

COMPETITIVENESS OF A PRODUCT BASED ON ITS PACKAGE: A CASE STUDY OF TANZANIAN LOCAL CONSUMER PRODUCTS

Jailos M. Nzumile, Tutorial Assistant, Department of Legal and Industrial Metrology, College of Business Education (CBE), P. O. Box 1968, Dar es Salaam. Email: mrishojailos@gmail.com Phone: +255 620 432 162

ABSTRACT

Industrialization is a holistic notion as it is not relying on a single factor e.g. foreign investments or availability of resources. The holistic nature of the notion is in the sense that it requires integration of multiple entities such as technology, policies, market assurance, product competitiveness etc. just to mention as a few to actualize it. It has been noticed that most of the local producers ignore the very substantial part of packaging which is a marketing tool when it comes to selling a product. This results to poor performance of the product in the market. Following this, a research was conducted based on the local consumer products (cocoa, peanut butter, cashew nuts & tea bags) to assess and inspect the way packaging was done on different products in the supermarkets located in Dar es Salaam. The assessment was based on two groups of packaging aspects that includes structural elements and graphical elements of packaging. Structural elements composed of packaging material and wrapper design whereas graphical elements composed of label and images on the package. These elements were assessed on a particular product by considering at least two criteria under each element. Weighted average as a statistical tool was employed in which a weighting factor was assigned on each criteria which add up to 1 which is then multiplied by the score of each product and finally average was computed under each product to see whether the product is competitive or not. The results revealed that on the case of structural elements of packaging among the assessed products, it revealed that peanut butter products has the highest score (97.3%) as its packaging material is robust and appropriate while tea bags has the least score (57%) in which the package is slightly not compacted and the material is somehow light which might lead to easy penetration of foreign materials. These prompt some improvements to be done on the said product to increase its competitiveness. Graphical elements on the other hands revealed that tea bags has the highest score (78.1%) as its image and labels were done effectively and color combination and representation were okay. In the same regard, Cashew nuts had the least score (49.8%). Labels and images were not done effectively and color of the product wasn't there at all. Improvements needs to be done on the way local producers are packaging their cashew nuts to secure their position in the market internally as well as externally.

Keywords: Products, Weighted Average, Graphical Elements, Structural Elements, Product Competitiveness.

1.0 INTRODUCTION

It is unbeatable facts that industrial development does not rely on a single factor, but it is an integration of various factors which when implemented simultaneously, the actualization of industrial development will be attained. The very substantial areas for which a country seeking to achieve industrial development must consider includes the technological advancement, government policies, market assurance as well as product competitiveness. Technological advancement is indispensable for industrial development. It plays a key role in ensuring that a country is catching up with the technological trends in the world and makes any new technology available in the country. The achievement of technological advancement is mostly revealed by considering the quality of education that is offered to the community, and the transfer of technology through training provision to the indigenous people.

Government policies to the large extent become a catalyst to industrial development of any country. Dating back to the vast development of industries, countries in the East Asian region, at first set their policies towards promoting industrial sector. Much of their efforts were on the rationalization of industries ensuring that their products are well exported. The country's industrial policy is responsible for ensuring that all the unnecessary bureaucracies to fulfill the requirements pertaining to investment procedures are removed or adjusted aiming at simplifying and shortening the process. Notwithstanding the good industrial policy that the country has set, market plays a key and unquestionable role in promoting industrial development. Market is considered to be the driving force of industries as it dictates to what quantity should the industries produce, the level of quality of the produce as well as type of product.

Product competitiveness is a key and crucial part within which the marketability of the product is determined. It is an integration of different aspects that takes account of very large number of interrelated factors. One can simply define product competitiveness as, attaining a balance between the cost of production and the value of the products meanwhile

meeting customer's need in the market. But rather it is a complex phenomenon that involves intensive knowledge as well as intensive material. To sustain in the market, based on product competitiveness, a company needs to ensure continuous improvement of the product competitiveness, increase sales volume in the market segment specifically by improving the quality of the existing product or producing a new product that fulfill customer's need in a high competitive level.

1.1 Problem Statement

Marketing mix tactics are mostly considered as tools to convince customers to buy product by most marketers. However, packaging plays a substantial role when it comes to decide what to buy at the final moment by customers (Fatemeh et al., 2017). Despite the fact that a bunch of literatures have pointed out the significance of packaging, still there are lots of products produced by locals with poor packaging to the extent that they fail to withstand external circumstances that affect the products. This is witnessed by the way local products are packaged in contrast to the imported ones leading to less sales when taken to the market. The paper is basically attempting to uncover the competitive advantages added by packaging to the product and also analyze few sampled local product in terms of their packaging to point out some areas of improvements.

1.2 Purpose of the Study

This paper aims at imparting knowledge and encourage Tanzanian local producers on how good packaging increases sales especially for Fast Moving Consumer Goods (FMCG) by increasing their competitive advantages in contrast to the counterpart products.

1.3 Research Objectives

- i) To identify the areas of weakness on local products (sample products)
- ii) To assess samples of Fast Moving Consumer Goods (FMCG) regarding packaging

2.0 LITERATURE REVIEW

Product packaging is one of the significant elements when marketing a product. This is the result of a dynamic nature of consumers or customers as they normally desire products that match their own attitude towards design and function (Schrijver, 2013). Packaging is always considered to be the last impression to customers toward purchasing a product at the final moment (Nawaz et al., 2012). Good packaging is not normally a guarantee that a packaged product is of good quality. Thus a product might have a good package but its quality is poor and vice versa is also true. Packaging is a brand concept, product features and a comprehensive reflection of consumer's psychology that normally results to a great impression towards the product (Qing et al., 2012). Considering customer's perspective, a product totality is generally defined by the two significant elements which includes functional as well as aesthetic matters (Noble and Kumar, 2010). For a newly introduced product its functionality can be known either by testing first if there is a possibility of doing so at the market or a customer has to buy first and test. So it might be difficult for a product functionality to be known at first if it is new to the market. However for an existing product, its functionality can be known either by referencing a product already sold to customers or already experienced by the same customers. On the other hand aesthetics characteristics are widely open and easy to be identified by customers visually. Depending on the customer's perception one might be attracted by a product appearance while other attracted by color of the product, graphic design, shape and general appearance. Therefore a conclusion that can be drawn considering functionality and aesthetics of the product is that, "functionality is objective in nature while aesthetics is subjective in nature".

The influence on selling a product in the market is sometimes backed by the way the product is being advertised and also the way it is been packaged. This is due to the fact that product advertisement normally tells about the product while packaging makes remarks on product representation (Gilaninia et al., 2013). A product competitiveness based on its package can be assessed considering two significant aspects as specified by Underwood (2003) which include structural elements and graphics elements.

2.1 Structural Elements

A robust structural design of a package means a lot when differentiating brand in the market. Well executed structural design normally helps to overcome the battles a brand is facing in the market. Structural elements include aspects such as size, material, shape and wrapping style just to mention few.

2.1.1 Size

Currently size is considered as a critical dimension aspect in packaging design (Sioutis, 2011). Many companies nowadays regard packaging size as a significant element during design (Gilaninia et al., 2013). One of the factor that derive packaging size is the type of the product to be packaged thus a package size is proportional to the product size and

the nature of the product. It is also found that size of the package is much related to usability (Silayoi & Speece, 2004). Package graphics and pictures have been considered by customers as a means of communication while packaging size is mostly regarded as being convenient to use and carry (Saeed et al., 2013). Also Jafar S et al. (2013) started in his regard that the size of the package can remarkably persuade customers to buy a product. Study conducted by Vyas and Bhuvanesh (2014) about packaging design elements and users' perception shows that 48% of the responded suggested that package size must suits the need for the amount required, 50% of respondents suggested that a size must be easy to carry while 47% encouraged to buy the product considering its size. Following the increased concern for public health, economic stagnation, raising concerns about waste as well as increased commodity cost, the importance of package size and shape has been highlighted by many scholars including Estiri et al. (2010).

2.1.2 Shape

Shape of a package is one of the crucial structural elements as it adds a competitive advantage in the sense that buyers are attracted most by the appearance of the package. Some researchers argued that shape is one of the important criteria for consumer assessment and it affects consumers' buying decision (Ritnamkam, & Sahachaisaeree, 2012). A good shape of packages always adds three common competitive advantages which include drawing attention of the buyers towards the product, customers find it easy to identify in the store and also make it easy to carry. This has been proved by the research conducted by Vyas and Bhuvanesh (2014) whereby 47%, 47% and 48% suggested that the shape of the package draws their attention, make it easy to find in the store and feel comfortable to carry the product respectively. It has been found that as the individual preferences become complex and diverse, packaging elements with the inclusion of shapes and size becomes major means of product branding (Hill, 2005). Following environmental effects such as micro-organism, presence of moisture, odor and the likes that cause the deteriorating of food, packages with pyramid shape combined with hurdle technology increases food safety and maintain quality (Suppakul, 2003).

2.1.3 Packaging Material

Generally, the shelf life of a product is mostly affected by the design and construction of a package in which a product is packed in. Selecting a right material for package normally helps to maintain the quality and freshness of the product during distribution and storage. Depending on the type of the product to be packed, one has to select a right material. This is because package is a Product Contact Substance (PCS) and has a direct impact on the product. According to a study by Taha et al., (2011) in which oil products were sampled and packed in the three different containers such as glass, plastic and tinplate leaving them for 60 days. The results showed that samples in the glass exhibit low level of deterioration followed by samples in the plastics and tinplate with higher levels. As pointed out by Kenneth (2007), for food products, glass is the most preferred package as it is odorless and chemically inert with virtually all type of food products. It is also advantageous in the sense that it is impermeable to gases and vapor that will enable product to maintain its taste and freshness for a long period of time. Consumer acceptance towards product also can be affected by the type of package in the sense that the package offers a combination of excellent physical protection and barriers properties, formability and decorative potential (Page et al., 2003). For fast food products, materials that are commonly used for package includes paper, paperboard, plastic, foil and cardboard (Foodservice & Packaging Institute, 2007). Sometimes consumers tend to prefer certain packaging materials with products partially as they are perceived to be appropriate for the distinct product (Raudenbush & Meyer, 2002). A package can be made by combining more than one type of material for the purpose of exploiting each of the material function or aesthetics characteristics. Thus finding an ideal combination of materials helps to maintain product quality and freshness during storage, transportation and consumption (Fellows & Axtell, 2002). Nevertheless packaging material also enhances customers to feel of a sign of quality as well as evoking their feelings. This is witnessed by the research conducted by Vyas and Bhuvanesh (2014) whereby 83% of the customers agreed that they feel a sign of quality regarding packaging material while 82% agree that their feeling are evoked by packaging materials.

2.1.4 Wrapper Design

Generally, a product can be packed in a more than one package classified as primary package which is directly in contact with the product; secondary package which serve to protect and identify primary package as well as auxiliary package which contains both primary and secondary package. Each of these packages contribute to overall protection of the packaged product (Capsule, 2008). Ahmed et al. (2014) also proved that there is always a relationship between the customers buying behavior and wrapper design. Among children aged 10 – 18 sensitivity to the design of the wrapper is higher. Robust wrapping design enhance the package to protect product against impact, foreign matters from entering the product when transported or storing as well as extending the shelf life of a product. The robustness of the wrapper design can be determined by the tightness of the package to prevent gaps along the connecting points and the quality of the tertiary packaging material. Also it was found that packaging design that includes (wrapper design, fonts and color) creates brand image and stimulates consumer purchasing intentions (Grossman & Wisenblit, 1999). Considering time constraints, consumers normally buy a product impulsively and their purchasing behavior is influenced by packaging

design (Herrington & Capella, 1995). It is also known that packaging design influence differently among different demographic groups in which children prefer mostly flamboyant packaging design while elders prefer mostly sober packaging design (Löfgren & Witell, 2005). Thus while wrapping a package one has insure that all the impressive parts of the package is visible to buyers.

2.2 Graphics Elements

Customer communication with the product is through graphics. These are considered to be a powerful marketing tool as it communicates directly without marketing personnel in between. Considering the fact that customers are exposed to more hundreds products at once, it becomes very difficult to differentiate a single product form a bunch of products and thus only a unique product will draw customer attention and decide to buy it. The uniqueness of the product is also brought by the graphical elements of the package which affect directly customer's perception and convincing them to buy a product. Graphical elements include but not limited to elements such as color, images, typography and labels, all these contributes to the product sells.

2.2.1 Color

Color of the package is normally the first thing a customer notices when he/shewants to buy a product (Schrijver, 2013). A perfect combination of colors and selection during package design plays a significant role when it comes to marketing a product and may lead to high performance or strategic failure when the selection and combination of colors were inappropriate (Aslam, 2006). It is also recommended that always the color of the package must match the color of the product (Mutsikiwa & Marumbwa, 2013). Changing product package colors could affect consumer inclinations and finally their buying motives. It is also found that consumers always tend to buy products whose packaging color capture their attention at the point of sale (Sidrah et al., 2018). Studies proved that different colors on package have different meaning. Black and green colors on a different package reflect authority & mystery and ease respectively. Also red color reflects passion and strong traits while green reflects affordability and casualness. Brown color represents masculinity and white color symbolizes purity, refinement and formality (Becker et al., 2011).

2.2.2 Images

Images on packaging such as pictures and photographs and imaging contribute to the large extent product differentiation in the market by helping attracting and sustaining attention of customers towards a product (Asadollahi & Givee, 2011). In packaging specifically, when an image of the product is printed on the package it helps to convey the information which affects directly customer's belief about the product (Madzharov & Block, 2010). When considering brand image it is very important that an individual to know that the perception of reality is of very significant that the reality itself (Price, 2010).

Scholars debate about the importance of brand image when it comes to selling a product for so long. However a proven idea is that brand image can create value to consumers by helping them to process information, differentiate their preferable brands, facilitating buying, giving positive feelings as well as providing a basis for product extension (Aaker, 1991). Also Goldberg et al. (1999) suggested that to increase the attention and familiarity of customers towards the product, image of the product on package is very substantial. It is recommended that when setting a background image authors should specify a background color so that it will be useful when the background image is not available (Mitul & Bhavesh, 2012). If the image is available it has to be positioned on top of the background color.

2.2.3 Typography

The art and technique of arranging type in order to make language visible on package is significant and must be ensured that it is professional when it comes to competition especially for food business. It is also suggested that the product package typography affects the brand identity and personality due to multiple structural and visual elements, including brand logo(s), colours, fonts, package materials, pictorials, product descriptions, shapes and other elements providing rich brand associations (Underwood, 2003). The study on the influence of product package typography also revealed that there is a relationship between the package typography variables i.e. brand name, company name, place of origin, company address etc. and the consumer purchase decision (Mutsikiwa & Marumbwa, 2013). Normally a good package typography helps customers to locate their preferred brands in the shelf within a short period of time rather than spending lots of time looking for a particular brand in a bunch of product. Therefore it is essential to bear in mind that good package typography must possess a brand name, place of origin, company address and others to enhance the competitiveness of a product in the market.

2.2.4 Labels

Labels are considered very significant element of the product packaging as it communicates message to consumers visually. To site an example, the study on the impacts of nutritional label on consumer buying behavior shows that,

consumers use nutritional labeling when making a purchasing decision and that it is purely due to health consciousness (Prathiraja & Ariyawardana, 2003). Generally, product labels help to provide necessary information to consumers (Mutsikiwa & Marumbwa, 2013). Labels on package should not be considered as just a piece of paper but a very powerful link between the product and the buyer's decision. Thus it is supposed to contain correct and appropriate amount of information about the product for the purpose thereof (Bandara et al., 2015). In addition to the correctness and appropriateness of information provided on the labels, the information must be understood easily, the presentation of the information should be standardized and the label must be attractive in terms of its colors and the related elements.

2.3 Theoretical Frameworks

Theoretical framework normally focuses on the way dependent variables and independent one are related. Dependent variables are those variables that are affected or predicted by the independent variables while independent variables are those which predict the dependent variables. Despite the fact that packaging is mostly considered nowadays as a means of increasing product competitiveness in the market, primarily packaging is designed for the following purpose as specified by (Gopinathar et al., 2016).

2.3.1 Physical Protection

The product inside the package is protected against the impact, vibration, compression, shock etc. during transportation, sales and storage.

2.3.2 Barrier Protection

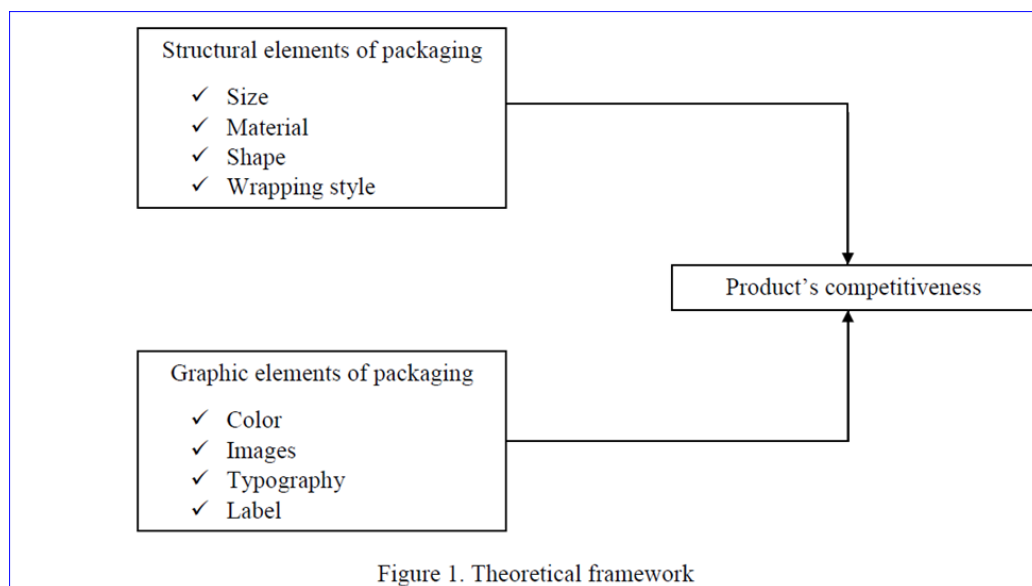
Preventing a product from external environment such as oxygen, water, dust etc. This is achieved by using absorber inside the package or by controlling the ambient condition where the product is located.

2.3.3 Containment or Agglomeration

Normally it is easier to control a bunch of products when packaged together in a single package than controlling a separate thousands packaged product, hence packaging provides the advantage.

2.3.4 Portion Control

It is difficult to control bulk commodities such as sugar salt etc. However, having packaging makes it possible to divide the product into portion of equal size and simplify usage and sales. Portion control normally helps to controlling inventory, crate product consistency as well as regulates prices.



3.0 RESEARCH METHODOLOGIES

The study employs a descriptive research design enabling a researcher to assess and inspect product sample based on the pre- determined packaging criteria.

3.1 Sampling

Due to time, resources, and information constraints, the researcher managed to sample five consumer products which are locally produced. The products include Bread, Cocoa, Peanut butter, Tea bags and Cashew nuts. The selection criteria for the sample products were the company brand, level of consumption of a particular product as well as availability of the product in the market. Sample products were assessed and inspected by a researcher directly in the supermarket. Some of the products were bought and inspected based on the stipulated criteria while others were inspected and assessed inside the building. The assessment and inspection were done in Dar es Salaam whereby small, medium and large supermarkets were visited by the researcher. Small and medium supermarkets visited by a researcher includes Vela supermarket, Malkia supermarket, Natalies min-supermarket and Musanga min-supermarket respectively. On the other hand large supermarkets visited includes Village supermarket, Maisha supermarket, Shrijee's supermarket, A to Z supermarket and TSN supermarket. Following the number of products available, the researcher sampled five (5) products from the visited small and medium supermarkets visited for inspection purpose. Meanwhile, for large supermarkets ten (10) products were selected for each sample product to be inspected.

3.2 Research Instruments

Product competitiveness based on package was analyzed by considering the stipulated criteria in the review. A total of four criteria were chosen to be inspected and assessed by the researcher on the sample products. Among the four criteria, two belong to structural elements of packaging (packaging material & wrapper design) and the other two to graphic elements of packaging (label & image). The reason behind choosing these criteria other than the others is due to the fact that they draw consumer's attention at the point of sales (Jusuf & Visoka, 2015). The four criteria were assessed through the number of sub criteria listed below it as shown under.

- a) Packaging material
 - i) Robustness
 - ii) Appropriateness of materials
- b) Wrapper design
 - i) Tightness of the package
 - ii) Obstruction of information
- c) Label
 - i) Appropriateness of information
 - ii) Correctness of the information
 - iii) Language used
- d) Images
 - i) Product image on the package
 - ii) Brand image
 - iii) Background color on the package

3.3 Data Analysis

The competitiveness of the sampled products was analysed based on the stipulated sub criteria under the main criteria. The analyses were done by employing a weighted average (WA). The analysis comprises of two part, the first one based on the structural elements of package whereas the second based on the graphic elements of package. For both cases weights were assigned considering its significance in packaging which adds up to 1 (100%). These weights were then multiplied by the score of each product packaging elements based on the sub criteria and finally summing up to obtain the average weight of a single product containing all the sub criteria under the product sample. The obtained weighted average enabled the researcher to draw inference whether the product was competitive enough and sort out areas of weakness of the sampled products and recommend some improvements.

4.0 FINDINGS AND DISCUSSION

This section is generally focusing on the data presentation and their interpretation regarding the stipulated criteria for the sampled products. The criteria as mentioned earlier have been grouped into two i.e. structural elements and graphical elements of packaging.

4.1 Result from the Analyzed Samples

The results are presented in two cases, the first part entails the structural elements of packaging and the stipulated sub criteria and the average weight are computed based on the score obtained from the findings. Likewise, the second part contains the graphical elements of packaging with the sub criteria and the average weight were also computed and analysed independently.

4.1.1 Structural Elements

Table 1 (a) presents the weight and score while table 1 (b) present the weighted average of an individual product sampled in the supermarket after multiplying with the assigned weight. The weighting factors were assigned to each sub criteria considering its significance in terms of customer’s preferences, the correlation with the product quality and the prescribed requirements. Results from table 1 (b) revealed that tea bags has the least score (57%) among the sampled products attributed to poor wrapper design especially the tertiary package. This makes it less competitive compared to the rest based on structural elements. This is brought by the fact that its package is wrapped in such a way that a customer cannot read what has been printed on the paper package. This would lead to a customer changing his/her mind towards buying the product. The paper package is also less compact thus leaving some spaces that would permit foreign materials into the product. This is unacceptable not only in a competitive markets but also in terms of hygiene. Regarding peanut butter, it is somehow competitive with the highest score (97.3%) based on material and wrapper design as they are designed effectively and everything seems to be okay. Cashew nut scores (67%) and was the second least to tea bags with the challenge of robustness of the package due to fact that the nylon package material is easy to burst when encountered with external reaction. Cocoa (80.2%) as well as bread (78.5%) got some competitive advantages on their packaging material and wrapper design just like peanut butter.

Table 1: (a). Weighing factor and score for individual product regarding structural elements

Criteria	Sub Criteria	Sample Products Score (Weight)					
		Weighting factor	Peanut butter	Cocoa	Tea bags	Bread	Cashew nuts
Packaging material	Appropriateness	0.2	95	96	63	74	84
	Robustness	0.4	98	84	58	78	68
Wrapper design	Compactness	0.3	98	62	52	76	90
	Obstruction	0.1	97	90	56	97	96

The above weighting factor and score for each product based on the stipulated criteria were multiplied to obtain weighted average and finally their summation was done as presented in table 1 (b) below;

Table 1: (b). Weighted average for individual product regarding structural elements

Criteria	Sub criteria	Weighted average				
		Peanut butter	Cocoa	Tea bags	Bread	Cashew nuts
Packaging material	Appropriateness	19.0	19.0	12.6	14.8	16.8
	Robustness	39.2	33.6	23.2	31.2	13.6
Wrapper design	Compactness	29.4	18.6	15.6	22.8	27
	Obstruction	9.7	9.0	5.6	9.7	9.6
Total weighted average		97.3	80.2	57	78.5	67

Furthermore, figure 2 describes in details the areas of weakness for each products represented by bar length that needs improvements based on the sub criteria highlighted regarding structural elements. The shorter the height, the weaker the area regarding structural elements and vice versa is also true.

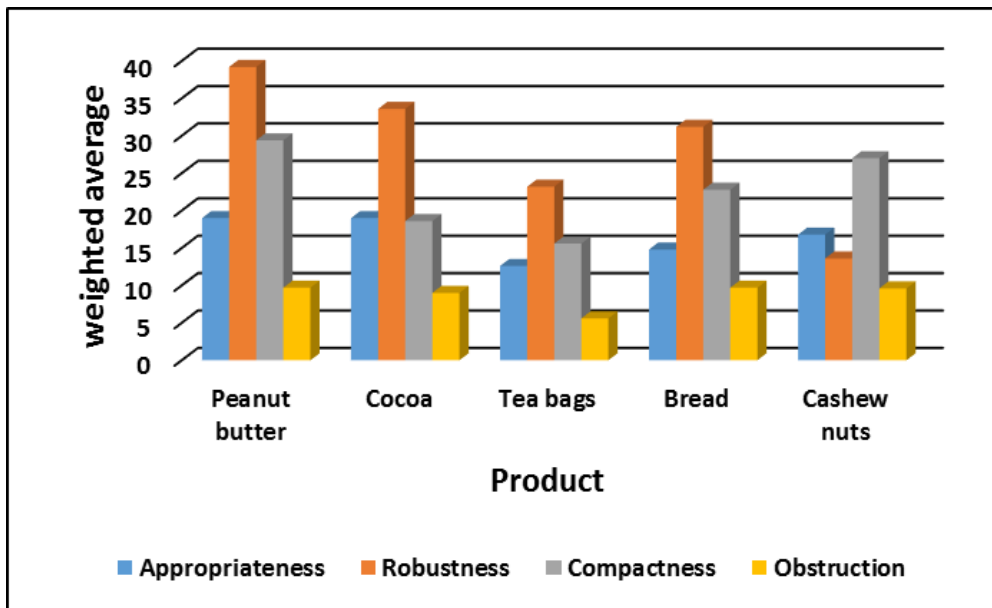


Figure 2. Individual product weighted average based on stipulated structural elements criteria

4.1.2 Graphical Elements

Table 3 (a) and (b) display the obtained results from sampled products that includes the score as well as average weight for an individual product regarding the sub criteria respectively. Cashew nut with the least score (49.8%) seems to be less competitive when it comes to labeling and imaging the package. The less competitiveness of the cashew nuts is brought by the fact that most of the package are blank with only a small piece of paper hanging inside with little information about the product. In marketing point of view, color on the package normally convey information to customers and influence his/her decision to buy or leave a product. Tea bags on the other hands show some competitiveness with the highest score (78.1%) on the case of graphical elements as the color combination was done effectively, background color was okay as well as labeling. Peanut butter (64.9%) next to cashew nut its competitiveness is somehow lowered by the unbalanced language i.e. most of the important information were presented in foreign language without the counterpart language of the natives. Cocoa (66.7%) and bread (66%) are still competitive just as tea bags though the gap is a little bit bigger between them.

Table 3 (a). Individual product score and weighing factor regarding graphic elements

Criteria	Sub criteria	Sample products score					
		Weighing factor	Peanut butter	Cocoa	Tea bags	Bread	Cashew nuts
Label	Appropriateness	0.2	90	86	88	86	62
	Correctness	0.1	96	71	96	70	65
	Language used	0.3	50	54	79	70	88
Image	Representation	0.1	80	98	96	76	20
	Background color	0.2	72	90	90	60	14
	Color combination	0.1	63	74	86	72	11

Weighing factors are therefore multiplied by each score to obtain a total weighted average for each product regarding graphical elements and presented in table 2 (b) below;

Table 3 (b). Weighted average for individual products regarding graphical elements

Criteria	Sub criteria	Weighted average				
		Peanut butter	Cocoa	Tea bags	Bread	Cashew nuts
	Appropriateness	18.0	17.2	17.6	17.2	12.4
Label	Correctness	9.6	7.1	9.6	7.0	6.5
	Language used	15	16.2	23.7	21	26.4
	Representation	8	9.8	9.6	7.6	2.0
Image	Background color	7.2	9.0	9.0	6.0	1.4
	Color combination	6.3	7.4	8.6	7.2	1.1
Total weighted average		64.9	66.7	78.1	66	49.8

Regarding graphical elements, most of the products seem to be performing poorly in contrast to structural elements as clarified in figure 1 (a) and (b). In most cases, graphical elements are considered as decorative items on the product by most of the producers. However, this is a deceitful perception as, according to researchers, they contribute a lot when it comes to differentiating a product from counterparts and attracting more customers, leading to more sales. Following this, local producers need to focus on these areas of weakness depicted by the weighted average for individual products for improvement. The heights of the bars represent how weaker the area is.

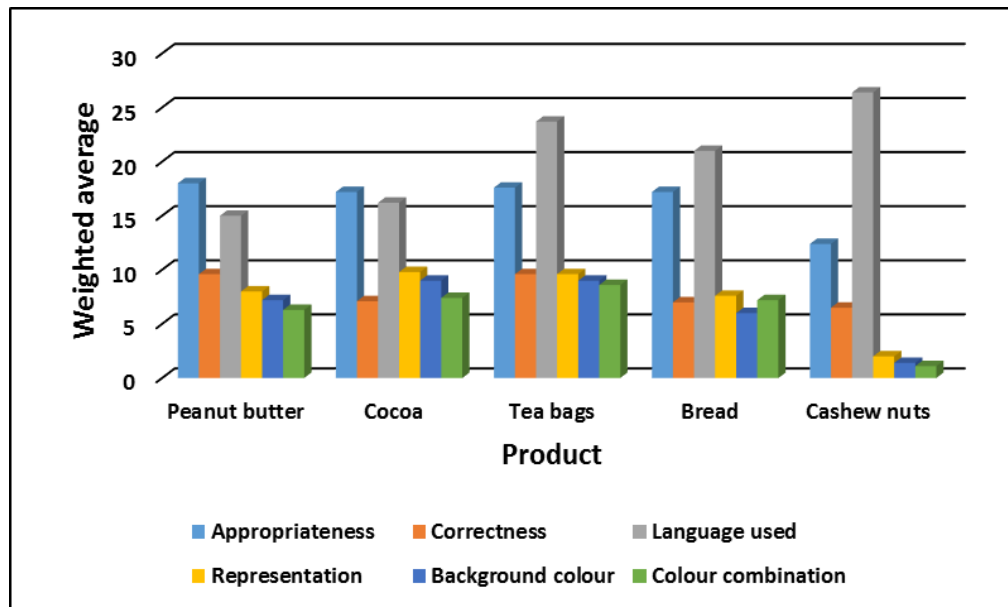


Figure 4. Individual products' weighted average based on stipulated graphical elements criteria

5.0 CONCLUSION AND RECOMMENDATIONS

As seen from table 1 (b) and 3 (b), the competitive product based on structural and graphical elements are clearly identified by the total weighted average computed. For structural elements in table 1 (b), peanut butter and cocoa are competitive following their packaging material being robust with the ability to protect these products. With regards to tea bags and cashew nuts, they are found to be less competitive because of their packaging material. On the other hand, tea bags seem to be competitive in graphical elements while cashew nuts is less competitive. However, figure 3 and 4 depicts the contribution of each element or sub criteria to the overall competitiveness of a particular product in both structural as well as graphical elements. The figures unveil areas of weakness of a specific product for both cases such as structural and graphic elements using the height of bars whereby the shorter the bar the weaker the element and vice versa holds as well.

In case of structural elements, as presented in figure 3, wrapper design is a challenging area as it appears to be lower across each product. The wrapper design should not obstructing customers from reading the printed information on the package. It is suggested that the information printed on the package should be readable by a customer from at most a distance of 2 meters. Thus to increase the visibility of the printed information, first the font size of the words should be increased and the color of the printed information should be different from background color. Also packaging material should be appropriate considering the type of product packaged in as most of producers ignore packaging material which lowers the product competitiveness.

Following multiple researches conducted on the packaging material, it is recommended that for food product glass material for packaging, with steel or thick nylon material to protect the product. On the other hand, graphical elements as seen from figure 4 should be well managed as mis-presentation of the image such as poor color combination, in appropriate background color as well as representation lower competitiveness of the product. The height of these elements appears to be short in almost every sample product which implies areas of weakness. It is recommended that the background color should be the same as the color of the packaged product for easy identification by customers, there should also be an image of the product on the package so that it will not take too much longer for a customer to think about packaged product.

REFERENCES

- Aaker, D. A. (1991), *Managing Brand Equity*, New York, NY: The Free Press.
- Ahmed R. R., Parmar V., & Amin M A. (2014). Impact of product packaging on consumer's buying behavior. *European Journal of Scientific Research*, 122 (2): 125-134.
- Asadollahi, A., & Givee, M. (2011). The Role of Graphic Design in Packaging and Sales of Product in IRAN. *Contemporary Marketing Review*, 1(5), 30 – 34.
- Aslam, M. M. (2006). Are You Selling the Right Color? A Cross-cultural Review of Color as a Marketing Cue. *Journal of Marketing Communications*, 12(1), 15-30.
- Bandara B.E.S., DeSilva, D. A. M., Maduwanthi, B.C.H. & Warunasinghe, W. (2015). Impact of food labeling information on consumer purchasing decision: with special reference to faculty of Agricultural Sciences. *Procedia Food Science* 6, 309 – 313.
- Becker, L., Van-Rompay, T. J., Schiff erstein, H. N., & Galetzka, M. (2011). Tough package, strong taste: The influence of packaging design on taste impressions and product evaluations. *Food Quality and Preference*, 22(1), 17-23.
- Capsule. (2008). *Design matters: packaging: an essential primer for today's competitive market*. Beverly, Mass: Rockport Publishers.
- Estiri, M., Hasangholipour, T., Yazdani, H., Nejad, H., & Rayej, H. (2010). Food Products Consumer Behaviors: The Role of Packaging Elements. *Journal of Applied Sciences*, 10(7), 535 - 543.
- Fatemeh, R., Abbas, D., & Neda, M. (2017). How Product Packaging Influences Buying Decisions: A Case Study of Tissue Paper in Bandar Abbas City. *International Journal of Engineering Research and Management (IJERM)*, 4(5), 28-34.
- Fellows, P., & Axtell, B. (2002). *Packaging materials. Appropriate food packaging: materials and methods for small businesses*. Essex, UK: ITDG Publishing. P, 25-77.
- Foodservice & Packaging Institute, I. (2007). *Single-use foodservice packaging: a tutorial*.
- Gilaninia, S., Hossein, G., & Saeid, M. (2013). Effect of Packaging Elements on Consumer Purchasing Decisions (Case Study Detergent Market). *Universal Journal of Management and Social Sciences*, 3(8), 10-15.
- Gilaninia, S., Hossein, G., & Saeid, M. (2013). Overview on Importance of Product Packing and Its Impact on Consumer Purchasing Process. *International Journal of Business and Behavioral Sciences*, 3(8), 50– 54.
- Gopinathar, P., Prabha G. & Ravichandran K. (2016). The Role of Packaging in Manufacturing –A Brief Understanding. *Journal of Business and Management*, 18(12): 1 – 7.
- Grossman, R.P. & Wisenblit, J.Z. (1999). What we know about consumers' color choices. *Journal of Marketing Practice: Applied Marketing Science*, 5(3), 78-88.
- Herrington, J. D. & Capella, L. M. (1995). Shopping reactions to perceived time pressure. *International Journal of Retail & Distribution Management*, 23 (12), 13-20.
- Hill, T. (2005). Packaging of children, breakfast cereal: manufacturers and children. *British Food Journal*, 104, 766- 777.
- Jafari, S., nia, M. S., Salehi, M., & Zahmatkesh, R. (2013). Influence of Package on Consumer Behavior. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 2(6), 65 – 71.
- Kenneth M., & Betty B. (2007). Food Packaging—Roles, Materials, and Environmental Issues. *Journal of food science*, 72(3): 39 – 55.

- Löfgren, M., & Witell, L. (2005). Kano's theory of attractive quality and packaging. *Quality Management Journal*, 12(3), 7-20.
- Madzharov, A. V., & Block, L. G. (2010). Effects of product unit image on consumption of snack foods. *Journal of Consumer Psychology*, 20, 398-409.
- Mitul M D., & Bhavesh J P. (2012). Role of Packaging on Consumer Buying Behavior– Patan District. *Global Journal of Management and Business Research*, 12 (10), 49 – 67.
- Mutsikiwa, M., & Marumbwa, J. (2013). The Impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe. *Business and Management (IOSR-JBM)*, 8(5), 64 – 71.
- Nawaz, A., Mohib, B., & Asad, L. (2012). Effect of Product Packaging in Consumer Buying Decision. Greenwich University, Karachi.
- Noble, C. H., & Kumar, M. (2010). Exploring the Appeal of Product Design: A Grounded, Value-Based Model of Key Design Elements and Relationships. *Journal of Product Innovation Management*, 27(5), 640-657.
- Page B, Edwards M, May N. 2003. Metal cans. In: Coles R, McDowell D, Kirwan MJ, editors. *Food packaging technology*. London U.K.: Blackwell Publishing, CRCPress. P.121 – 51.
- Prathiraja, P.H.K. & Ariyawardana A. (2003), impact of nutritional labeling on consumer buying behavior. *Sri Lankan Journal of agricultural economics*, 5(1).
- Price, A. E. (2010). How Brand Name and Packaging Quality Affect the Consumer Choice Process. Butler University, Graduate Thesis Collection, College of Business. Purchase Intentions. *College of Management Sciences*, 13 (2), 97 – 114.
- Qing, H., Kai, Z., Zhang, C.-F., & Chen, M.-R. (2012). Packaging Design Research and Analysis Based on Graphic Visual. *IACSIT Coimbatore Conferences*, 28, 148 – 153.
- Raudenbush, B., & Meyer, B. (2002). Ratings of pleasantness and intensity for beverages served in containers congruent and incongruent with expectancy. Perceptual and motor skills.
- Ritnamkam, S., & Sahachaisaeree, N. (2012). Package Design Determining Young Purchasers 'Buying Decision: A Cosmetic Packaging Case Study on Gender Distinction. *Procedia - Social and Behavioral Sciences*, 38, 373 – 379.
- Saeed, R., Lodhi, R. N., Rauf, A., Rana, M. I., Mahmood, Z., & Ahmad, M. (2013). Impact of Labeling on Customer Buying Behavior in Sahiwal, Pakistan. *World Applied Sciences Journal*, 24(9), 1250- 1254.
- Schrijver, M. (August 2013). Retail Ready Packaging and the importance of Design. University of Twente.
- Schrijver, M. (August 2013). Retail Ready Packaging and the Importance of Design. University of Twente.
- Sidrah W., Mariam M K., & Nawaz A. (2018). Product Packaging and Consumer
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British Food Journal*, 106(8), 607 - 628.
- Sioutis, T. (2011). Effect of package design on consumer expectations of food product healthiness. (Master's Thesis).University of AARHUS.
- Suppakul P, Miltz J, Sonneveld K, Bigger SW (2003) Active Packaging Technologies with an Emphasis on Antimicrobial Packaging and its Applications. *J Food Sci* 68: 408-420.
- Taha M R., Hao F., Wade Y., Khalil E., & Mohamad A. (2011). Effects of type of packaging material on physicochemical and sensory properties of olive oil. *International Journal of Agricultural and Biological Engineering*, 4 (4): 66 – 72.
- Underwood, R. L. (2012). The Communicative Power of Product Packaging: Creating Brand Identity via Lived and Mediated Experience. *Journal of Marketing Theory and Practice* 9 (winter), 12 (10), 62-76.
- Vyas H., & Bhuvanesh V. (2014) Packaging Design Elements and Users Perception: A Context in Fashion Branding and Communication. *Journal of Applied Packaging Research*, 34, 95 – 107.