Knowledge Creation in Export Trading

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Abstract. In this research, we investigate how knowledge in the export trading industry is created. Prior research focuses on general businesses in local market environment. This research specifically focuses on export trading with overseas market needs. These needs require attention to different types of control and requirements beyond that of a local market. In this paper, Nonaka et al.'s theory of organizational knowledge creation is explored. We specifically examine the processes of knowledge creation through four modes of knowledge conversion. Empirical investigations in export trading organizations are conducted. We examine how export firms obtain new knowledge for innovations based on collective knowledge being used in export trading. The findings indicate that knowledge management processes in export firms allow for the creation of new knowledge. The collective knowledge (from groups and individuals) forms a basis for innovations and competitive intelligence. This collective knowledge also creates foresight, insight and hindsight in the export trading context.

Keywords: knowledge creation; knowledge management; export trading.

1. Introduction

Knowledge is a precious global resource. It is also a critical factor for an organization’s survival (Clarke, 2001; Haldin-Herrgard, 2000; Merchant, 2000; Nonaka, 1995; 1996). Organizations have to effectively manage the multiple sources of knowledge used in various aspects of organizational activities. Our future will be essentially determined by our ability to wisely use knowledge (Shariq, 1997). Export trading is the sale and export of products, services or ideas to an overseas buyer. It is clearly (different from normal commercial trading in a domestic market. While research in the knowledge management area is common, research on how knowledge is created in some specific areas is rather limited. In particular, research on knowledge management in export trading is scarce. The target audience of this research is export traders and government agencies involved in export activity. In this paper, we examine the use of knowledge for innovations and competitive advantage in export trading. In his theory of organizational knowledge creation, (Nonaka, 1995) examines how knowledge is created after it is uncovered, shared, transferred and reviewed through four modes of knowledge conversion (socialization, externalization, combination and internalization). In the light of Nonaka et al.'s (1996) theory of organizational knowledge creation, we explain how knowledge management contributes to the creation of new knowledge in export trading. We discover a shortcoming in Nonaka et al.’s (1996) work. Their research does not explicitly explain how knowledge spirals work at group and organization levels. In our research we take a further step to explain how knowledge (acquisition?) takes place beyond an individual level in an export trading context.

Using the same inductive reasoning, this paper explains the emergence and integration of useful types of export trading knowledge in the tacit and explicit
forms at all individual, group and organizational levels. Most importantly, it explains the knowledge processes that an export trading organization has to go through to create new critical knowledge. The findings indicate that new knowledge is created when knowledge is effectively used at individual, group and organizational levels in export trading. This new knowledge transforms into organizational wisdom. Hence, knowledge creation plays a very important part in knowledge management. Critically, knowledge creation should take place in an export trading organization.

The rest of this paper adopts the following structure. Section 2 describes related research work, our comparisons and evaluations. Section 3 outlines the research method and approach that we adopt in this research. Section 4 explains the relation between knowledge creation and export trading. Based on the investigations results on knowledge creation at individual, group and organizational levels, Sec. 5 shows a conceptual framework of knowledge creation in export trading. Section 6 provides many critical findings in the case studies and experimental work. In concluding, Sec. 7 highlights the great importance of learning and knowledge creation at individual, group and organizational levels in export trading. Section 7 also explains our future work.

2. Related Work

Since no prior research is available on knowledge management in export trading, there are different types of important literature that we will review. We will first explore the importance of knowledge and knowledge management. Subsequently, we focus on Nonaka et al.’s (1996) theory of organizational knowledge creation and four modes of knowledge conversion. Next, we explore knowledge required in export trading.

Knowledge is a fundamental factor behind an enterprise’s success, corporate competitiveness and all its activities (Stenmark, 2002; Wiig, 1997). Knowledge is used in critical decision-making for solving problems and overcoming difficulties in business practices. In essence, having the relevant knowledge reduces investment risks in organizations (Miller, 1999). Knowledge can be tacit or explicit. We can know more than we can tell (Polanyi, 1962). Tacit knowledge is what we know but find difficult to tell. Explicit knowledge is our expressed knowledge that we know and explain well. Explicit knowledge should be disseminated within and across organizational borders on documents, through human contacts or via technology (Soon, 2003). For an effective learning organization, Bhatt (2000) and Martensson (2000) suggest that firms should create an environment that would make it simpler to convert tacit knowledge into explicit knowledge and to retain, develop, organize and utilize employee competencies.

Having knowledge management practice put in place will integrate all valuable intuition, experience, intellectual knowledge, skills and expertise through communication and collaborative processes. Adopting knowledge management naturally creates a knowledge cycle. This cycle involves uncovering, sharing, transferring, and reviewing knowledge in organizations to continually create new useful knowledge. The bottom line of knowledge management is that it enables the workers to perform the task effectively and create greater values in organizational products, services and systems.

2.1. Theory of organizational knowledge creation

In Nonaka’s (1996) theory of organizational knowledge creation, knowledge management is based upon the premise of new knowledge. Creating new knowledge is to tap into the tacit and often highly subjective insight, intuitions, and hunches of individuals and make those insights available for use by the company as a whole (Nonaka, 1996; Sumner, 1999). To understand knowledge creation further, we will examine knowledge in relation to Nonaka et al.’s (1995, 1996) four modes of knowledge conversion.

2.2. Four modes of knowledge conversion

Knowledge needs to be distributed to achieve firm-specific goals (Bhatt, 2000). The distribution and use are made through the knowledge management processes of knowledge discovery, sharing, transfer and review. We adopt Nonaka’s (1996) four modes of knowledge conversion (as in Fig. 1) to explain the essence of knowledge management processes in export trader knowledge settings.

The modes are socialization, externalization, combination and internalization. In socialization, experience is shared, thereby creating tacit knowledge such as mental models and technical skills. Socialization can be seen in apprenticeships, mentoring and mastery of craftsmanship.
Any advanced or complex skill learned is knowledge formation. Externalization is a process to convert tacit knowledge to explicit knowledge. In this process, tacit knowledge is articulated into explicit concepts. This is a knowledge creation process making use of metaphors, analogies, concepts or models. Externalization can be seen in concept creation, dialogue or collection reflection. Combination systemizes concepts into a knowledge system. Internalization is a process that converts explicit knowledge into tacit knowledge. Internalization allows absorption of knowledge through learning by doing, training and exercising (Haldin-Herrgard, 2000). The reality is constructed through the way people narrate their ongoing experiences (Boland, 2001). When the mobilized tacit knowledge is organizationally amplified through four modes of knowledge conversion, it forms a knowledge spiral as in the spiral in Fig. 1.

Nonaka (1996) explains that the knowledge spiral will go on and on and it leads to new knowledge creation for innovations, better business performances and benefits. There are however many essential points that are absent from Nonaka et al.’s discussions. Since socialization is through apprenticeship, mentoring and mastery of craftsmanship, socialization is an essential learning skill in learners (especially in export firm staff) to obtain tacit knowledge. Socialization in order to obtain tacit knowledge is an essential skill for advanced knowledge discovery. If externalization converts tacit to explicit knowledge, externalization is a critical skill in individuals (especially the experts contributing to export products/service) to express or reveal both explicit and tacit knowledge. Externalization is a crucial skill for knowledge sharing. However, how will the knowledge spiral in knowledge creation work in the context of export trading? Whenever human collaboration is required to achieve any major common goal, the mission often requires knowledge beyond that of an individual. The examination of a knowledge network or collective knowledge is essential.

As knowledge creation is part of the knowledge management process, we examine prior research in knowledge management as illustrated in Table 1.

Even though knowledge management is not a new research area, there is an absence of specific knowledge management research available in export trading. Table 1 shows the disparate foci of extant knowledge management research. In Table 1, prior research is replete in the area of using information technology as an enabler in knowledge management, managing knowledge for strategic business advantage and the needs of organizational learning in knowledge management practice. They are however all delivered in the generic business trading organization context. By comparison, there is nothing specific to an export trading environment. In this research, we specially focus on knowledge creation in export trading.

Since Nonaka et al.’s theory of organizational knowledge creation is based upon the premise of new knowledge; new knowledge is not possible to be obtained if learning is not put in place in the export trading

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<tr>
<th>Research Area</th>
<th>Details of Research</th>
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<tr>
<td>Knowledge management and applications of information technologies</td>
<td>Knowledge management in enterprise resource planning, business process re-engineering, enterprise systems, and information systems</td>
<td>Abell, 2001; Ambrose, 1998; Chan, 1999; Chan, 2001; Department of Education Training and Youth Affairs, 1999; Fensel, 2001; O’Leary, 2001; Rosemann, 2001</td>
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<td>What systems and processes in organizations are highly regarded as producing and using knowledge</td>
<td>Davenport, 2001; Davenport, 2000; Nonaka, 1995, 1996; O’Leary, 1999; Porac, 1999; Prusak, 1977; Spiegler, 2000; Srikantaiah, 2000; Standing, 2001; D. Stenmark, 1999; D. Stenmark, Klang, M., and Olsson, S., 1999; Summer, 1999; Wiig, 1997</td>
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<td>Knowledge management for strategic business advantages</td>
<td>Discuss how knowledge management creates competitive business advantage in organizations</td>
<td>Burn, 1999; Cleland, 1975; O’Leary, 2001, 1999; Patrick, 2001; Spiegler, 2000; Zack, 1999a, 1999b</td>
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<td>Knowledge as a means to empowering the people within the organizations to use it for efficient work performance and fruitful business results</td>
<td>Andrews, 1999; Boyce, 2001; Centre For Educational Research and Innovation OECD, 2000; Nonaka, 1996; Pan, 2001</td>
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<td>Knowledge management with a focus on organizational learning approach</td>
<td>Examine how organizations should encourage and adopt an organizational learning style</td>
<td>Andrews, 1999; Boland, 2001; Boyce, 2001; Centre For Educational Research and Innovation OECD, 2000; Civi, 2000; Hawryszkiewycz, 1999; Lehrer, 2002; Pan, 2001; Summer, 1999</td>
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organization. In this line of reasoning, learning does play an important role in the organizational knowledge creation. Andrews (1999) states that organizational learning is the process of improving actions at the individual, group and organization levels through better knowledge and understanding (Lehrer, 2002) also state that innovative activities are deeply ingrained in dynamic learning and feedback loops delimited by national boundaries. Drawing on the insights of the authors, the needs of learning at individual, group and organization levels and the importance of learning beyond national boundaries in an export trading situation need to be explored. Hence, Nonaka et al.’s (1996) theory of organizational knowledge creation has to be re-evaluated at individual, group and organization levels taking into account learning and use of knowledge beyond national boundaries.

Having explored knowledge creation and Nonaka’s four modes of knowledge conversion, it is essential to investigate what export trading is, its constant needs for knowledge and the way knowledge management works in export trading.

2.3. Export trading

In a narrow sense, export trading is the sale and export of products, services or ideas to an overseas buyer. In a broader sense, an export trading organization has to perform all possible supporting activities to facilitate the sales and export of products, services or ideas before they reach the hands of an overseas buyer. Export activity allows economic growth, provides several beneficial outcomes and brings in profits or revenues into a country (Australian Bureau of Statistics, 2000; Australian Trade Commission, 2000; Morgan, 1998). In Australia, export activities of tangible products are regulated and controlled by the Australian Customs Service (ACS) (Australian Customs Service, 1994, 1995).

An important difference between a domestic and an export business is that the former involves sales to domestic market buyers and the latter to foreign market clients. General business operators conduct business within the domestic country. They are usually familiar with customer needs and the required standards of general business practices within a country’s legal context. As for export trading, there is more effort to be expended on understanding the needs of the foreign customers and the foreign business practice within a different legal environment. This implies that export traders have to know how to conduct their export operations within the legal context of both the local country (to export) and foreign market contexts (to buy export products). All businesses are subject to new requirements and changes in business environments. It is therefore essential to obtain external information to monitor changes and requirements outside the organization. This act of acquisition of external information for use in an organization is also known as environmental scanning. By performing the act, knowledge is gained. The knowledge in turn assists management in planning a future course of action (Tan, 1998). Basically, the viability of any organization depends on the act and the ability to stay ahead of environmental challenge

Obtaining relevant and useful information to update existing information and knowledge is essential. Environmental scanning is therefore a vital organizational task. If general businesses operate within a country context, their environmental scanning is mainly for information within the domestic market where the businesses operate. As for any export trading organization, environmental scanning involves information related to the target country to which goods will be exported. An export trading organization should always scan the environment and learn. The convergence of current information on the same subject matter updates the old knowledge and hence creates new knowledge.

2.4. Needs of knowledge management in export trading

After examining the needs of knowledge in export trading, we need to investigate how knowledge management helps to manage knowledge based on those needs. Every trade needs its own trade knowledge to operate successfully in business. To form a type of knowledge involves relating the relevant information. As discussed before, information and knowledge can be presented through human, traditional textual format or electronic means. In export trading, export traders need their own types of knowledge for successful export activities. It is important to obtain the required export trading information and knowledge. We have identified the value of environmental scanning in both the domestic market and target export market to increase knowledge in addition to the existent knowledge in the export firm. So, what types of information or knowledge should an export trading firm scan for in the environment? The Australian Trade Commission (Australian Trade Commission, 2000) suggests the essential elements for exporting are the self-assessment of business capability to export, banking procedures, international trade terms, identification of characteristics of the likely market, an export plan and more desk research on the likely market.

Assessing export credentials is an important part of export knowledge. The Australian Trade Commission (Australian Trade Commission, 2000) also recommends
that the prospective exporter perform a SWOT analysis. The importance of using the method is to measure strength, weaknesses, opportunities and threats of an organization (Balamuralikrishna, 1995), and functional area, product, market, brand, and the like from both a short term as well as a long term perspective (Anwar, 2000). SWOT analysis can be used as technology planning systems (Miao, 2000). SWOT analysis is used to assess both internal and external environments of an organization. The outcomes of the analyses create knowledge in export firms to assist in determining whether or not to take advantage of any export opportunities and to identify what they can do to the product to create a niche (competitive advantage) in a foreign market.

A goal of exporting is to make business profits in any export venture in the overseas market(s). We investigated some literature on export performance and export success (Kaleka, 2002; Leonidas, 2002; Robertson, 2000; Winklhofer, 2001) and identified the following important factors in exporters’ knowledge.

- Experience in exporting to a number of countries and the number of distinct geographical regions served contributes to the success of export. A battery of individual, organizational and environmental constructs has a bearing upon the export intensity of the firm.
- Possession of superior physical and/or financial resources by the manufacturing firm to improve export products.
- Development of good relationships with customers, directly or indirectly through the acquisition of important export market information, facilitates the development of those product features that meet overseas customer requirements better than competitors’ offerings.
- Important relationship of managerial, organizational and environmental factors to influence the firm’s export performance.
- Importance in mixing the strategic orientation of being entrepreneurial or conservative and the export channel structure to deal with an external environment.¹

In a nutshell, all the above literature suggests that export knowledge is important to ensure export success. The knowledge is only obtained by experiencing the use of physical, financial and material resources for production over an extended period of time. Over years, extensive information is collected, compiled, evaluated, used and tested in terms of whether it is appropriate for export success. This knowledge also allows firms to decide on the strategic orientation and export channels they should employ for optimal export performance in external environments. Knowledge creation generates new ‘realities’ by breaking down rigid thinking and assumption (Bhatt, 2000). Nonetheless, the nature of an export business requires it to assess the known, the unknown, the risks and the opportunities opened up in foreign markets, and to then develop and sell products that adapt to the foreign market needs. From the entire literature review, it reports a propensity for a constant need in renewal of export knowledge in order to provide innovative products in foreign markets for trade viability. In short, knowledge management is critical and must be put in place in export trading firms. Nevertheless, it is essential to apply an appropriate methodology in any research. In the next section, we will explain the method and approach we adopt in this research.

### 3. Method and Approach

The main purpose of the research is to explore how knowledge in the export trading industry is created. Most importantly, this research uses exploratory qualitative research techniques (Gummesson, 2000; Myers, 2001; Strauss, 1990) such as observation, face-to-face interviews, telephone interviews, documentation or archives, and surveys that Yin suggested lead to qualitative research result. The case study method (Yin, 1984; 1989; 1993; 1994; 2003) is used in this research. The factual information collected is substantially textual. The overall aim of the empirical work is to discover what knowledge, technology and knowledge in business processes are in place at a governmental or private service unit in an overall export trading operation. The knowledge used and created is also examined at individual, group and organizational levels in an export firm during the empirical investigation. There are two sub-aims in the exploratory work. For the government agencies, the aim is to find out the major legislative control and its impacts on the export trading activities. For the individual export service providers and export traders, the purpose is to identify the inter-relationship between them.

For this research, we have formulated a research methodology appropriate to exploring knowledge creation in export trading. Allmen (2001) states that there are four

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¹Robertson and Chetty (2000) identify two types of strategic orientations and two types of export channels. The strategic orientation of export firms is either entrepreneurial (high risk-taking, proactive and innovative) or conservative (risk-adverse, passive and non-innovative). The export channel can be mechanistic (centralized decision-making, formal, adhere to practices and principles) or organic (decentralized decision-making, informal, authority in situation expertise).
main sources of data available to social researchers. They are: (i) secondary sources; (ii) observation of the sample; (iii) conducting of interviews (individuals or groups); and (iv) the questionnaire (standard mail, electronic mail or Delphi survey). Miles and Huberman (1994) suggest performing triangulation by data source (which can include persons, times, places, etc.), by method (observation, interview document), by researcher (investigator A, B, etc.), by theory and by data type (qualitative text, recording, quantitative). Adoption of any two or more of the above methods suggested will help improve the validity and rigor of the research results.

In this research, we adopt the following approaches: (i) Secondary sources: We obtained the sources of data through secondary sources. Besides the academic and practice research literature, we obtained documents, in-house export trading bulletins and archives from export trading organizations, government authorities and export service providers; (ii) Researcher: All three researchers have prior work experience in trading organizations with two particularly in the export trading environment; (iii) Theory: Nonaka's theory of organizational knowledge creation is applied in this research. The theory has been an underlying thread throughout our research. It also guides us in observing recurring facts in knowledge issues during our data collection; and (iv) Case study method: We conducted face-to-face interviews, telephone interviews and observation at interview sites with management personnel, experts, and specialists in export trading fields. Each expert freely related to us their specific trading scenario. In some interviews, we observed some work processes in export firms and in government offices. For example, we observed how staff obtained and printed reports of declarations. We were shown trade photos and picture models about export scenes. Many interviewees also demonstrated real-time use of electronic systems. The systems demonstrated include those for export declaration, control of cargo movement at ports, shipping details, and in-house inventory of a manufacturing plant. A survey method as suggested in the case study methodology is used. Some surveys were carried out to collect in-depth textual information. These survey forms contained basically open ended questions. However, to ascertain the important export knowledge, we included a question that requested the respondents to rate the important types of knowledge on a 7-point Likert scale. Survey forms were filled out on the spot at the interview or returned to the researchers at a later time.

In brief, we developed Fig. 2 to provide a clear illustration of our research work. As illustrated in Fig. 2, there are two phases in our research: an exploratory phase and a confirmatory phase. In the exploratory phase, we first conducted the literature review as in the previous section. After having understood Nonaka’s theory of organizational knowledge creation, the theory serves as a starting point and an overarching benchmark for this entire research. We next conducted some field research studies. Observation, face-to-face interviews or telephone interviews and surveys were conducted with the Australian Trade Commission, Australian Customs Service, members in Australia Institute of Export, export service providers and export traders. In referring to individual export service providers and export traders, we mean exporters who export goods by themselves, freight forwarders, carriers, shipping companies, and a few logistic training organizations for exporters.

In the interviews, interviewees were requested to give us leaflets, brochures, documentations and archived materials if they were available and permitted. Some materials were also posted to the researchers upon requests over telephone interviews. Documentation and archived materials were obtained with the permission of authorities. After having collected the data, factual details were compiled and analyzed. We matched all forms of data sources to ensure that the information collected agreed in all ways in all data sources. In a few cases where doubts and discrepancies existed, we sought clarification from the interviewees. This further validated the information we obtained. We then formulated the hypothesis of export trading knowledge creation.

We subsequently moved on to the next phase of confirmatory research. All the factual information from various data sources was checked against one another to further ensure its validity. Triangulation provided us with important factual details, knowledge and experience.
Applying the theory of organizational knowledge creation, some loopholes in the previous theory were identified. We try to explain and describe the theory again with the export trading scenarios. When we explain the theory in an export trading context, a conceptual framework of export trading knowledge creation is obtained and developed. With the empirical work, we are also able to report many major findings of export trading knowledge creation. In a systematic way, the next section will explain the relation between knowledge creation and export trading. Section 5 will explain our development of the conceptual framework. Section 6 will further explain the other major results obtained through the case studies and experimental work.

4. Relation between Knowledge Creation and Export Trading

In this section, we explain the relation between knowledge creation and export trading. To begin, we provide an overall picture of export trading based on what we discovered in our investigations. In the explanation, we relate learning and new knowledge creation at individual, group and organizational levels.

4.1. An overall picture of export trading phenomenon

There are many essential governmental, quasi-governmental or private agencies overseeing export trading in Australia (e.g., Chamber of Commerce, Permit Issuing Authority, Taxation Office and more). Essentially, this research concentrates on three of the most critical organizations, namely Australian Customs Service, Australian Trade Commission and Australia Institute of Export as in Fig. 3.

This sample of organizations was selected for this research to avoid complicating the export trade picture while at the same time having a sample that is most representative of the Australian export trade industry. Specifically, we focus on the relation of knowledge creation, knowledge spirals, innovations and collective knowledge in the export trading firms. These export firms manufacture and export their products. Other than subjects from government agencies, the subjects of export service providers and export firms are from areas around and within Brisbane, the capital of the state of Queensland in Australia. Subjects interviewed were management executives from food, machinery and office product industries.

Australian Customs Service (ACS) is the controlling point for import and export trade in Australia. All goods to be exported out of Australia need an Export Clearance Number (ECN) from the (Australian Customs Service, 1994; 2000; Soon and Chen 2002; Soon, Chen and Underwood, 2002). Australian Trade Commission (Austrade) is the federal government agency dedicated to help Australian exporters take their goods and services into overseas markets (Australian Trade Commission, 1999). Australian Institute of Export (Australian Institute of Export, 2002) assists Australian exporters and export service providers by providing export education and training. Australian Institute of Export trains exporters on what to do and how to actually export a product successfully by enabling them with skills and knowledge. Austrade provides more useful exporting details and advice to exporters so that the business is operated on the right track. ACS actually controls the export activities, ensuring that the exportation of goods is operated within a controlled and legal context.

There are many activities involved in physically exporting goods from an export firm to an overseas buyer. The range of export tasks involves overseas market studies, export logistics, product re-adaptation to suit overseas buyer, and the procedure for actual export of the product. The exporting firm (e.g., the manufacturer of a product) has to package the products according to the needs of the foreign buyer. With boxes or cartons of goods, they have to be packed into containers for shipping purposes. The exporter has to engage a transportation company to transfer the cargo in a container to a carrier. Unless the overseas country is accessible in the form of land transport (e.g., America to Canada), the carriers with cargo train and truck services will not be used. Where goods have to be sent overseas by air or by sea, carriers such as airline companies or shipping companies can be engaged to ship the cargo from the airport or seaport in a country to an airport or seaport of the overseas country. These movements of goods require paper
work processes such as banking documentation, insurance statements, export permits, export declarations from customs and more.

As the procedures of handling such exporting goods are too cumbersome, freight forwarders are often engaged to handle both paper work and physical goods handling procedures. From the field interviews, some executives from freight forwarders and a shipping company revealed that small and medium-sized export firms usually engage freight forwarders to export their goods. With the large export firms, they usually have enough and better resources (e.g., export department/representative office with facilities, transportation equipments and people of expertise) and usually only use carrier services for the shipping of goods.

4.2. Knowledge, learning and knowledge creation

What knowledge exists and what knowledge is new? If an export business has already survived in the trade for a certain number of years, the people in the firm should have sufficient trade-specific knowledge to operate in the export trading environment. Various executives in exporting firms agree that existing knowledge is subject to change. For example, governmental controls may become more stringent, export laws vary over time, technology has advanced, and overseas customers may have higher expectations due to higher living standards and so on. With such experience, it is clear that existing knowledge is subject to constant updating due to unforeseen changes. Another important characteristic is that an export firm needs relevant knowledge in both the general business and export business to operate in export trading. General business knowledge is what is required in any normal domestic business. The product exported can also be a product sold in the domestic market. Besides, the general business processes such as accounting, finance, advertising, production, warehousing and human resource management are to be in place. General business knowledge is therefore required in an export business. Since changes regularly affect the accuracy and quality of knowledge, all export staff should keep themselves updated with any changes.

Export knowledge is a good example of trade-specific knowledge and export trading knowledge is a knowledge domain in its own right. How will the export firms tap into useful knowledge for their business success? Many exporters revealed that firms recruit experienced personnel. The staff is usually conversant in the tasks. When any service, production or technology knowledge is required, any employees usually have the knowledge. However, firms train their staff when it is necessary. A general manager from an export logistic training organization commented that export firms want their staff to learn essential knowledge and new skills to perform different tasks in the firm. Learning is for the purpose of doing various tasks more effectively. There are many types of export related courses in which the firm may want staff to be trained. For example, the transportation course on driving control and fatigue management is useful for container truck drivers who transport cargo across states and over a long distance. Any new skill and new technology has to be learned in order to provide efficiency and effectiveness of business operations. An example he cited was on the use of a more advanced mobile phone for email and word processing for more effective communication and rapid decision making with staff and overseas clients.

From the interviews, we discovered that export traders usually accumulate their knowledge from the export cases and frequencies of export over the years. Besides, the right people with the critical knowledge and experience in the same or similar field of exporting product(s) are hired into each export firm. Any group decision and group effort will contribute towards a group project. We also discovered that learning is important to individuals, groups and the organization. Export firms always need new information. Export firms have a constant need for learning and knowing more. Individuals in export firms have to constantly learn and know more to perform well in their own work in order to react in risky and uncertain environments. Any organizational success needs the combination of effort, ideas, learned knowledge and skills of individuals together. However, there are some examples given in the interviews that humans refuse to share what they know. If it is for a common interest or a personal interest, individuals within organization will share the knowledge. Sharing of knowledge is made difficult when the situation poses a threat to job security or an invasion of their authority. Sharing of knowledge with business associates is more discrete especially when it is uncertain whether the shared knowledge is used against the original knowledge owner’s interest. A significant example given was that of a cola manufacturing firm that never shares the recipe of cola with the business competitors.

5. Conceptual Framework

Being able to relate knowledge creation and export trading together, we are now able to develop a conceptual framework of export knowledge creation. First, it is important to explain knowledge creation at a group level (in a single group and within multiple groups) and at an
organizational level before we show how knowledge creation takes place in the framework of export trading.

5.1. **Knowledge creation at group level**

Clarke (2001) states that knowledge management is to apply the fullness of an organization’s knowledge to make critical decisions. Applying the fullness of knowledge for knowledge management in export trading is important. With this rationale, we now discuss knowledge creation in export trading at a project group level.

5.1.1. **Knowledge of a project group in an export firm**

Exploring the four modes of knowledge conversion in Nonaka et al.’s theory of organizational knowledge creation allows us to build Fig. 4 to illustrate knowledge conversion in a project group within an export manufacturing firm. The four knowledge spirals in Fig. 4 depict the functional effects of socialization, externalization, combination and internationalization processes as four teams of individuals within a project group. Each team member communicates and learns individually. As discussed in Nonaka et al.’s theory of organizational knowledge creation in the previous related work section, knowledge spirals allow learning and also facilitate knowledge discovery, sharing, transferring, and reviewing of knowledge in individuals and groups. Knowledge spirals are applicable to project situations as in Fig. 4. The outer one refers to the knowledge processes occurring within the entire group of the four team functions.

We will use the following case to explain this project situation. This is a case that a chief executive officer related to us about an important manufacturing machine for mass production of factory products. In the case, collective knowledge is required in order to sell the very large manufacturing production machine to an overseas company. Because of cost factors and inconvenience, the machine is too large to be transported and put in the overseas market for “touch and feel” display or viewing in any shopping window or exhibition centre. To allow the overseas buyer to access the information before deciding on a purchase, it requires the work of a project team. The advertising and marketing team function has to announce the product and make it known to the world. The sales team has to communicate and arrange with the overseas buyer to make a sales trip to their firm to view the product. When the overseas client has questions on the product upon viewing, the engineers and designer have to provide technical and practical answers. When the buyer decides to buy, the accounts and finance team members have to invoice and arrange for the delivery of the product. The processes of socializing, externalizing, combining and internalizing knowledge happen in such a project team. It is the collective knowledge expended on the project that facilitates the entire sales transaction.

Collective work is important. As Ernst (2002) highlights, it is a parallel process of integrating hierarchical layers of participants. In this case of exporting a very large manufacturing production machine to an overseas company, it requires the transfer of both explicit and tacit knowledge amongst several individuals. As Prias (1993) explains collective knowledge, “Knowledge includes knowledge about customer expectations, knowledge about ways to prevent systematic variations, and knowledge about other parts of the production process.” This transfer of knowledge takes place amongst staff members from various departments with the organization of the local product supplier. The transfer of knowledge takes place through both formal and informal mechanisms.

Products are intimately linked with the skills and knowledge of the staff delivering the service (Ezingeard, 2000). The new ideas are new collective knowledge evolved and created on the basis of old knowledge of the machine from all the individual members. As a whole, the old knowledge of the requirements in a machine for a local market has to work with new information provided to the team for the successful development and export sales of the new machine. The four modes of knowledge conversions are represented in the project. To communicate in a team (explaining the part of knowledge that a member contributes towards the better product) is to have knowledge externalization. Socialization takes place when engineers guide, demonstrate and go through the production processes with workers to ensure quality and good craftsmanship of the product in manufacturing. To brainstorm and discuss together in project meetings is combination. To have learned the new knowledge gained from this project is internalization.
5.1.2. **Knowledge of different project groups in an export organization**

Different export firms have different organizational structures. It all depends on how many individuals are involved in a group and how many groups are involved in an organizational project. Based on the rationale and the way Fig. 4 is constructed, Fig. 5 also shows two other possible variations with other possible scenarios in various real-life situations.

The inner most spirals depict knowledge of individuals. The second inner most spirals depict knowledge of project groups/teams in various locations. The outer spirals may depict the knowledge of a major national or cross-country project. Such variations of project group knowledge can be observed in very large enterprises having manufacturing plants in various locations, but logistics and sales offices in various parts of a country. An example is a large international product producer with factories and offices in various parts of the country.

5.2. **Knowledge creation in an export firm at the organizational level**

In this paper, the thesis posed is that knowledge creation and knowledge management are influential in export trading. New knowledge, as a result of knowledge creation, creates power to make changes and make critical decisions at the right point of time in export trading. This power helps to provide a solution to existing or predicted problems in export trading, or also to create a new export product or service. It is a “sophisticated” wisdom to respond (with action) to the continuously changing world. The gap in Nonaka et al.’s (1996) research is seeing intellectual capacity as an organizational resource but not explaining that the knowledge spirals can take place beyond individuals. We advocate that the knowledge spiral exists at all individual, group and organizational levels. The individual, group and the organizational knowledge spirals however have to constantly work collectively to create an organizational wisdom. We argue that wisdom emerges through the new knowledge created which is essential to solve problems at individual, group and organizational levels. The effect of constant knowledge spiral work is also to hone wisdom so as to act and react wisely in a changing or uncertain export-trading environment. The wisdom is a critical awareness especially important for seeking knowledge sources. Knowledge sources are from the societal, governmental, legal, political, economical, cultural, technological and business procedural areas inside and outside the organization.

The importance of knowledge management is creating new knowledge (Nonaka et al., 1996) and reducing investment risk (Miller and Morris, 1999). We posit that new knowledge creates organizational wisdom for better problem-solving, decision-making and innovative work. As explained before, the foreign target export market always presents uncertainties and risk for export trading firms. It is through constant learning, environmental scanning, SWOT analysis and knowledge management that create wisdom to act in this challenging environment. Therefore, more effort should be put in to increase the organizational wisdom that will further reduce the investment risk in export trading. Wisdom avoids business losses and increases understanding on how to act in the current and future export-trading environment. We now develop a conceptual model of organizational knowledge creation in export trading.

5.3. **A conceptual framework of knowledge creation in export trading**

We will illustrate the conceptual model of organizational knowledge creation in export trading using Fig. 6.
Figure 6 aims at showing how information forms knowledge and knowledge advises decision making. Such decision making allows better actions to counteract challenges and difficult situations in export trading.

In Fig. 6, the cylindrical symbol represents a database or knowledge source as knowledge input. An oval represents a cognitive process happening depending on different intelligence and talents. A box with rounded corners represents knowledge output as an institution converts cognitive thinking into action. The hexagon indicates challenges or problems triggering the cognitive processes of knowledge management. Export trading always operates in a competitive and challenging environment requiring solutions to new problems as depicted in the hexagon. The arrow from the hexagon triggers a cognitive process in oval 1. For the cognitive processes to take place effectively, we explain that export-trading organizations have to first explore knowledge from various sources from within and outside the organization (knowledge input: two bottom cylinders on left and right of oval 1) through the human interactions, textual documentation and electronic means.

In oval 2 and 3, tacit and explicit knowledge gathered will be processed. We embedded oval 3 in oval 2 to emphasize that tacit knowledge is expressible and convertible into explicit knowledge. The dark shaded bi-directional arrow stresses that tacit knowledge should be codified into explicit knowledge to facilitate organizational knowledge sharing and transfer for knowledge creation. Oval 4 shows that such codified knowledge is processed with an aim to provide solutions and decisions. The knowledge output...
box i is a process and an emphatic space forming knowledge through a series of cognitive processes over human intelligence and talents (Nonaka et al., 1996). An organizational knowledge spiral takes place with an intention to evaluate (identify critical knowledge), synthesize (extract values and create meaningful use of knowledge) and synergize the effects of using critical knowledge at individual, group and organizational levels. New knowledge will be created in the form of new ideas, products and services as in the box ii. We argue that new knowledge also emerges into wisdom. There is an indication in the call-out symbol containing a line graph that the greater the wisdom the less is the risk in export investment in export trading. Box iii shows that new knowledge creation leads to a capacity for innovation and competitive advantage. In turn, it transforms into a critical decision for the right action (box iv) to counteract challenges and solve problems (the hexagon).

6. Case Studies and Experimental Results

In this section, we describe some important findings we obtained from the case studies and experimentations with interviewees. At the time of the interviews, a survey form was handled out to the interviewees. Participation in the survey was voluntary. For the participating interviewees, they were requested to complete the survey during the interview. The survey aimed at identifying the important types of knowledge required in export trading.

6.1. Important types of knowledge and knowledge management

The survey result found the following types of important knowledge in export businesses as in Table 3. Table 3 illustrates the relative orders of importance of each type of knowledge. Percentages are used to indicate the importance in the type of knowledge. Types of knowledge with less than 70 percent in scoring are omitted from Table 3 to avoid a lengthy presentation as the emphasis is on the most critical knowledge for export trading. Some discussions with senior executives in exporting firms also revealed that these types of knowledge directly impact on the export trade operation and the possibility of business success.

Additionally, textual information was compiled and organized into a table as in Appendix A. Appendix A was built based on information and documents obtained. It provides a detailed analysis of such essential knowledge items. It also provides important ideas on those types of knowledge needing further discussion. Further evaluating Table 3 and the information available in Appendix A, Table 4 is developed to present the export knowledge required, needs of environmental scanning, needs of information technology and their relation to information technology and knowledge management.

A focus of this paper is on how knowledge creation involves individuals and groups within export organizations without national boundaries. As addressed in the discussions above, export firms must put knowledge management in place together with organizational learning. Discussion in various interviews showed that management agrees that individuals have to constantly learn to gain new knowledge. They do think that team work within a country or across countries is important and teams should have individuals with appropriate knowledge to contribute to a project and organizational success. All members have to contribute their knowledge through group discussions, brainstorming and, help in making group decisions. The interview results support the following rationale: individuals discover, learn, communicate and revise knowledge through a knowledge spiral. Through meetings the group brainstorms and discusses things which will allow the group knowledge spiral to take place among members. The different project groups, when meeting or discussing together allow another inter-group or organizational knowledge spiral to take place amongst project groups or in an entire organization.

In the discussions with executives in senior management, they were questioned on how innovation, new products and new ideas came about within exporting firms (the focus is on the manufacturing firms of physical products). Innovation was not a one person effort. It was a result of combining the expertise of relevant
Table 4. Attributes of export knowledge for knowledge management.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain knowledge</td>
<td>Technology: Communication tools; information processing systems to help export activities; production technology</td>
</tr>
<tr>
<td></td>
<td>Economy: Whether the population is economically well-off to buy the product</td>
</tr>
<tr>
<td></td>
<td>Society: Demographics, social norms, social needs</td>
</tr>
<tr>
<td></td>
<td>Laws: Import duties, local tax on products, import licensing, overseas import laws</td>
</tr>
<tr>
<td></td>
<td>Politics: Political structure and critical political issues impacting exports</td>
</tr>
<tr>
<td></td>
<td>Government: Government control &amp; regulations e.g. labeling standards, quarantine, consumer protection rules and product standards</td>
</tr>
<tr>
<td></td>
<td>Culture: Cultural difference in that country in terms of characteristics, behaviour and needs</td>
</tr>
<tr>
<td></td>
<td>Procedure: Export procedures, overseas import procedures, overseas business practices</td>
</tr>
</tbody>
</table>

Classification: Tacit vs explicit

Learning context: Human

Electronic means: Internet, CD-Rom/online database, telephone technology, email, TV/radio news & etc

Traditional formats: In-house bulletin, magazines, trade journals, newspapers, reports, & publications

Temporal factor: Data — Past

Information — past & present

Knowledge — Present & future

Impact on KM: Data processing

Information system

Knowledge management

personnel. With further examination, they explained that the expertise was from management insight, research and development teams, marketing teams, the engineers or designers, and any other important knowledge contributors. The important point is that there are practices in place to provide collective knowledge. Collective practice is what these executives saw as the team work, project group effort and assembling various people with expertise, skills, knowledge, beliefs, values and passion work together for a common organizational goal. The heterogeneity of groups may lead to an organization that is adaptive and responsive to the environment (Leonard, 1996). Export firms are warned that homogeneity of groups within the organizations may lead to “tunnel vision” on the part of the organization.

6.2. Technology as an enabler in knowledge management

Do export firms use information technology and how can information technology help export firms manage their knowledge? As for how information technology can help in knowledge management, there are various perspectives from different respondents. From the interviews, when the importance of the use of technology was acknowledged, the importance of human information processing was also emphasized. While information processing helps speed up paperwork, processes and stores much more information, the respondents do not agree that an information processing system covers all knowledge required in an export firm. Some export-related information is not available through information technology, even on the Internet. Generally, the respondents remarked that information processing systems do speed up office work. The general comment was that knowledge required in the export trade was beyond what can be captured using the information technology alone.

While technology serves as an enabler in knowledge management, people are a more important enabler for knowledge management in export trading. One fact highlighted in the data collection was that a member of the export firm should visit a country to assess the particular foreign market needs. During such a visit the staff member should do the following: evaluate the conditions in the target country, understand how the marketing firms operate in the country, conduct market survey research
and build up business contacts and relationships with prospective corporate or individual clients. The research found that obtaining reliable information from chambers of commerce and export related associations and attending relevant international trade workshops and seminars, is critical.

Respondents remarked that constantly socializing with export-related personnel from all government agencies or private organizations will lead to critical new information and knowledge in export trading. Their explanation is based on the fact that exporting to overseas markets involves uncertainty. The overseas market may be malignant (adverse conditions and risk-taking) or benign (positive conditions and export opportunity). Any market research or new product development to be done requires new information not possibly captured in any form of technology. Even when the Internet provides an exponential amount of information, it does not cover the buyer preference, expectations and foreign market distribution needs in any prospective buying situation. How the product can be developed to adapt to such a different market is the critical new knowledge to be obtained for export success.

6.3. Processes in knowledge management and environmental scanning

The knowledge of export traders originates from inside an organization, within a country and in the target market country. However, export trade situations and knowledge has to be gained from learning outside the organization. Ongoing organizational learning can explore more knowledge, facilitating the creation of new knowledge. The respondents agreed that environmental scanning for external information in addition to the internal information is mandatory in an export firm. The information being processed forms critical knowledge for export trading. Environmental scanning will capture both domestic market and overseas market information. This is important, as the products have to be exported out of the country in a legal context and imported into the overseas country in a regulated environment. The combined internal and external information will help in SWOT analysis to determine the risk and opportunity for export activity.

We developed Fig. 7 to illustrate knowledge processes in export trading in relation to knowledge management. Figure 7 also shows how knowledge is obtained and used at the individual, group and organizational levels. The knowledge group spirals may involve project groups within a country or across countries. In Fig. 7, all of the knowledge spirals as a whole in the centre of the figure denote constant organizational learning. The learning processes allow an export firm to gain knowledge within and outside the organization from all sources (e.g., government, competitors, etc as shown in each rectangular box). The innermost rectangular box shows the learning process and knowledge creation within an organization. The second rectangular box shows a general business environment within the exporter’s country legal context. The outer rectangular box shows all foreign country legal contexts.

Fig. 7. Environmental scanning for knowledge in export trading.
The three rectangular boxes aim to show how knowledge should be gained: from within the organization (innermost box); from outside the organization but within the country (second box); and outside the organization but within the target market country (beyond domestic country) (outer box).

6.4. **Organizational knowledge creation in export trading**

Figure 8 is developed to further explain the attainment of innovation as a result of organizational knowledge creation in export trading. It also informs the targeted audience of this research of the importance of knowledge management in export trading.

The baseline in Fig. 8 denotes a learning ground. On such a learning ground, information and knowledge are the types of important knowledge covered in Table 2 even though only some essential ones are listed under the line. The eye denotes a constant scanning for such new information and new knowledge applicable to export trading from environments (through human, textual and electronic means). From this learning ground, information of the essential knowledge types from the export knowledge domain is obtained. Such information and knowledge can be put into good use in the organization. Whether the information is gathered from within the domestic market in the country or from the target foreign export market outside the organization, it should be effectively used in the organization.

Knowledge is processed through evaluation, synthesis and synergy to pronounce its usefulness. All knowledge spirals at individual, group and organizational levels work in order to achieve a collective practice. New knowledge is obtained at all three levels. Knowledge management has to be practiced collectively so that the collective knowledge is available. This collective knowledge is a new competitive knowledge working towards achieving organizational benefits and goals. This new knowledge is a form of wisdom to provide innovation. It should be apparent in the project group(s) in order to achieve the common goal. This wisdom is used to solve problems, plan and make critical decisions in export trading. Competitive advantage is delivered through the foresight, hindsight and insight that it provides.

7. **Conclusions and Future Work**

There are important findings made through this research. When collective effort is in place in an export firm, there is collective practice and collective knowledge. The new knowledge is a competitive knowledge for product innovation which is particularly essential in export manufacturing firms. The new knowledge is critical to obtain competitive advantage, and aid decision-making and strategic planning. Learning and knowledge creation should however go beyond the individual level to also reach the group and organizational levels. The new collective knowledge is important for export traders to sustain business viability in a competitive global knowledge economy. The new collective knowledge forms organizational wisdom. This wisdom is required for innovation, decision-making, planning and competitive advantage. It also creates strategic business advantages, leverages market positioning, and assures export trading success.

This research highlights a very strong need for export firms to become learning organizations and to manage knowledge. The main contributions of this research are twofold. Essentially, it provides a conceptual framework of knowledge creation in export trading. It also explains how innovations can result from knowledge creation in export trading. Secondly, it also fills a gap in prior research work by drawing attention to the need for knowledge creation to exist at three levels: individual, group and organizational. We further conclude that when knowledge is created at all three levels, an organization obtains organizational wisdom. This wisdom is important in handling risks and challenges in the world of competitive global business.

This research is based on various in-depth qualitative analyses. However, to statistically reflect various types of comparisons involving a wider population in the export trading community, we will conduct quantitative research in export trading in the future.
Acknowledgements

The authors would like to thank the senior executives from various export firms and export service providers that have generously shared their time and participated in this research. Similar attitude goes to the officers in Australian Customs Service, Australian Trade Commission and Australian Institute of Export. Additionally, the authors would like to thank the reviewer for many positive comments to further improve the quality of our paper.

References


### Appendix A. Important knowledge in export trading.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Analysis</th>
</tr>
</thead>
</table>
| Government | - Within a country, there are various rules, regulations and acts governing the export trade.  
- Various government departments are granted authorities to control the movement and sales of items overseas. To do so, they exercise rules and regulations.  
- Another major control is over items not to be exported overseas (e.g. Cultural heritage), restricted goods (e.g. goods needs certification), or unrestricted goods (cargo still need to be declared to ACS).  
- Exporters also need to know what overseas import regulations and country control are over import. |
| Laws | - Government enforce some rulings into export laws.  
- The laws appear in sections and acts.  
- Infringements of such laws incur penalty.  
- Knowing the exporter’s country laws is insufficient. The exporter needs to know the overseas buyers’ country laws to buy products from overseas too. |
| Political issues | - There may be some governmental best practices known to the general export traders on what to do and not to do.  
- Policies do not aim at imposing fines or penalties. They aim at fostering a relation or create a better way of doing thing.  
- Policies restrict the cargo exporting movement to or from certain part of the world due to war-time, religions, locality or regional needs.  
- Over each trading organization, each trader implements their internal policies to cooperate with government fulfilling the laid-out policies. |
### Appendix A. (Continued)

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economy</strong></td>
<td>• When the economy is strong, the government will purchase and invest in highly skilled manpower and high-tech equipment to facilitate trading and improve trading procedures.</td>
</tr>
<tr>
<td></td>
<td>• The export traders must be relatively well-off to invest in the minimum manpower, technology, operation and maintenance.</td>
</tr>
<tr>
<td></td>
<td>• Government may provide export subsidy or grant to encourage the use of technologies in order to facilitate trading and improve trading procedures.</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>• Export trading operates within an environment in a legal domain.</td>
</tr>
<tr>
<td></td>
<td>• Peer export traders have mutual influence on the standards, general practice and agreement on trading procedures.</td>
</tr>
<tr>
<td></td>
<td>• There must be knowledge on geography, climate of export trade, energy of manpower, population overseas for international trade/marketing.</td>
</tr>
<tr>
<td><strong>Technologies</strong></td>
<td>• As technologies advance rapidly, government will lead all virtual export-trading communities spearheading an adoption of any nascent technology.</td>
</tr>
<tr>
<td></td>
<td>• The confident and competent virtual members are well-informed and educated over the change-over to any new technology.</td>
</tr>
<tr>
<td><strong>Social/demography</strong></td>
<td>• The government must encourage the use and implementation of the same technologies (two kinds as aforesaid).</td>
</tr>
<tr>
<td></td>
<td>• The export traders respond by fully employing technologies.</td>
</tr>
<tr>
<td><strong>Payment/finance</strong></td>
<td>• The financial payments arranged between vendor and overseas buyer need to be decided before the export.</td>
</tr>
<tr>
<td></td>
<td>• Payments must be clearly laid out in details such as which banks are involved in both buyer and seller sides. Any checking and confirmation statement associated with the payment agreement should be stated in the payment agreement.</td>
</tr>
<tr>
<td></td>
<td>• For such an international sale, the sale contract agreement is different from that in any other types of trading. It is essential to spell out what the payment covers (e.g. EXW (Ex works), FOB (Free on Board), CIF (Cost, Insurance and Freight), DDU (Delivered Duty Unpaid), or CPT (Carriage Paid To).</td>
</tr>
<tr>
<td></td>
<td>• The payment amounts, methods, credit period, credit term and any specific trading requirements or conditions must be formally written into the contract (sometimes with the aid of a lawyer) to avoid international business disputes later.</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>• The method used to transport or the transportation mode of cargo is essential. For example, dairy products, fruits and vegetables are perishable and need short transportation turnover time.</td>
</tr>
<tr>
<td></td>
<td>• The costs and time associated with the types of cargo to be transported have to be taken into account.</td>
</tr>
<tr>
<td></td>
<td>• Whether the shipment should go over on the land (e.g. from Canada to America), by sea or by air must be decided.</td>
</tr>
<tr>
<td></td>
<td>• Factors on human, time, distance and types of cargo are to be considered.</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td>• In relation to the export cargo to be sent to the overseas buyer, which type of insurance is paid for and what insurance has covered is to be decided.</td>
</tr>
<tr>
<td></td>
<td>• What insurance and insurance companies are available to deal with international trade and costs related to it have to be identified.</td>
</tr>
<tr>
<td><strong>Export procedure</strong></td>
<td>• If the export amount is small, the organization may prefer to engage a customs agent or a freight forwarder.</td>
</tr>
<tr>
<td></td>
<td>• The export company will operate like any trading company with the departmental structure similarly. The export organization will still adopt normal structure like any trading company. Departments such as human resource, accounting and finance, sales and marketing, administration, production and warehousing will exist.</td>
</tr>
<tr>
<td></td>
<td>• However, there will be an emphasis on staff having shipping, export legislations, international business dealings skills, and export related knowledge, especially in sales/marketing department.</td>
</tr>
<tr>
<td></td>
<td>• As international trading involves different business practices from general trading, there may be a shipping department involved.</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>• Production caters for overseas market other than any local business dealings.</td>
</tr>
<tr>
<td></td>
<td>• The labels and product descriptions may be done differently.</td>
</tr>
</tbody>
</table>
### Appendix A. (Continued)

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Packaging material used may be different. For example, some vegetables for local market consumption are packed in cartons. But it is packed in vacuum air-tight packing for overseas sales purpose.</td>
</tr>
<tr>
<td>Sales/marketing</td>
<td>• Information is to be sought on what the overseas market is like in terms of demography, competitors, market demand for the types of product and so on.</td>
</tr>
<tr>
<td></td>
<td>• Are there some different needs in the types of marketing techniques? Is there a need to speak a language to negotiate a business deal? Is the product used within a local community overseas? Are there restrictions posed by the religion, government control or laws. For example, wine is never sold to a Muslim country due to religion and country governmental control.</td>
</tr>
<tr>
<td>Customer relations</td>
<td>• To foster a customer relations with overseas require the understanding and empathy of local language, culture and believes.</td>
</tr>
<tr>
<td></td>
<td>• The skills required to create a strong, good and healthy relations for regular and constant business will be different from that with customers in the exporter’s country.</td>
</tr>
<tr>
<td>Competitor</td>
<td>• Are there ways to penetrate into the local market overseas? Places where an ethnic community requiring a certain cultural food or products will create demand for country which can produce the food or products.</td>
</tr>
<tr>
<td></td>
<td>• In the overseas market, there may be local competitors selling the similar products. What market share they will take and what will the export trading company’s share be?</td>
</tr>
</tbody>
</table>

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