# CUSTOMER PRODUCT SPECIFICATIONS AND EXPORT PERFORMANCE OF FOOD PROCESSING ORGANIZATIONS IN KENYA A CASE OF DEL MONTE KENYA LIMITED

Esther Karuri<sup>1</sup>, Margaret Oloko<sup>2</sup>

<sup>1</sup>Department of Commerce and Economic Studies, Jomo Kenyatta University of Agriculture and Technology <sup>2</sup>Senior Lecturer, Department of Commerce and Economic Studies, Jomo Kenyatta University of Agriculture and Technology

Abstract: This paper identifies the influence that customer product specifications have on export performance of food processing organizations in Kenya. Employees of Production and Logistics department at Del Monte Kenya Limited formed the population of the study. Primary data was collected by administration of questionnaires to the target population. Descriptive statistics was used in analyzing the data, where summaries were made and conclusions derived based on the findings. The information is presented in the form of tables. The researcher found that product specifications have a negative influence on export performance, with stock age specifications and shelf life specifications having the most negative influence on export performance. The researcher therefore concluded that food processing organizations seeking to export their products should identify and serve markets in which customers present the least product specifications, since these specifications affect the volume of export sales made, number of markets served, and management of the organization have a negative attitude towards these specifications.

Keywords: Customer Specifications, Product Specifications, Export Performance.

## 1. INTRODUCTION

Ever since the industrial revolution, the world is evidencing a paradigm shift in the operations of manufacturing organizations. The manufacturing industry began what was called craft manufacture where workers produced a unique single piece of a product. However, as demand grew, industry introduced ways and means to increase the throughput of a product and standardize the product specifications. The product specifications were standard and manufacture was tailored to meet these standard specifications. In short, it was a sellers' market. However, the customer began slowly but surely to demand products of his choice to his specifications and quality levels and industry was forced to adopt the model of mass customization, where the components of a product were manufactured en masse but the final product delivered was configured to meet the specific customer requirement. For example, at Dell, customers can actually log on to the net and configure their PC to their requirement and the delivery is per the customer specifications (Mohanty, 2008). Specifications can be defined as a detailed list of requirements or particulars in specific terms. Therefore, customer specifications are a detailed list of requirements regarding a product, material, process and so on that a customer gives to the seller (Reed, 2006). A significant reason why consumers self-engage with composing their product purchases is to satisfy their desire for quality. In order to assess what the customer or market specifically wants, many producers are delaying the final configuration of the product as it traverses the supply chain. Faced with the need to accommodate imminent consumer idiosyncrasies, it is a natural option for a company to seek opportunities for postponing some activities, like the final processing or manufacturing of a product, to as late a time as

Vol. 2, Issue 1, pp: (1-6), Month: April 2014 – September 2014, Available at: www.researchpublish.com

possible in order to improve its prospects of delighting the customers (Mario and Laszlo 2007). However, fresh food manufacturing organizations are faced with the dilemma of Perishability. Rapid delivery is essential in ensuring the product reaches the consumer in top quality, therefore postponement may present its challenges. Product specification describes a product in terms of the design characteristics. Design characteristics influence the quality of a product and include dimensions, weight, surface finish, shape, size, physical and chemical properties and performance. The product has some properties that try to fulfill the customers' requirements or specifications. These properties include: performance (functional characteristics), aesthetics (sensory characteristics: sound, feel, look and so on), reliability (consistency of performance), durability (usage of life) and maintainability. Product specifications affect the quality of the product and the price paid (Rajendra, 2007). With globalization, export-led growth strategy has become a major focus for many countries including Kenya. Although there have been efforts towards diversification of the export sector, Kenya's exports are still dominated by primary agricultural products (Were, 2002).

## 2. LITERATURE REVIEW

#### 2.1 Theoretical Framework

As a result of the increasing tendency towards a global economy and the severities of trade deficit pressures by many countries, firm behaviour and performance in export markets has received considerable research attention over the last two decades. The two principal modes of performance assessment identified in the general literature are objective (e.g. based mainly on records relating to absolute figures of company profitability, sales level and such like) and subjective (e.g. managers' perceptions) measures. In the context of export marketing, the vast majority of studies have utilized objective performance indicators. Nevertheless, there are two different sources of problems with the use of objective measures in assessing export performance. One is concerned with research methodology. In this regard, two potentially important limiting issues warrant consideration. First, formal company financial statements and reports often make no clear distinction between domestic and export business operations, due in part to the fact that many firms view exporting as an extension of their domestic activities. The question which may then be raised is whether accurate objective indicators of export performance can always be obtained (Constantine, 1996). The four major measures of export performance are; export intensity, number of countries in the firm's base, management's perceptions of export profitability, and management's satisfaction with export performance (White et al., 1998).

# 2.2 Empirical Literature

#### 2.2.1 Customer Specifications

The review of existing research work shows that understanding and fulfilling individual customer requirements has been recognized as a pressing challenge for companies across industries. As customers increasingly demand for individual products, companies start to pursue the strategy of offering customer focused products with a large degree of individuality. A broad range of socio-cultural factors emphasize the fact that customer requirements within one customer group may conflict considerably with another (Thompson, 2011).

#### 2.2.2 Product Specifications

Product specifications are based on what the customer needs and wants, and how the producer can meet the expectations. Product specifications descried what the product has to provide and define the product characteristics so that the product can be produced. They include the technical requirements used to design the product, and the physical and psychological characteristics (Rainey, 2008). The manufacturer must translate customer requirements into detailed product and process specifications. Product specifications might address such attributes as size, form, finish, taste, dimensions, tolerances, materials, operational characteristics and safety features. The customer is the driving force for the production of goods or services. The manufacturing function is responsible for guaranteeing that product specifications are adhered to during production and that the final product performs as intended (James and William, 2008).

Vol. 2, Issue 1, pp: (1-6), Month: April 2014 – September 2014, Available at: www.researchpublish.com

Today, many companies are interested in improving their competitive edge in the global marketplace where rapid changes occur due to technological innovations and changing customer demands. These companies realize that in order to bring product innovations and value-added services to the market in a timely fashion, they must know the wants (like-to-have), needs (must-have), and desires (wish-to-have) of their customers and quickly fulfill these wants, needs and desires as completely as possible (Usher *et al.*, 1998). It is desirable that the customer gets as much freedom as possible when specifying the requirements for a product. He should be free in what kind of information he provides about the desired product: functional information, technical information and structural information (Shwarze *et al.*, 1996).

Canned pineapple is the product prepared from fresh, frozen or previously canned mature pineapple, conforming to the characteristics of *Ananas comusus* (L) Merr., and from which peel and core have been removed, packed with water or other suitable liquid medium; it may be packed with nutritive sweeteners, sweetening or other ingredients appropriate to the product and processed by heat in an appropriate manner, before or after being sealed in a container so as to prevent spoilage. Any commercially cultivated variety suitable for canning may be used. Canned pineapple may be packed in the following cuts: whole, slices, spears of fingers, tidbits, chunks, cubes, pieces, chips or crushed. Canned pineapple may be packed in a regular pack or a heavy pack. Regular pack contains a liquid packing medium, such as own juice. Heavy pack consists of crushed styles, with or without sweetening ingredient and containing at least 73% drained fruit weight (Ranganna, 2008).

## 3. STATEMENT OF THE PROBLEM AND RESEARCH GAP

Several studies concerning export performance have been conducted, but none of the studies have looked at the influence that product specifications made by customers have on export performance of food processing organizations. Wolff and Pett (2000) conducted a study on internalization of small firms: an examination of export competitive patterns, firm size, and export performance and concluded that no significant difference in export intensity across three size categories of small firms was found. Robert and Elko (1985) conducted a study on the impact of export strategy on export sales performance and concluded that the types of foreign markets selected, segmentation strategies and product strategies all have a pronounced impact on export sales and export growth. Leonidas *et al.* (2002) conducted a study on marketing strategy determinants of export performance: a meta-analysis and concluded that although many marketing strategy variables demonstrate positive effects on overall export performance, the relationship is not always significant.

There exists a research gap in the study of customer influences on export performance. Many customers want products that fit their specific needs. These customers are not willing to pay premium prices for those customized products compared to competing standard products in the market (Martin and Joakim, 2004). Some international customers provide detailed instructions on characteristics related to the product, packaging and delivery. In food processing organizations, where products are processed on a make-to-stock basis, customer product specifications present a challenge when the customer needs a product other than what is in stock. This study therefore provides fresh insight that sheds light on the influence that customer product specifications have on export performance of food processing organizations. International markets offer vast opportunities for organizations to grow.

#### 4. METHODOLOGY

The study used descriptive research design. Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or of a group. Using descriptive research design helped the researcher obtain precise and concise information about the target organization (Kothari, 2005). The target population was the management and employees of Production and Logistics department at Del Monte Kenya Limited. Purposive sampling also called judgment sampling which is a non-probability sampling method was used in determining the sample of the study. There are many food processing organizations in Kenya. However, the researcher selected Del Monte Kenya Limited. The selected organization exports large volumes of canned pineapple products to a diverse international market whose customers have differentiated preferences. Statistical Package for Social Scientists was used in analyzing the data and information derived was presented in the form of tables.

Vol. 2, Issue 1, pp: (1-6), Month: April 2014 – September 2014, Available at: www.researchpublish.com

## 5. RESULTS AND DISCUSSION

Table 1 Frequency of Appearance of Product Specifications on Purchase Orders

<b>Product Specification Category</b>	Mean Frequency	Likert Point  Sometimes	
Fruit size specification	3.02		
Fruit grade specification	5.00	Always	
Fruit pack medium specification	5.00	Always	
Fruit cut specification	5.00	Always	
Product/stock age specification	3.37	Sometimes	
Shelf life specifications	3.50	Often	
Chemical properties specifications	2.75	Sometimes	

Table 1 indicates the frequencies with which different product specifications made by customers appear on purchase orders. The points in the Likert scale were: 1-Never; 2-Rarely; 3-Sometimes; 4-Often; 5-Always.

Table 2 Percentage of Product Specifications Made by Each Market

<b>Product Specification Category</b>		Export Market	
	Europe	Middle East	Americas
Fruit size specifications	20	15	-
Fruit grade specifications	100	100	100
Fruit pack medium specifications	100	100	100
Fruit cut specifications	100	100	100
Product/stock age specifications	-	100	-
Shelf life specifications	1.7	98.3	-
Chemical properties specifications	3.3	88.3	8.3

Out of every 60 purchase orders received from each of the three markets served by the organizations, Table 2 displays the percentage of orders containing each category of product specifications in each market. While fruit size specifications only occur sometimes; most of these (20%) are presented by customers in the Europe Market. Fruit grade specifications, fruit pack medium specifications and fruit cut specifications are always presented in purchase orders from customers across the three markets. Only customers from the Middle East provide product or stock age specifications appearing in all 60 orders received from the market. These customers will usually specify that products should be shipped on the same month they have been manufactured, or not be older than a given time frame. Middle East market also presents the most shelf life specifications at 59 orders, (98.3%) out of 60 orders. Presence of strict quality policies in their countries is a reason why Middle East customers make these specifications. Out of every 60 orders received from Middle East, 83.3% of these present specifications concerning chemical properties of the product, while only 3.3% are received from the European market and 8.3% from the American market. Chemical properties of a product affect the final taste of a product; hence these specifications are driven by the tastes of the customer.

Vol. 2, Issue 1, pp: (1-6), Month: April 2014 – September 2014, Available at: www.researchpublish.com

Table 3 Volume of Export Sales and Number of Markets Served

Market	Containers of canned pineapples exported in a year	Number of markets served
Europe	4,000	35
Middle East	150	5
Americas	20	1

As shown in Table 3, the organization exports the largest volumes of canned pineapple products to Europe, where the highest number of markets are also served. Approximately 83% of the European market is served by the organization, 20% of Middle East market is served while only United States of America is served in the American market.

#### 5.1 Influence of Customer Product Specifications on Export Performance

Fruit size specifications sometimes appear on purchase orders, with most of these specifications coming from the European market. However, volume of export sales to the market is large at 4,000 containers of canned pineapple products shipped to the market in a year. Fruit grade specifications, fruit pack medium specifications and fruit cut specifications are made by all customers in the three markets. It is seen however that the organization performs well in terms of export volumes to Europe but not so well to Middle East and Americas. Therefore, fruit grade specifications, fruit pack medium specifications and fruit cut specifications have no influence on export performance of the organization. Stock age specifications are made exclusively by customers in the Middle East market as are majority of shelf life specifications and chemical properties specifications. Volume of export sales to the Middle East market is low at only 150 containers of canned pineapple products exported to the market in a year, and only 20% of the market served. The reason that the American market is not served by the organization, except the USA is that Del Monte Fresh Produce, the mother company of Del Monte Kenya Limited is located in the USA and serves the American market. Asked if the organization was meeting its export objectives, the managers at the organization said that the organization was not meeting these objectives. The reason given for this was that some strict product specifications given by customers were difficult to meet, leading to cancellation of orders due to delayed delivery and unavailability of stock.

#### 6. CONCLUSIONS

Based on the volume of export sales to the different markets, and the number of markets served in each group of markets, the researcher concluded that stock age specifications, shelf life specifications and chemical properties specifications have a negative influence on export performance of food processing organizations, while fruit size specifications, fruit grade specifications, fruit pack medium specifications and fruit cut specifications do not influence export performance.

#### 7. RECOMMENDATIONS

On the basis of the study, the researcher recommends that food processing organizations should seek to market their products to markets in which customers make the least product specifications. Specifications concerning product stock age and shelf life may prove difficult to meet especially in organizations that manufacture their food products on a make-to-stock basis. Chemical properties specifications, for example Brix to Acid Ratio of a product are sometimes affected by the weather patterns, therefore meeting such specifications can be impossible. Failure to meet customer specifications leads to loss of the customers and as such the organizations should focus more on the markets in which they can fully meet the specifications of the customers concerning the products they export.

Vol. 2, Issue 1, pp: (1-6), Month: April 2014 – September 2014, Available at: www.researchpublish.com

#### REFERENCES

- 1. Constantine, S., Nigel, F. and Chris, I. (1996). *Determinants of Export Performance in a European Context*. European Journal of Marketing, 30(6):6 35.
- 2. James, R. and William, M. (2008). The Management and Control of Quality. 7th Edition, Thompson, Southwestern.
- 3. Kothari, C. (2005). Research Methodology, Methods and Techniques. New Age International Ltd, New Delhi.
- 4. Leonidas, C., Constantine, S. and Saeed, S. (2002). *Marketing Strategy Determinants of Export Performance: A Meta-Analysis*. Journal of Business Research 55(1): 51-67.
- 5. Mario, J. and László K. (2007). *Customization: Moving Customers Away From the Dull Conformity of Brand Loyalty*. Managing Service Quality, 17 (4): 449 467.
- 6. Martin, R. and Joakim, W. (2004). *Mass Customization in Terms of the Customer Order Decuopling Point, Production and Planning Control*. The Management of Operation, 15(4): 445-458.
- 7. Mohanty, R. (2008). Management Practices. Anurag Jain, New Delhi, India.
- 8. Rainey, L. (2008). Product *Innovation: Leading Change through Integrated Product Development*. Cambridge University Press, Cambridge.
- 9. Rajendra, M. (2007). Materials Management. Anurag Jain, New Delhi, India.
- 10. Ranganna, S. (2008). *Quality Control for Food and Vegetable Products*. 2<sup>nd</sup> Edition, Tata McGraw-Hill Publishing Company Limited.
- 11. Robert, G. and Elko, K. (1985). *The Impact of Export Strategy on Export Sales Performance*. Journal of International Business Studies 16(1): 37-55.
- 12. Schwarze, S., Paul, S. and Max, E. (1996). Configuration of Multiple Variant Products. Hochschulverlag Ag, Zurich.
- 13. Thompson, K. (2011). Proceedings of the 6<sup>th</sup> International Conference on Axiomatic Design. ICAD 2011, Korea.
- 14. Usher, M., Utpal, R. and Hamid, R. (1998). *Integrated Product and Process Development: Methods, Tools and Technologies*. John Wiley and Sons Inc, Canada.
- 15. Were, M. (2002). *Analysis of Kenya's Export Performance: An Empirical Evaluation*. Kenya Institute for Public Policy Research Analysis.
- 16. White, D., David, A. and John, K. (1998). *Measuring Export Performance in Service Industries*. International Marketing Review, 15(3): 188 204.
- 17. Wolff, J. and Pett, L. (2000). *Internalization of Small Firms: An Examination of Export Competitive Patterns, Firm Size, and Export Performance*. Journal of Small Business Management 38(2): 34-47.

# Acknowledgements

My gratitude goes to my supervisor Dr. Margaret Oloko for her guidance, persistence; understanding and willingness to share her knowledge, going an extra mile to assist me make this achievement. I also wish to thank the employees of Production and Logistics Department at Del Monte Kenya Limited for their cooperation.