



Impact of Packaging Strategies and Customer Patronage of Agricultural Produce (A Case Study of Firms in Rivers State).

¹Oghenekome Ewomazino Goodluck and ²Prof. H.N Ozuru

^{1,2}Department of Marketing, Faculty of Management Sciences, University of Port Harcourt

ABSTRACT

This paper investigates the relationship between packaging strategies and customer patronage of agricultural produce firms in Rivers State. The aim was to examine the relationship between packaging strategies and customer patronage of agricultural produce firms in Rivers State using label information and packaging material as dimensions. The study adopted Survey research design. 203 copies of questionnaire were distributed. Pearson Correlation Statistical tool was used with the aid of Statistical Package for Social Sciences (SPSS version 23.0), discriminant validity (AVE) and Cronbach Alpha verified the internal consistency and validity status and the results were positive. The findings of the study showed that packaging strategies significantly related with customer patronage of agricultural produce firms, thus enhancing quality and price. Based on the findings, the study concluded that packaging strategies and customer patronage significantly correlated. Therefore, the study recommends that, Agricultural produce firms should ensure that their packaging includes label information concerning product features usage and derivable benefits.

Keywords: *Packaging Strategies, Customer Patronage, Agricultural Produce Firms*

1.0 INTRODUCTION

Agriculture is the main-stay of most country's economy and a sector that others depend directly or indirectly for sustainability (Izuchukwu, 2011). Agriculture is and still remains an important sector of the Nigerian economy in spite of the importance of crude oil which has been unduly emphasized over agriculture (Nwafor, et al., 2011). Agriculture provides food, clothing, and shelter for the nation. It not only meets the food needs of the entire population but also supplements the foreign exchange resources through export of farm produce as well as provide raw materials for our industries, also a vital development tool and has features that make it unique instrument for development and Over 60% of Nigerians practice agriculture in different scales (Eboh, et al., 2012) and he stated that agriculture was a major revenue earner for Nigeria. Prior to the discovery of oil in Nigeria in 1958 at Olobiri in Bayelsa State by Shell Darcy, the country's economy was largely driven by Agriculture through the export of agricultural produce such as cocoa, rubber, kola nut, cotton, hides and skins, groundnut, palm produce (Eboh, et al., 2012).

In any case, through packaging, these farmers can improve their returns and incomes (Oyaniran, 2020), and this is the main reason packaging creation has gained reputation in the agricultural sector recently. Such packaging creating efforts will entail developing new products and creating market-base remunerations that would allow agricultural commodities to attain higher value (Ubalua, 2007). For the farmers in Rivers State, packaging is critical as it would raise their livelihood (Lu & Dudensing, 2015). Packaging within the agricultural produces would amount to great opportunities considering its versatility (Virchow, 2014; Adeyemo & Okoruwa, 2018). Packaging is a coordinated system of preparing goods for safe, secure, efficient and effective handling, transport, distribution, storage, retailing, consumption and recovery, reuse or disposal combined with maximizing consumer value, sales and hence profit (Saghir, 2002). Above all its fundamental function of protecting, containing and preserving the product, the functions of packaging are manifold and complex and the definition here can be related to three main categories i.e. logistics, marketing and environment. The primary purpose of packaging is to protect the product, but packaging can be used by companies as an instrument for promoting their marketing offer, and for boosting their sales (Adeyemo & Okoruwa, 2018).

A good packaging helps to identify and differentiate products to the consumers. Packaging is used for easily delivery and safety purpose. Packaging helps companies to differentiate their product from other brand. Companies must understand what influences consumers in their consumer buying process. They must also understand what factors influences the buying behavior and what is the role of the packaging elements toward buying decision process of consumers during their purchase decision. Market research helps companies to create the 'right' packaging for a product, as well as the packaging elements that might be of importance to consumers. According to Alvarez and Casielles (2005) organizations' intentions are developing brands in order to attract and retain the existing consumers. Good packaging stands far more than a salesman; it gives a brand 'recognition and a symbol of values' (Naik, 2015). Packaging strategies considered being a family of activities that are related with design, production and contain of a wrapper which help to protected, stored and transported and marketed. Packaging strategy is a powerful promotion tool. It provides not only safety to the items but it is the source of communication of the product. Packaging strategy proves fruitful for promoting consumer's goods and services. Packaging contain a wrapper after the use of the product these wrappers are wasted.

Past researchers have shown that there is no consensus of opinion on how product should be packaged as regards universal classification and methods (Daliya & Parmar, 2012; Zekiri & Hasani, 2015; Gilaninla et al., 2013). In the same vein, authors in the past focused on specific element of a particular packaging like: food, milk, detergent, tooth paste, rice, beverage (Nilforushan & Haeri, 2015; Gomez et al., 2015; Gilaninla et al., 2013; Rasheed et al., 2015; Oladele et al., 2015; Akabogu, 2014; Mousavi & Jahromi, 2014; Adam & Ali, 2014; & Dadras, 2016) and their effect on consumer patronage. Therefore, it is against this backdrop, the researcher seek to investigate the impact of packaging strategies on customer patronage of agricultural produce firms in Rivers State.

1.1 STATEMENT OF THE PROBLEM

Customers of agricultural produce are very sensitive and concern when it comes to product quality, price and referrals before making decisions on purchase. Customer patronage is dwindling as a result of product quality, price and referrals of which required urgent attention. The low quality and structural packaging resulting from inadequate skills in packaging technology and know-how has affected patronage of these agricultural produce in Rivers state which consequently cause local manufacturers and the country to lose revenue.

However, despite these perceived achievements of packaging many customers still are concern about quality and price of agricultural produce while others are still skeptical about patronizing them given these determinants. Thus, although some locally made products are observed to be of high quality and exclusive but, they are not accepted as good packaged products to enable them to be sold successfully, especially outside or within the local and foreign market. To this end, patronage of these locally made agricultural produces has been low compared to similar products from other countries. Again, packaging affect consumer buying decision, because wrong\bad online service packaging can make a consumer not to buy a particular product. In this aspect packaging strategies needs to be suitable for each agricultural produce in order to attract the attention of the consumers and also make them buy. Good packaging strategies also protects the image of the firm, but some firms do not have good packaging system, thereby making their products to appear cheap and of low quality.

In the light of this, it is imperative to examine how good product design, label information, and packaging graphic affect customer patronage of agricultural produce firms in the Rivers State. There is an identified gap in the research on how packaging strategies can add value when it is received from commercialization. It is against this point, the researcher prompted to investigate the relationship between packaging strategies and customer patronage of agricultural produce firms in Rivers State.

1.2 AIM AND OBJECTIVES OF THE STUDY

The aim of this study is to empirically examine relationship between packaging strategies and customer patronage of agricultural produce firms in Rivers State. Based on this, we have the following specific objectives to:

- i. Determine the extent of relationship between label information and customer patronage of agricultural produce firms in Rivers State.
- ii. Assess the extent of relationship between packaging graphic and customer patronage of agricultural produce firms in Rivers State.

2.0 LITERATURE REVIEW

2.1 Theoretical Framework:

This theory is motivated by Herzberg's M-H theory in behavioural science, Kano and his co-workers developed the theory of attractive quality. The theory of attractive quality is useful to better understand different aspects of how customers evaluate a product or offering (Gustafsson 1998). Over the past two decades, this theory has gained exposure and acceptance through articles in various marketing, quality, and operations management journals. The theory of attractive quality has been applied in strategic thinking, business planning, and product development to demonstrate lessons learned in innovation, competitiveness, and product compliance (Watson, 2003). The theory of attractive quality originated because of the lack of explanatory power of a one-dimensional recognition of quality (Kano, 2001). For instance, people are satisfied if the packaging of rice has cooking instructions and dissatisfied if the packaging does not have cooking instructions.

For a quality attribute such as religious symbols & images, people are not satisfied if the package does not religious symbols & images, but they are very dissatisfied if it does. To understand the role of quality attributes, Kano et al. (1984) present a model that evaluates patterns of quality, based on customers' satisfaction with specific quality attributes and their degree of sufficiency. The theory explains how the relationship between the degree of sufficiency and customer satisfaction with a quality attribute can be classified into five categories of perceived quality. According to Kano et al. (1984), their ideas are similar to quality theories suggested by Mizuno and Ishikawa. But instead of only providing general concepts and nomenclature, Kano and his coworkers provide a methodology to use. The categories of perceived quality are:

2.2. Packaging Strategies

A packaging strategy needs to reach the company's vision. Harckham (1989), a packaging strategy gives a holistic view and makes it easier to combine all packaging-related functions, impacting the overall performance. If a company chooses to change its brand image and target a new segment of

consumers, it must also change the packaging strategy. According to Prendergast & Pitt, (1996), Packaging needs to fulfil several functions as suggested by previous research: the logistics function, the marketing function, and in providing convenience in handling and storing the product and it is evident in the marketing literature that packaging is playing a vital role as a marketing tool in many market areas by protection, promotion and user convenience. Rundh (2005), concluded that even a tiny investment in packaging derives a significant gain in sales, which should account for informing the business strategy. It is vital to understand customers' needs and wants when the inter-functional teams plan the innovation strategy (Vernuccio et al., 2010). Rundh, (2005) argues that packaging improves sales as it is one of the key components that deliver a commercial advantage in the competitive arena of fast-moving consumer goods. Kuvykaite et al. (2009) argue that the package stimulates impulsive buying behaviour, resulting in increasing market share and reducing promotional costs.

Dileep, (2006), defined packaging as the methods, wrapping material and its designs that are used to contain and store, protect, handle, transport, identify, display, describe, promote, and otherwise attract attention of products on display. In the view of Kotler and Armstrong (2005), packaging every phase that concerns the designing and manufacturing of the container for a product or also the product wrapper. Appiah, & Kumah, (2009) defined packaging as the art, science and technology of enclosing or protecting products for distribution, sale, storage and use. That is a means of making the product handy by putting the product in appropriate containers to enhance mobility, prevent contaminates such as pathogens, dirt and undesirable reaction with the environment. The Encyclopaedia Britannica (2003), define packaging as the technology and art of preparing a commodity for convenient transport, storage, and sale. Packaging is really the physical vessel that is able to suitably protect the product contents through the transportation and distribution stages, and has a well-designed label which gives all vital information about the product and most importantly looks attractive.

Packaging materials have traditionally been chosen for convenient and to avoid unwanted interaction with agricultural produce (Rooney, 2011). In 20th-century packaging developments such as packages incorporating antimicrobials and oxygen scavengers have been established new standards for protracting shelf-life and protecting agricultural produces from environmental effects. These new packaging systems are called active packaging (Mahalik, 2009). Nevertheless, universal global trends such as increased industrial processing of agriculture, greater importation and exportation of agriculture produces, and less time for preparation of fresh foods compel the food and beverage packaging industry to investigate newer, more advanced packaging solutions to meet the demand for healthier, safer, functional, and cheaper, as well as more convenient processed foods. Other elements of increasing importance in agriculture packaging include trace ability, tamper indication, and sustainability (Kotler, & Armstrong, 2010). These newer packaging systems are called smart packaging. Adoption to smart packaging makes the packaging to extend the shelf life of the product, even it improves the quality, safety and work on to provide information of the product.

2.2.1 Label Information

Labelling usually means putting information on packaging, labels or collective packaging, which concerns the products packed (Jin, & Leslie, 2003). This information takes the form of words, letters, logos, images, figures or symbols and may refer to the shelf-life of the product, ways of preparation, consumption, nutritional value or other commercial aspects (Underwood, 2001). Labelling information is supposed to protect consumer interests and it also plays an important role in food trade and is a source of information both for a consumer and for other participants of the logistics chain (Wells, 2007). The required information can be placed directly on packaging or on labels. Labelling is an element of ensuring safety of products, which consists of health and sensory quality as well as nutritional value and which labelling must not mislead a consumer and any statement placed on packaging by a manufacturer must be verified and approved by relevant supervisory authorities (Lise, & Dominique, 2015). Therefore, Products labelling consists of placing information about the product and its manufacturer as well as data on the nutritional value of the product.

Silayoi, & Speece, (2007), stated the information which is placed on the packaging, must not only fulfil the requirement of compliance with other messages, but also include the content required by law. The detailed requirements specifying the scope and the methods of placing information on products shall be governed by the provisions of the law. For instance, the European food law requires that all information placed on packaging of foodstuffs should be consistent, clear and understandable, and above all, it must not mislead a potential consumer. The purpose of the superior law on labelling, i.e. the Regulation of the European Parliament and of the Council (EU) No 1169/2011 on the transmission of information on foodstuffs to consumers is the introduction of solutions aimed at conscious decision making by consumers (Rundh, 2015). The changes in respect to labelling introduced by the European Parliament and the Council are not only a response to the expectations of consumers but they were also introduced in order to harmonize the information provided on the labels of food products available in the European Union (Rundh, 2015). The new regulations are designed to provide consumers with the ability to make right and informed choices when buying food.

2.2.2 Packaging graphics

It is said that a picture is worth a thousand words. Underwood et al. (2001), stated that customer were prone to imagine the tastes, feels, or smells of a product while they were looking at the graphic on the packaging. Then, a graphic attribute that attracts customer at the point of sales will help them make the purchase decisions quickly. Customers would become frustrated without the many clues provided by the graphics of sales packaging (Prendergast & Pitt, 1996). An eye-catching graphic will make the product stand out on the shelf and attract the customer's attention (Rundh, 20015). In a psychology research (Rettie & Brewer, 2000), the recall of pictorial attribute is likely to be influenced by their lateral position on the packaging. Customers were likely to recall non-verbal stimuli when it is positioned on the left hand side of the package. This may indicate that pictorial attribute such as visual image should be positioned on the left hand side of the package in order to maximize consumer recall. Graphics play an important part in packaging in that they pull customer attention (Adam & Ali, 2014).

Polyakova (2013), graphics comprise of colour mixtures, layout, photo of product and typography; all these create an image on the packaging and he stated that graphics on a package provide important information concerning the product. In low involvement, decisions valuation of product qualities is not important, so graphics become critical. Most consumers in low involvement mainly for the reason that the first impressions might have a permanent effect regard graphics. Kuvykaite et al. (2009), stated that memory of a package is improved if the picture is placed to the left and is improved for verbal stimuli if the information is scribed to the right side of the packaging. A qualitative study done by (Otterbing et al., 2013) on text and picture elements of packaging, indicates that picture elements like the photo of product should to be put on the left side of the packaging so as to maximize customer memory. Graphics offer consumers some assistance with going through bunches so as to find their preferred brand at retail locations and that if they do not have any solid preference of a brand then at any point design can draw their interest in making evaluations regarding a specific product (Silayoi & Speece, 2004). Additionally, in lots of circumstances, graphics may in still a positive mind-set and could meet the lifetime-hidden goals of a customer (Smith & Taylor, 2004).

2.3 Customer Patronage

Patronage is defined as the level to which a customer displays repeat purchase behaviour from a service provider, possesses an affirmative, enduring outlook and temperament concerning a service provider (Gremler & Brown, 1996). From the observation of Oliver (1999), customer patronage is demarcated that a profoundly held dedication to repurchase a firm's products at the cost of a competitor's offering. Customer patronage is an amalgamation of psychological factors that impacts on purchase behaviour (Burnkrant, 1982); and these factors are well thought-out important by consumers (Moye & Giddings, 202); and used as a criteria in influencing which firm to patronize (Ogbuji et al., 2016). Customer patronage has been measured by an assortment of authors in diverse magnitude, as well as store traffic flow (Engel et al., 1996); willingness, word-of-mouth and repurchase (Baker et al., 2002); repeat purchase, customer retention and customer referrals (Awah, 2015); and customer satisfaction and referrals (Ogbuji et al, 2016). These dimensions of customer patronage were used by these authors to explain that the continued existence of any business is a utility of the rate of patronage. This pictures the outlook of Ogwo & Igwe (2012) that the foremost motivation for erecting a business is to engender customers. Consequently, and in corroboration with earlier studies, this study adopts store traffic flow and customer referrals as the measures of customer patronage, and scrutinizes customer patronage as the means of a respondent's evaluation for his or her firm's store traffic flow and customer referrals level.

2.3.1 Quality

The quality of the package as well as the quality of the actual product are the core elements of purchasing decision making. When the consumer forms an opinion towards the new package, the packaging design variables are highly important. The consumer makes a quality evaluation based on the packaging attributes and the overall package. Here, the consumer may perceive the usefulness of the package and judge the favourability of the new product. Packaging is a quality measurement for the products. Grunert, et al. (2000), when the consumers view the new package on the shelf, they are usually forced to make a quality evaluation of the product through experience with the package (Holmes, & Paswan, 2012).

Quality judgments are influenced by product and package characteristics. When the package communicates high quality, frequently the consumer assumes the product itself as a high quality item. If the package gives the impression of low quality, the consumer perceives the actual product as a low quality item. Underwood et al. (2001) suggest that consumers instinctively can imagine how the product looks, tastes, feels, smells, and sounds while viewing pictures and images on the package (Silayoi et al., 2004; Silayoi et al., 2007). Packages should be exciting and safe and have a high quality at the same time. Food product expectations are created by packaging elements such as labelling and product information. Here, the colour element also plays an important role. Colours on the package can be perceived and associated with quality attributes, such as flavour and nutrition. Imram (1999) believes that a positive effect can be gained by combination of packaging elements: colour, clear packages and incident light. In food service, the food products chosen for display are selected for their colour and appearance attributes (Silayoi et al., 2007).

2.3.2 Price

Price represents the perceived value of product/service at which the seller and buyer are ready to do business (Campbell, 1999). From the perspective of the consumer, it is what the customer pays in exchange for a product or service. Price as an important marketing factor has been noted to be a serious influencer of consumer behaviour. Sinha & Batra (1999) highlighted that consumers tend to search for products and services that are fairly priced that which would deliver maximum of desired value. Xia et al. (2004), indicated that consumer perceives the offered price to be fair when it is sufficiently reasonable, can be accepted or justified. Bolton et al. (2003) suggested that it is likely that customers will rely on certain standards reference sources such as cost of goods sold, previous prices, and rivals' to make better judgments when evaluating price fairness in order to form comparisons.

Anderson et al. (1994), the prices of a product can affect the degree of patronage among customers, because whenever they assess the given value of a purchased product or service, they tend to consider its price. Similarly, Campbell (1999) considered price as a key factor that influences brand image such that perceived price unfairness may lead to negative customer outward communication, switching behaviour, disloyalty and loss of patronage. Partial price may lead to outcomes including heightened customer dissatisfaction, drop in repurchase (Rothenberger, 2015). Prices is a process by which we choose, organize and translate information input to create a meaningful world picture (Saptariani, 2008) and the important thing is that perception depends not only on physical stimulation, but also on the relation of stimuli to the surrounding plane and the conditions in each of us, while the price is the sum of all the valuable that the customer gives to profit from giving a deep meaning to them. When consumers evaluate and research the price of a product is influenced by consumer behaviour.

2.4 Packaging strategy and Customer patronage

Packaging is an actually part of product planning and development which is the design of a product container or wrapper whose purpose is to protect the product physically to enhance the product's value to the consumers and to stimulate sales through emotional appeals to consumers (Farooq, et al., 2015). Packing is recognized as an integral part of modern marketing operation, which embraces all phases of activities involved in the transfer of goods and services from the manufacturer to the consumer (Nayyar, 2012) and the packaging component of a product refers to any container in which it is offered for sale and on which information is communicated. To a great extent the customer's first exposure to a product is the package, and it is an expensive and important part of the marketing strategy. Packaging permits multisensory and bi-directional communication to the receiver, who consumes signs and symbols in order to produce individual and social meaning (Scott, 2008). Packaging may also present elements with essentially informative and communicative power as well: words, images, colours, shapes, etc., which communicate to the customer in various ways and places, both before and after the shopping experience (Rasheed, et al., 2015).

According to Mohebbi, (2014), Packages can deliver information in countless different combinations by use of graphics, text, colours, shapes and sizes of the packaging, giving cues to the product's personality. Completely dissimilar personalities can be communicated for the same product content purely through the means of packaging. However, the aspiration is to fully match the product personality with consumer personality. Customer's attitude and concerns are also addressed through the package (Kamaladevi, 2010). For example, customers who are health conscious may look at the nutrition facts stated on the packaging, which assists them in their purchase decision. Most products do not come in just one piece of packaging. Almost always, the primary packaging is shipped in secondary packaging. And the secondary packaging may also double as a promotional display. Packaging products is almost always a multi-component endeavour (Zekiri, & Hasani, 2015), and packaging needs to compete in a very crowded environment. Placed in a real life context, the products owner can visualize what the customer will end up experiencing relative to all the other products on the shelf. When designers and brand owners are close to deciding on a particular concept, a physical sample can be created on a short-run cutting and creasing table, for final review and testing.

2.4.1 Label information and Customer patronage

Labelling provides information regarding the product category, products ingredients, and product instructions. Customers when making their mind whether to buy or not to buy a product they are guided not just by the taste, but also some other extrinsic factors such as, brand awareness, labelling, price and origin. Morris, (1997) stated that labels information help customer to differentiate a product more easily. Labelling information helps customers spend less time needed while searching for products that are decided to be bought by them. Customers under time pressure their decisions are influenced when the package comes with a distinctive appearance that contains simple and accurate information (Silayoi, & Speece, 2004). Currently, there are customers that pay more attention to label information since they are more concerned with health and nutrition issues (Coulson, 2000).

Label serves as a first line of consumer awareness and is vital to maximize the efficacy of the product. Labels keep consumers informed, describe the product and help customer's makes an informed decision and it is found in researches that the consumer purchase behaviour is affected by the labelling (Mahalik, & Nambiar, 2010). A label is not only carries a brand name but also a source of important information (Silayoi, & Speece, 2004) and the presence of nutritional information may influence the customer to switch from unhealthy food products towards healthy food products and it also help in directing customer about anything they want to know in that particular. Thus, the hypothesis that has been developed is as follows;

H₀₁: There is no significant relationship between label information and quality of agricultural produce firms in Rivers State.

H₀₂: There is no statistically significant relationship between label information and price of agricultural produce firms in Rivers State.

2.4.2 Packaging graphics and Customer patronage

Wells et al. (2007) study packaging Graphics and Customer patronage in the study of packaging for own label food brands' which explored the relationship between packaging and quality perception conducted in the United Kingdom. Observation was used as a research technique. The results showed that more than 45% of consumers use packet photography as a proof of product quality. Graphics can be used to attract consumers at the point of sale to help the consumers to make rational purchase decision. The study also demonstrated the value placed on package graphics on the buying decisions. Moreover, Mizutani, et al. (2010) suggest that juice packaged that had images on them had the power to influence the purchasing decision. Pleasant images were a source of positivity in regard to taste and juice freshness even if some of the images had no relation to the presented juice. The study also concluded that juices that had congruent images were rated to having a better aroma compared to juices with non-congruent images. The findings were an experimental confirmation that attractive images are efficient in portraying a congruent and pleasant image of the product.

The customer will perceive the product in a positive light (Mizutani et al., 2010). According to Lee (2010) showed that graphics on the packaging for convenience goods has no significant relationship with buying decision. Lifu, (2012) in his study found that all attributes and not just one attribute must be combined to affect purchase behaviour. Sioutis (2011) suggests that graphical information is usually misleading hence consumers do not consider pictures on a package when buying. Based on this criticism we hypothesize that:

H₀₃: There is no significant relationship between packaging graphic and quality of agricultural produce firms in Rivers State.

H₀₄: There is no significant relationship between packaging graphic and price of agricultural produce firms in Rivers State.

3.0 METHODOLOGY

Survey research design was adopted, which involves the systematic gathering of information from respondents for the purpose of understanding and/ or predicting some aspects of the behavior of population of interest through the use of statistical control and appropriate test statistic. Consequently, the population of the study comprises of selected, Twenty-Nine (29) agricultural produce packaging firms in Rivers State. This is premised on information obtained from the National Agency for Food & Drug Administration and Control (NAFDAC) office, Port Harcourt. (www.nafdac.gov.ng); Rivers State Bureau for Public- Private Partnerships (www.rsbppp.org.ng) and Standards Organisation of Nigeria (SON) South-South Regional Office, Port Harcourt. Based on the small size of the population, the study adopted a census study. We developed interactive section with the human resources manager and other employees for only two months, which involves dropping seven (7) copies of questionnaire for each firm which amount to 203 copies of questionnaire. Purposive sampling technique was adopted for nature and characteristics of the respondents. Pearson Product Moment Correlation Coefficient was used to test the hypotheses.

Table 1: Measurement Model: Reliability and Validity for LI, PG, Q and P

Construct	Item	Loading	CR	AVE	α
Label Information	<i>LI1</i>	0.874	0.93	0.77	0.843
	<i>LI2</i>	0.827			
	<i>LI3</i>	0.900			
	<i>LI4</i>	0.891			
Packaging Graphic	<i>PG1</i>	0.878	0.94	0.79	0.872
	<i>PG2</i>	0.883			
	<i>PG3</i>	0.918			
	<i>PG4</i>	0.867			
Price	<i>P1</i>	0.844	0.90	0.74	0.901
	<i>P2</i>	0.875			
	<i>P3</i>	0.869			
Quality	<i>Q1</i>	0.906	0.93	0.82	0.904
	<i>Q2</i>	0.915			
	<i>Q3</i>	0.888			

Source: SMARTPLS Result Output

As evidenced in Table 1, the paper witnessed all the observed variables (statement items) factor loaded was high against their elemental factors (latent variables), owing to factor loadings ranging from 0.827 to 0.918. These values are all above the suggested threshold of 0.6, implying that they were valid measures of their latent factors. Also, for all cases, CR, AVE and Cronbach Alpha (α) were higher than their suggested threshold values of 0.5 respectively. All these imply that our data achieve convergent validity. For discriminant validity, we follow the usual procedure by comparing the Cronbach Alpha (α) with the PPMCC between the constructs. All in all, our measurement analysis shows that label information, packaging graphic, quality and price are all objectively and validly measured by their respective statement items contained in our research instruments.

4.0 DATA ANALYSIS AND PRESENTATION

The data analysis was done using Pearson Product Moment Correlation Coefficient.

Table 2. Correlation Analysis showing the relationship between Label Information and Quality and Price

Correlations		Label Information	Quality	Price
Label Information	Pearson Correlation	1	.848	.896
	Sig. (2-tailed)		.000	.000
	N	202	202	202
Quality	Pearson Correlation	.848	1	.799
	Sig. (2-tailed)	.000		.000
	N	202	202	202
Price	Pearson Correlation	.896	.799	1
	Sig. (2-tailed)	.000	.000	
	N	202	202	202

****.** Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey Data, 2022, SPSS 23 Output

Interpretation: Table 2. above revealed a PPMCC (r) of 0.848 and probability value of 0.000 (**Sig< 0.05**). This result indicated that there was a positive and strong significant relationship between label information and quality of agricultural produce firms in Rivers State. Also, at $r^2=0.719$ which indicated that the coefficient of determination of the correlation between label information and quality = 71.9% implying that label information has a high and strong correlation with quality of agricultural produce firms in Rivers State. Holding that sig value < 0.05 and $r > 0.5$, the null hypothesis was rejected which stated that there was a significant relationship between label information and quality of agricultural produce firms in Rivers State. H_{02} also revealed PPMCC(r) of 0.896 and probability value of 0.000 (**Sig< 0.05**). This result indicated that there was a positive significant relationship between label information and price of agricultural produce firms in Rivers State. Also, at $r^2=0.803$ which indicates that the coefficient of determination of the correlation between label information and price = 80.3% implying that label information has a high and strong correlation with price. Holding that sig value < 0.05 and $r > 0.5$, the null hypothesis was rejected which stated that there was a significant relationship between label information and price of agricultural produce firms in Rivers State.

Table 3. Correlation Analysis showing the relationship between Packaging Graphic and Quality and Price

Correlations		Label Information	Quality	Price
Label Information	Pearson Correlation	1	.913	.917
	Sig. (2-tailed)		.000	.000
	N	202	202	202
Quality	Pearson Correlation	.913	1	.799
	Sig. (2-tailed)	.000		.000
	N	202	202	202
Price	Pearson Correlation	.917	.799	1
	Sig. (2-tailed)	.000	.000	
	N	202	202	202

****.** Correlation is significant at the 0.05 level (2-tailed).

Source: Field Survey Data, 2022, SPSS 23 Output

Interpretation: Table 3. revealed a PPMCC (r) of 0.913 and probability value of 0.000 (**Sig< 0.05**). This result indicated that there was a positive significant relationship between packaging graphic and quality of agricultural produce firms in Rivers State. Also, at $r^2=0.834$ which indicated that the coefficient of determination of the correlation between packaging graphic and quality of agricultural produce firms in Rivers State = 83.4% implying that packaging graphic and quality of agricultural produce firms in Rivers State. Holding that sig value < 0.05 and $r > 0.5$, the null hypothesis was rejected which stated that there was a significant relationship between packaging graphic and quality of agricultural produce firms in Rivers State. Also, H_{04} revealed a PPMCC (r) of 0.917 and probability value of 0.000 (**Sig< 0.05**). This result indicated that there was a positive significant relationship between packaging graphic and price of agricultural produce firms in Rivers State. Also, at $r^2=0.841$ which indicated that the coefficient of determination of the correlation between packaging graphic and price of agricultural produce firms in Rivers State = 84.1% implying that packaging graphic and price of agricultural produce firms in Rivers State. Holding that sig value < 0.05 and $r > 0.5$, the null hypothesis was rejected which stated that there was a significant relationship between packaging graphic and price of agricultural produce firms in Rivers State.

4.1 DISCUSSION OF FINDINGS

Positive significant relationship between label information and customer patronage (quality and price)

Hypothesis one was aimed to examine the significant relationship between label information and quality of agricultural produce firms in Rivers State for which result showed that a significant relationship exist between studied variables ($R = 0.848$). Our analysis revealed the existence of a strong and positive significant relationship between label information and quality of agricultural produce firms in Rivers State. Considering the probability value which is less than the stated level of significance ($Pv < 0.05$) we therefore, rejected hypothesis one earlier stated in chapter one.

H_{02} was designed to examine the relationship degree between label information and price of agricultural produce firms in Rivers State. The result revealed the existence of a positive significant relationship between label information and price of agricultural produce firms in Rivers State ($R = 0.896$). Our analysis showed the existence of a strong and positive significant relationship between the two variables. Considering the probability value which is less than the stated level of significance ($Pv < 0.05$) we therefore, rejected hypothesis two earlier stated in chapter four.

Our findings correspond with work of Adebisi, & Akinruwa (2019) who findings showed that label information has a significant positive effect on customer patronage of Bournvita. Ebube & Tobenna (2017) findings showed that label information has a direct relationship both to consumers' choice of

agricultural products and their perception of the quality of such products. Chukwu & Enudu (2018) findings showed that a significant and positive relationship lies between the independent variable, label information and the dependent variable consumer buying behaviour. A negative relationship exists between label information in packaging and the dependent variable consumer purchasing behaviour.

Positive significant relationship between packaging graphic and customer patronage (quality and price)

Hypothesis three was aimed to examine the significant relationship between packaging graphic and quality of agricultural produce firms in Rivers State for which result showed that a significant relationship exist between studied variables ($R = 0.913$). Our analysis revealed the existence of a strong and positive significant relationship between packaging graphic and quality of agricultural produce firms in Rivers State. Considering the probability value which is less than the stated level of significance ($Pv < 0.05$) we therefore, rejected hypothesis four earlier stated in chapter four.

The four hypothetical statement (H_{04}) was designed to examine the relationship degree between packaging graphic and price of agricultural produce firms in Rivers State. The result revealed the existence of a positive significant relationship between packaging graphic and price of agricultural produce firms in Rivers State ($R = 0.917$). Our analysis showed the existence of a strong and positive significant relationship between the two variables. Considering the probability value which is less than the stated level of significance ($Pv < 0.05$) we therefore, rejected hypothesis five earlier stated in chapter four.

Our findings correspond with work of Wells et al. (2007) who results showed that more than 45% of consumers use packet photography as a proof of product quality. Graphics can be used to attract consumers at the point of sale to help the consumers to make rational purchase decision. The study also demonstrated the value placed on package graphics on the buying decisions. Moreover, Mizutani, et al. (2010) suggest that juice packaged that had images on them had the power to influence the purchasing decision. Pleasant images were a source of positivity in regard to taste and juice freshness even if some of the images had no relation to the presented juice. According to Lee (2010) showed that graphics on the packaging for convenience goods has no significant relationship with buying decision.

5.0 CONCLUSIONS

The results on packaging strategies indicators, namely label information and packaging graphic, all contributed significantly towards achieving customer patronage (price and quality) of agricultural produce firms in Rivers State. In light of this, the study therefore concludes that:

- i) The findings revealed that label information significantly influence price and quality of agricultural produce firms in Rivers State.
- ii) Furthermore, packaging graphic significantly relates with price and quality of agricultural produce firms in Rivers State positively.

Based on the results, the study concludes that packaging strategies is strongly and positively relates with customer patronage of agricultural produce firms in Rivers State.

5.1 RECOMMENDATIONS

1. Agricultural produce firms should periodically evaluate how consumers respond to their product packaging so as to enhance the competitiveness of their products in the market.
2. Agricultural produce firms should always ensure that their packaging appeals to their consumers which will increase the sales of their products.
3. Agricultural produce firms should ensure that their packaging includes label information concerning product features usage and derivable benefits.
4. Agricultural produce firms should ensure that they design packaging that cannot be tampered with, which if breached or missing will provide visible evidence to consumer that it's been tampered with.
5. Agricultural produce firms should focus much of their attention on colour and labelling of their products so that their market share can be increase, because colour and label call the attention of market people.

REFERENCES

- Adam, M.A., & Ali, K. (2014). Impact of verbal elements of packaging of packaged milk on consumer buying behaviour. *International Journal of Business and Social Science*, 5(1), 94-106.
- Akabogu, O.C. (2014). Consumers' satisfaction with 7up packaging: An empirical Analysis. *Journal of Business and management (IOSR-JBM)*, 15(6), 28-36.
- Alvarez, A. & Casielles, R.V., (2005). Consumer evaluation of sales promotion: The effect on brand choice', *European Journal of Marketing* 39(1/2), 54-70.
- Anderson, E. W., Fornell, C. & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3)53-66.

- Bolton, L. E., Warlop, L. & Alba, J. W. (2003). Consumer perceptions of price (un)fairness.
- Campbell, M. C. (1999). Perceptions of price unfairness: Antecedents and consequences. *Journal of Marketing Research*, 36(2), 187-199.
- Dadras, A. (2016). Impact of shapes in packaging design on consumer behaviour in the lens of Kano's attractive quality theory. *International Journal of Scientific Research and Management Studies*. 2(1), 78-86.
- Deliya, M.M., & Parmar, B.J. (2012). Role of packaging on consumer buying behaviour Patan District.Global. *Journal of Management and Business Research*, 12(10), 48-67.
- Eboh, E., Oduh, M., & Ujah, O. (2012): *Drivers and sustainability of agricultural growth in Nigeria*. Aiae research paper 8. African institute for applied economics,
- Farooq, S., Habib, S., & Aslam, S. (2015). Influence of product packaging on consumer purchase intentions. *International Journal of Economics, Commerce and Management*, 3(12), 538-547.
- Gilani, S., Ganjinla, H., & Moradi, S. (2013). Effect of packaging elements on consumer purchasing decisions (Case study of detergent market). *Universal Journal of Management and Social Sciences*, 3(8), 10-15.
- Gomez, M., Consuegra, D.M., & Molina, A. (2015). The importance of packaging in purchase and usage behaviour. *International Journal of Consumer Studies*, 39, 203-211.
- Grunert, K. G. & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. *Asia Journal of Public Health*; 15, 385-399.
- Harckham, A.W., (1989). Packaging strategy: Meeting the challenge of changing times. *International Journal of Retail & Distribution Management*, 3(2), 638-657.
- Holmes, G.R. & Paswan, A. (2012). Consumer reaction to new package design. *Journal of Product & Brand Management. Emerald Article*.
- Imram, G. A. (1999). The effect of packaging attributes on consumer buying decision behaviour in major commercial cities in Ethiopia. *International Journal of Marketing Studies*, 9(6), 43-54.
- Izuchukwu, O. (2011). Analysis of the contribution of agricultural sector on the Nigerian economic development. *World Review of Business Research*, 1(1), 191-200.
- Jin, G. Z. & Leslie, P. (2003). The effect of information on product quality: evidence from restaurant hygiene grade cards. *Asia quality Journal of Economic*, 8(2), 409-451.
- Kamaladevi, B. (2010). Customer Experience Management in Retailing; *Business Intelligence Journal of Asia*, 3(1), 37- 54.
- Kotler, P. & Armstrong. (2010). *Marketing management 14th edition*. Pearson Education.
- Kuvykaite, R., Dovaliene, A. & Navickiene, L., (2009). Impact of package elements on consumer's purchase decision. *Economics and management*, 1(4), 441-447.
- Lee, W. L. (2010). *The influence of packaging attributes on consumers' purchase decision of packaged food*. MBA. Sains University.
- Lifu, F.L. (2012). An analysis of the effect of product packaging on consumers' buying choice in Calabar Municipality, Cross River State, Nigeria. *Asian Journal of Business Management* 4(2)186-191.
- Lise, M. & Dominique, C. (2015). Communicating packaging eco friendliness: An exploration of consumers' perceptions of eco designed packaging. *International Journal of Retail & Distribution Management*, 3(4)350-366.
- Mahalik, N. P., & Nambiar, A. N. (2010). Trends in food packaging and manufacturing systems and technology. *Trends in Food Science & Technology*; 21(3), 117-128.
- Mizutani, N., Okamoto, M., Yamaguchi, Y., Kusakabe, Y., Dan, I., & Yamanaka, T. (2010). *Package images modulate flavour perception for orange juice*. Food quality and preference, 2(5)867-872.
- Mohebbi, B. (2014). The art of packaging: An investigation into the role of colour in packaging, marketing, and branding. *International Journal of Organisational Leadership* 3, 92-102.
- Mousavi, S.A., & Jahromi, M.M. (2014). Examining the relationship between packaging and consumer buying (Case study: Comparison of pasteurized 1.5L Milk of Brands Roozaneh and Mihan). *Indian Journal of Fundamental and Applied Life Sciences*, 4(1), 1038-1044.
- Naik, A. K (2015). *Empirical study on packaging factor influencing consumer buying decision in confectionery item*. The degree of Master of Business Administration (MBA), School of Management National Institute of Technology, Rourkela

- Nayyar, E. V. (2012). Packaging: An innovative source of impulsive and abrupt buying action. *International Journal of Management and Information Technology*, 1(1), 13-16.
- Nilforushan, S., & Haeri, F.A. (2015). The effect of packaging design on customers' perception of food products' quality, value, and brand preference. (Case study: Pegah pasteurised cheese, in Isfahan city). *WALIA Journal*, 31(S3), 127-132.
- Nwafor, M., Ehor, E. C., Chukwu, O. J., & Amuka, J. I. (2011). *Cost-effective agriculture growth options for poverty reduction in Nigeria: evidence and policy implications*. Aiae research paper 6. African institute for applied economics, Enugu.
- Oladele, P.O., Olowookere, B., Okolugbo, C.N., & Adegbola, E.A. (2015). Product packaging as a predictive factor of consumer patronage of toothpaste in Ado-Ekiti, Nigeria. *British Journal of Marketing Studies*, 3(3), 12-28.
- Oliver, R.L. (1999). Whence customer loyalty. *Journal of Marketing*, 63, 33-44.
- Oyaniran, T. (2020). *Current State of Nigeria agriculture and agribusiness sector*. AfCFTA Workshop. Retrieved from: <https://www.pwc.com/ng/en/assets/pdf/afcfta-agribusiness-current-state-nigeria-agriculture-sector>.
- Prendergast, G. & Pitt, L. (1996). Packaging, marketing, logistics and the environment: are there trade-offs? *International Journal of Physical Distribution & Logistics Management*, 6(6), 60-72.
- Rasheed, O.K., Olanipekun, J., & Adetunji, A.A. (2015). Product package and customer brand commitment in food and beverages markets of Lagos state, Nigeria. *European Journal of Business, Economics and Accountancy*, 3(6), 44-54.
- Rettie, R. & Brewer, C. (2000). The verbal and visual components of package design. *Journal of product and brand management*, 9(1)56-70.
- Rothenberger, S. (2015). *Fairness through transparency: The influence of price transparency on consumer perceptions of price fairness*. Working Papers CEB, 15.
- Rundh, B. (2005). The multi-faceted dimension of packaging marketing logistic or marketing tool? *British Food Journal*, 107(9), 670-684.
- Rundh, B. (2015). Linking packaging to marketing: how packaging is influencing the marketing strategy. *British Food Journal*; 15(11), 1547-1563.
- Saghir M. (2002). *A platform for packaging logistics development- a systems approach*. Doctoral thesis, Division of Packaging Logistics, Lund University, Sweden,
- Saptariani, S. T. (2008). Impact of price on brand loyalty sensitivity. *Journal of Product and Brand Management*, 2(3), 9-18.
- Scott, Y. (2008). Packaging and the environment. A cross-cultural perspective. *Design Management Review*, 19, 42-48.
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: an exploratory study on the impact of involvement level and time pressure. *British food journal*, 10(8), 607-628.
- Silayoi, P., & Speece, M. (2007). The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*; 52(12), 14-28.
- Sinha, I. & Batra, R. (1999). The effect of consumer price consciousness on private label purchase. *International Journal of Research in Marketing*, 16(3), 237-251.
- Sioutis, T. (2011). *Effects of packaging design on consumer expectations of food product healthiness*. Msc, University of Aarhus.
- Smith, P.R. & Taylor, J. (2004). *Packaging in marketing communications*, Kogan Page Limited.
- Ubalua, A. O. (2007). Cassava wastes: treatment options and value addition alternatives. *African Journal of Biotechnology*, 6(18), 2065-2073.
- Underwood, R. L. (2001). Packaging communication: Attentional effects of product imagery. *Journal of Product and Brand Management*, 10(4), 403-422.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: Attentional effects of product imagery. *Journal of Product & Brand Management*, 10(7), 403-422.
- Vernuccio, M., Cozzolino, A. & Michelini, L. (2010). An exploratory study of marketing, logistics, and ethics in packaging innovation, *European Journal of Innovation Management*, 1(3), 333-371.
- Wells, L. E. (2007). The Importance of Packaging Design for Own-label. *International Journal of Retail and Distribution Management*, 5(9), 667-690.
- Wells, L.E., Farley, H. & Armstrong, G. (2007). The importance of packaging design for own-label food brands. *International Journal of Retail & Distribution Management*, 35 (9), 879-891.
- Xia, L., Monroe, K. B. & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *AsiaJournal of Marketing*, 68(4), 1-15.
- Zekiri, J., & Hasani, V.V. (2015). The role and impact of the packaging effect on consumer buying behaviour. *ECOFORUM*, 4(1), 232-240.