated by the company owners. They did say, however, that the quality of the crab they received varied a lot. This implies that the information dissemination is quite inactive and random, and dependent on the workers’ particular interest.

5.3 Fishermen

Interviews with a selection of fishermen (12 in total) who deliver crab to the different companies revealed that the information they receive is quite random. The responsibility is placed on the fishermen to ask for information about every aspect regarding MO. Limited or no information is shared about the market where the crab is sold or about the competitive situation in the marketplace. As one fisherman expressed: “it is up to me to gather information, that is the way it is in this fishery.” On the other hand, when asked what kind of information they seek, most admitted that they just want to do their part of the job: fish the resource, land it and get paid.

One fisherman said: “I am not interested in where the crab is being sold - I know it is transferred by plane so it needs to be in good condition.” Only one fisherman complained about the limited contact and information given from the management of the companies they deliver crabs to. The others seemed to be content with the situation, since they were mostly preoccupied with their own businesses.

Regarding quality, the fishermen say that it varies a lot throughout the season, but one said: “I prefer to deliver to X landing station because they don’t care that much about meat content, they take everything.” While yet another said: “The best crab is in January and February, but I prefer to fish in September.” It is, of course, understandable that the harsh weather conditions in the northern part of Norway in winter influences the time fishermen prefer to fish for crab. However, perhaps a stronger price incentive to fish when the quality of the crab is at its best could also influence the fishermen’s choice of season.

The apparently low priority of information sharing along with the focus on quality from the fishermen results in unstructured and often low levels of training available to the fishermen about handling and sorting the catch. One expressed it as followed: “Well, I guess we have received an information note about how to lift the crab holding two of the feet on both sides, but no one does this when they are in a hurry.” To measure the meat content in a crab one has to squeeze a leg or joint, however, translating that feeling into actual meat content demands knowledge and experience. The respondents noted that at one of the facilities, the management had boiled some crab and split the legs to show the fishermen how much the meat content varies.

Most crab fishers have long experience in the fishing industry. However, fishing king crab in northern Norway has become a lucrative business, and thus has attracted a significant number of new fishermen to the industry. The newcomers often have limited or no fishing experience from other seafood and definitely no experience with crab fishing. One informant complained: “There are a lot of newcomers with limited knowledge about crab handling. Many people think that the crab is so tough because it so big and has a shell and everything, but it really damages easily.”

5. 4 Customers (buyers in South Korea)

Interviews with the customers (importers) of Norwegian king crab in South Korea revealed many interesting elements, and many discrepancies when the results are compared with the perceptions of the Norwegian sellers. The most serious discrepancy is that many of the

Korean customers were not satisfied with the quality of the crab or with the quality of the business relationship, including information sharing.

First, their perception of what constitutes a long-term and good relationship is different from the Norwegians. For instance, Norwegians feel free to sell to another buyer if he pays a higher price. This is perceived by the Koreans to be a breach of trust. As one customer explains: “the problem is that if someone interrupts and offers a much higher price, they (the Norwegians) just go. There is no trust. Just end of the business.” The Korean customers also describe situations where they buy poor quality crab just in order to keep and build the business relationship with the Norwegian exporters, even if they lose money on the transaction. As one customer expressed: “the Norwegian exporters don’t understand that we lose money and that we buy it only to try to keep the business relationship.” On the other hand, Norwegians are perceived to be trustworthy compared with Chinese exporters and get credit for treating everyone with respect. They also regularly visit Korea and their premises, which is considered important for the Korean customers.

Second, the Korean customers we interviewed varied significantly in their knowledge of the molting season is for Norwegian crab. Most seem to understand that there must be a season for molting, but do not know when it is. “I would really like to know when is the best timing for high-quality live crabs from Norway,” one customer expressed.

The most important quality parameter for the Korean customer is meat content, mainly because of the increased mortality of crabs with low meat content. Regarding quality, most of the Korean informants perceive a lot of the live crab coming from Norway to be of poor quality. One importer quite angrily expressed: “Norway does not have any filtering system for quality; they just dump trash to Korea.” These opinions are probably somewhat affected by the interviews being done in early June 2016—the first year after the regulatory change. Another Korean informant expressed: “The quality, we call it meat content, has been pretty bad from Norway this season.” Mortality increases if the crab is in poor condition or weak, even with high meat content. The mortality rate will differ a lot from supplier to supplier, from an acceptable 5% from the best suppliers to higher than 20% from others.

Another important insight coming from the interviews of the Korean importers is that their preferred and biggest supplier of live king crab is Russia. As mentioned, Russia has a significant logistical advantage in being able to deliver live crab directly by boat to Korea. This results in fewer challenges regarding quality for the Russian suppliers, and also cheaper transportation

costs. Still, according to the Korean customers, the Norwegians try to sell crab for a higher price, even in periods when the quality is low. Some of the sellers in the market claim that the Norwegian crab is sold as Russian, because a Russian origin is familiar to the Koreans and has the highest standing.

There is a request for crab to be supplied all year round, but not at the cost of quality. The period of January through April and August seem to be periods of particularly low supply. Korea has two seasons for domestic crab catching: the spring season of March and April and the autumn season of September and October. However, the quotas are too low to satisfy the market demand. One Korean customer also explained: “Nowadays, the domestic catches of crab are very poor, so that is good news for import.”

6. Perceptions and misperceptions

The interviews reveal several mismatches regarding the Norwegian companies’ self-perceptions, and how their behavior is perceived by the actors in different stages of the value chain. The most significant and serious misperception is related to the Korean buyers’ lack of satisfaction. While the Norwegian exporters claim that their customers are satisfied and substantiate this by claiming to have good quality crab with very low mortality, the South Korean customers maintain that they are often not satisfied with the product quality due to the high mortality rates, often due to low meat content and poor condition of the live crab arriving in South Korea.

In the analysis, we defined elements useful for determining the MO behavior of the Norwegian companies selling live king crab to South Korea. The overarching evaluation of their MO behavior was the buyers’ satisfaction, because satisfaction is related to the buyers’ overall positive evaluation of the Norwegian crab trade. It involves, among other things, building and maintaining long-term business relationships, as this is an important aspect of doing business with Koreans. Our interview results show that even though there is an intention to establish a long-term relationship from the Norwegian side, the Norwegians and the Koreans seems to have a quite different understanding of what is needed to build long-term relationships. For the Koreans, it is important to be loyal even in bad times or when prices might be better elsewhere. Koreans also put pride in being available 24/7, while Norwegians seem to “be always on vacation”—as several of the Korean buyers indicated. This may be related to the fact that Norwegians are more used to trading with European countries, where shifting sales according to prices is more acceptable, unlike many Asian countries. Another misperception is that the

Norwegian sellers state that the Koreans want to buy and pay good prices for crab during the molting period and that the quality is good, while the Koreans buy in this period only due to an obligation toward future business relations and find the quality of the crab to be poor at this time.

Another misperception is related to the successful dissemination of information between the exchange partners. This includes knowledge about seasonality of the wild caught crab in Norway and best time for catching quality crab. In the Norwegian part of the value chain, and within the company itself, the majority of actors seem to know when the molting period takes place and understand the challenges involved with capturing crabs during this period. Still, some fishermen fish in the period of molting, aiming to sort the crab at sea—releasing the crabs that are too weak, soft, or have too low meat content. Some of the Korean buyers, on the other hand, express insufficient information about the molting period in Norway, and also perceive that the sorting of the crab is insufficient and that they get delivered too much poor quality crab. The Korean buyers would like to avoid buying crab in this period.

The company owners also claim that the information flow between them and the fishermen is good. Also, here we find misperceptions: while the company owners say they disseminate information and train the fishermen well, the fishermen claim they get limited training and limited or no information about where the crab is going or what the customers want. The insights into fishermen's reactions to crab handling and quality are also of interest because they infer that insufficiently clear, or at least incentivizing, price signals are being sent back along the chain. As long as this communication failure persists and the price signal is not strong enough, an “appropriate” response cannot be expected.

7. Explaining the mismatches

The Norwegian company owners claim to be market oriented, while the feedback from the rest of the value chain reveals a different picture. An essential part of being market oriented would be to have satisfied customers. The interview results reveal that several of the customers are not satisfied and that the rest of the value chain lacks both information and training. This reveals a serious gap between the partners. According to Krepapa *et al.* (2003) the greater the divergence in perceptions of market orientation between customers and service providers, the lower the level of customer satisfaction. Since we know that satisfaction in buyer–seller relationships are important for continuance (Selnes, 1998; Abdul-Muhmin, 2005; Voldnes *et al.*, 2012), this gap may have serious consequences for the long run.

What can explain these misperceptions? The companies' information gathering is often limited to the information provided by their customers. The quality of this information might be influenced by cultural differences. Different markets and cultures may have different preferences and demands, not only related to products, but also to ways of conducting business (Voldnes, 2015). While some cultures have a long-term orientation to their business philosophy in which building a trustful business relationship is a prerequisite for conducting business, others are more transactional-based and have more focus on short term profits (Hofstede *et al.*, 2010). Such differences can have a big impact on trust and information sharing between a buyer and a supplier (Voldnes *et al.* 2012), and thus, the market orientation of the selling company. In defense of the Norwegian companies, it is difficult to be MO if the dissatisfaction is not communicated. The lack of communication in this situation could also be explained by the different cultural perspectives on doing business. The South Koreans' long-term orientation makes them willing to disregard short-term costs to gain more benefit in the long run; a strategy common in many Asian markets (Hofstede *et al.*, 2010). South Korea actually has the highest score (100) on long-term market orientation in Hofstede *et al.*'s (2010) index of cultural dimensions, comparing 93 countries and regions. Norway, on the other hand, scores a much lower score (35), indicating it has much less emphasis on building long-term business relationships (Hofstede *et al.*, 2010; Voldnes and Kvalvik, 2017). See the Appendix for further comparison of Norway and South Korea from the index.

This mismatch between the Norwegian sellers' perception of satisfied Korean buyers can also be explained by the asymmetric power-dependence between the partners, in Norway's favor. The international market for large crabs is under-supplied and the supply from the big supplier countries, such as Russia, Canada, and Alaska, is restricted to certain times of the year when they are allowed to fish for crab due to resource management. In these restricted times, the South Korean market have a deficit of crab, and are thus dependent on getting crab from other countries. The new 2016 regulation in Norway allows Norwegian companies to fish crabs all year round, though under a strict quota and allocation regime. This explains why the Korean buyers still bought crabs when they were dissatisfied with the quality. They told us that their aim was to build long-term business relationships with their partners, thus they accepted the poor quality to be able to buy crabs when the season is better for higher quality crabs, as the demand for crabs in South Korea is high all year.

Another explanation of the revealed mismatch can be related to the fact that being truly market oriented is a task that demands a lot of resources, which can be especially challenging for small

companies like the Norwegian king crab companies. The company owners describe a working day fully occupied by phone calls with fishermen, landing stations, production facility leaders, and buyers from many different parts of the world. Most of the companies not only buy, process, and trade crabs, but also deal with other fish species and seafood products. In addition, the companies have small administrative staffs. There is no dedicated department, or even person, responsible for developing strategies and undertaking organizational development and information sharing. The CEOs usually have personnel responsibility and significant administration loads. This does not facilitate time to spend on systematic information sharing with other channel members. An additional omnipresent and complicating factor in the highly perishable food sector is time, which is especially critical with live seafood. Production stages must be completed within tight, non-negotiable, schedules. As a consequence, many firms may lose sight of their MO goals and aspirations for the sake of short-run profits. This results in a failure to be truly MO and a high likelihood of missing out on valuable information critical to maintaining buyers' satisfaction.

Similarly, the fishermen and processing personnel perceive themselves to have more than enough work focusing on what they consider to be their key tasks: meeting their quotas and receiving and processing crabs, respectively. They rely on getting just the amount of information they need from the company owners to be able to fish, deliver, and otherwise adapt to government regulation of the fisheries. They generally do not seek much information.

These less-than-enthusiastic attitudes to market information may prevail for a number of reasons. First, the most obvious explanation is the perception that the cost of acquiring the information is outweighed by any benefits that might accrue. This could suggest a deficiency in any returning price signal. In other words, suppliers simply do not associate better quality product with higher prices. It may also be that fishermen find themselves without the necessary skills to interpret and understand the available data in a meaningful way. Similarly, as suggested above, the various tasks of operating a small boat leave scant time for any additional activities that may appear to be tangential to their central operation – despite the anomaly that the market price is a key determinant of their overall profitability.

7.1 Practical implications of the study

Hitherto, the Norwegian crab companies have benefited from resource availability responding to an under-supplied demand for crab in the market. This is, however, a non-controllable situation, and potentially not a stable long-term strategy. The companies might be better advised

instead to allocate more time and resources to building long-term business relationships with their Korean business partners.

7.2 Theoretical implications

Related to the above results, the study shows that using profitability as an indicator of MO can be misleading, especially in an under-supplied market. Further, self-reporting is not always a reliable way to measure MO. One should also include the other actors in the value chain, especially the downstream actors. According to Blesa and Bigné (2005), research into market orientation has ignored the effect of this orientation on channel relationships, even more so in cross-national contexts. Had this study only considered interviews with the exporting company owners, an entirely different – and incorrect – impression would have been promulgated: that the companies were market oriented demonstrated by gathering and sharing information and supplying quality crab, resulting in satisfied customers. The value of this research that attains information from different perspectives along the chain reveals a more accurate – albeit disconcerting – impression. In particular, it identifies several interesting discrepancies and misperceptions with potentially significant adverse ramifications for the Norwegian suppliers. However, it also identifies that with greater attention to seemingly less important tasks, possibly through the incorporation of specific allocations of resources, that these deficiencies can be remedied.

7.3 Concluding remarks and directions for future research

Ensuring satisfied customers should be the most important task for any company and is a critical part of being market oriented. To be able to attain valuable information about the market, it is helpful, perhaps imperative, to build close, long-term business relationships. However, this is not always an easy task. Building close, trustful business relationships with foreign business partners takes time as well as cultural sensitivity. Both sides of the value chain must understand the differences in ways of conducting business and what information is shared, should be shared, and should not be shared (Voldnes, 2015; Voldnes and Kvalvik, 2017).

This study confirms that information generation is more challenging when conducting business with foreign cultures. This raises important questions as to how actors' trust might be enhanced and how trustworthy information sources may be developed that are effective within the constraints of an organization. We claim that companies should be able to overcome their challenges with a little more focus on communication and relationship building. Small companies do have limited resources to conduct such activities. However, a small firm may find it much easier to implement decisions and disseminate and adapt to customers' demands

quickly; they do not have a large organization, with numerous departments protecting their turf, and with path dependencies to contend with. The findings in this study could be complemented by future qualitative research to explore MOs using sources from different stages in the chain and in different types of companies and different cross-cultural settings.

References

- Abdul-Muhmin, A.G. (2005). Instrumental and interpersonal determinants of relationship satisfaction and commitment in industrial markets, *Journal of Business Research*, Vol. 58, pp. 619-628.
- Bello, D.C., Chelariu, C. and Zhang, L. (2003). The antecedents and performance consequences of relationalism in export distribution channels, *Journal of Business Research*, Vol. 56 No. 1, pp. 1-16.
- Blankson, C., Motwani, J.G. and Levenburg, N.M. (2006). Understanding the patterns of market orientation among small businesses. *Marketing Intelligence & Planning*, Vol. 24 No. 6, pp. 572-590.
- Blesa, A. and Bigné, E. (2005). The effect of market orientation on dependence and satisfaction in dyadic relationships, *Marketing Intelligence & Planning*, Vol. 23 No. 3, pp. 249-265.
- Cadogan, J.W. and Diamantopoulos, A. (1995). Narver and Slater, Kholi and Jaworski and the market orientation construct: Integration and internationalization, *Journal of Strategic Marketing*, Vol. 3 No. 1, pp. 41-60.
- Cannon, J.P. and Perreault, J.W.D. (1999). Buyer-seller relationships in business markets. *Journal of Marketing Research*, Vol. 36, No. 4, pp. 439-460.
- Currey, P., Somogyi, S. and Ariyawardana, A. (2017). Why organizations struggle to implement a market orientation: Insights into beliefs of top management, *Journal of Food Products Marketing*, Vol. 23 No. 7, pp. 783-798. Doi: 10.1080/10454446.2016.1141142.
- Durcun, T. and Kilic, C. (2017). Conceptualization and measurement of market orientation: A review with a roadmap for future research, *International Journal of Business and Management*, Vol. 12, No. 3, pp. 1-18.
- FAO(2019). Report. <http://www.fao.org/3/i9540EN/i9540en.pdf>
- FAO (2016). Report. <http://www.fao.org/3/a-i5555e.pdf>
- Geyskens, I., Steenkamp, J.-B.-E.M. and Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships, *Journal of Marketing Research*, Vol. 36, No. 2, pp. 223-238.
- Grundvåg Ottesen, G. and Grønhaug, K. (2002). Market orientation and uncertain supply in upstream markets: an exploratory study, *European Journal of Purchasing & Supply Management*, Vol. 8 No. 4, pp. 209-219.
- Grünert, K.G., Jeppesen, L.F., Jespersen, K.R., Sonne, A.-M., Hansen, K. and Trondsen, T. (2002). Market orientation at industry and value chain levels: concepts, determinants and consequences, *Journal of Customer Behavior*, Vol. 1, pp. 167-194.
- Grünert, K.G., Jeppesen, L.F., Jespersen, K.R., Sonne, A.-M., Hansen, K., Trondsen, T. and Young, J.A. (2005). Market orientation of value chains, *European Journal of Marketing*, Vol. 39 No. 5/6, pp. 428-455.
- Hofstede, G., Hofstede, G.J. and Minkov, M. (2010). *Cultures and Organizations: Software of the Mind*, McGraw-Hill, New York.
- Kirk, J. and Miller, M.L. (1986). *Reliability and validity in qualitative research*, Newsbury Park, CA: Sage
- Kirca, A.H., Jayachandran, S. and Bearden, W.O. (2005). Market orientation: A meta-analytic review and assessment of its antecedents and impact on performance, *Journal of Marketing*, Vol. 69 No. 2, pp. 24-41.

- Kohli, A.K. and Jaworski, B.J. (1990). Market orientation: The construct, research propositions, and managerial implications, *Journal of Marketing*, Vol. 54 No. 2, pp. 1-18.
- Knight, J.G., Holdsworth, D.K, and Mather, D.W. (2007). Country-of-origin and choice of food imports: an in-depth study of European distribution channel gatekeepers, *Journal of International Business Studies*, Vol. 38 No. 1, pp. 207-125.
- Krepapa, A., Berthon, P., Webb, D., and Pitt, L. (2003). Mind the gap: An analysis of service provider versus customer perceptions of market orientation and the impact on satisfaction, *European Journal of Marketing*, Vol. 37 No. 1/2, pp. 197-218.
- Leonidou, L.C., Samiee, S., Aykol, B. and Talias, M.A. (2014). Antecedents and outcomes of exporter-importer relationship quality: Synthesis, meta-analysis, and directions for future research, *Journal of International Marketing*, Vol. 22 No. 2, pp. 21-46.
- Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*, Newbury Park, CA: Sage Publications.
- Lorentzen, G., Lian, F. and Siikavuopio, S. (2019). Quality parameters of processed clusters of red king crab (*Paralithodes camtschaticus*) – Effects of live holding at 5 and 10°C up to 92 days without feeding, *Food Control*, Col. 95, January, pp. 142-149.
- Lorentzen, G., Voldnes, G., Whitaker, R.D., Kvalvik, I., Vang, B. and Solstad, R. G. (2018). Current status of the Red King Crab (*Paralithodes camtschaticus*) and Snow Crab (*Chionoecetes opilio*) industries in Norway, *Reviews in Fisheries Science & Aquaculture*, 26(1), 42-54.
- Mehta, R., Larsen, T., Rosenbloom, B. and Ganitsky, J. (2006). The impact of cultural differences in U.S. business-to-business export marketing channel strategic alliances, *Industrial Marketing Management*, Vol. 35, pp. 156-165.
- Narver, J.C. and Slater, S.F. (1990). The Effect of a Market Orientation on Business Profitability, *Journal of Marketing*,” Vol. 54 No. 4, pp. 20-35.
- NSC (2019). <https://seafood.no/markedsinnsikt/>
- NSC report (2017), Norwegian Seafood Council, Red King Crab and Snow Crab in the Korean Market. Report. Tromsø, Norway, www.seafood.no.
- Ottesen, G.G. and Grønhaug (2005). Exploring how managers conceive and practice market orientation in near “perfect” food markets, *Journal of Food Products Marketing*, Vol. 11 No. 2, pp. 59-74.
- Pascucci, F., Bartolini, S. and Gregori, G.L. (2016). Export market orientation and international performance in the context of SMEs, *Journal of Small Business & Entrepreneurship*, Vol. 28 No 5, pp. 361-375.
- Pelham, A. and Wilson, D. (1996). A longitudinal study of the impact of market-structure, firm structure, strategy, and market orientation culture on dimension of small-firm performance, *Journal of Academy of Marketing Science*, Vol. 24 No. 1, pp. 27-43.
- Rodrigues, A.P. and Pinho, J.C. (2012). The impact of internal and external market orientation on performance in local public organisations, *Marketing Intelligence & Planning*, Vol. 30, No. 3, pp. 284-306.
- Rong, B. and Wilkinson, I.F. (2011). What do managers’ survey responses mean and what affects them? The case of market orientation and firm performance, *Australian Marketing Journal*, Vol. 19, pp. 137-147. doi:10.1016/j.ausmj.2011.04.001.
- Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationships. *European Journal of Marketing*, Vol. 38. No. 3/4, pp. 305-322.
- Quintens, L., Pauwels, P. and Matthyssens, P. (2006). Global purchasing strategy: Conceptualization and measurement,” *Industrial Marketing Management*, Vol. 36 No.7, pp. 881-892.
- Voldnes, G., Grønhaug, K. and Nilssen, F. (2012). Satisfaction in Cross-Cultural Buyer-Seller Relationships—influence of cultural differences, *Industrial Marketing Management*, Vol. 41, pp. 1081-1093.
- Voldnes, G. (2015). Buyer-seller relationships across cultures: Conceptual, empirical and methodological issues, *Faculty of Biosciences, Fisheries and Economics, Tromsø University Business School*. Tromsø: The Arctic University of Norway.

- Voldnes, G. and Kvalvik, I. (2017). Interfirm relationships in emerging markets: The importance of relationships and cultural sensitivity, *Journal of East-West Business*, Vol. 23 No. 2, pp. 194-214.
- Voss, K.E., Johnson, J.L., Cullen, J.B., Sakano, T. and Takenouchi, H. (2006). Relational exchange in US-Japanese marketing strategic alliances, *International Marketing Review*, Vol. 23 No. 6, pp. 610-635.
- Walsh, G., Evanschitzky, H., Wunderlich, M. (2008). Identification and analysis of moderator variables: Investigating the customer satisfaction-loyalty link, *European Journal of Marketing*, Vol. 42 No. 9/10, pp. 977-1004.
- Woodside, A.G. (2011). Responding to the severe limitations of cross-sectional surveys: Commenting on Rong and Wilkinson's perspectives. *Australasian Marketing Journal (AMJ)*, Vol 19, No. 3. pp. 153-156

Appendix