The Impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe.

¹Munyaradzi Mutsikiwa, ²John Marumbwa ^{1,2}Great Zimbabwe University Great Zimbabwe University

Abstract: The aim of this paper is to examine the impact of aesthetics package design elements on consumer purchase decisions of dairy products with particular emphasis on these variables: package colours, material, instructions and typography. A descriptive research design methodology was adopted. A structured questionnaire was used to collect data and information from 150 respondents who were randomly selected while going about their shopping experiences. The study revealed that not all aesthetic package design elements trigger consumer purchase behaviour. The elements that have an influence should be properly blended together to ensure that they remain sensitive and appealing to the consumers thereby shaping and guiding their intention to purchase dairy products.

Keywords: product, packaging, aesthetics, package design elements, purchase decisions.

I. Introduction

The study of the impact of package design elements on overall purchase decisions is not new as various researchers have investigated this before (Bloch, 1995; Hewett and Roth, 2000). The rationale behind these studies is that, in today's competitive clutter packaging has occupied an important and unique position of rendering value to products. It has become an important avenue of differentiating products to consumers as it helps them to choose the product from a wide range of similar products. It also stimulates customers' purchase decisions (Wells, Farley & Armstrong, 2007), yet there is no consensus on the actual impact of packaging plays a very significant role as a marketing tool. In this regard, it assists customers to identify the product and provides useful information about the product. It has become traditional that packaging has facilitated marketers of various brands to write the brand name, the size of the product, the grade, net weight, nutritional information and other related information meant for the consumers of the brand (Sacharow and Griffin, 1980).

A product's packaging design is a touch point which is regularly experienced by consumers and it edifies consumer perceptions of the product. The appearance of the package is believed to have a stronger impact on influencing consumers purchase decisions than advertising. In marketing, the product package design is considered as a "silent salesman or salesman in the shelf". Silayoi and and Speece (2004) emphasise that understanding consumer response to packaging is key to processed food companies competing globally in the rapidly expanding modern retailing industry, where packaging plays a pivotal role in merchandising and communication, and act as a strategic driver of the dynamic competitive environment for processed food products. According to Asadollahi and Givee (2011), an appealing and successful packaging design, with relevant design, pictures and decorations is more successful in attracting customers. In this case package designs may stimulate consumers to repeatedly purchase a product. Laforet (2010) indicates that a brand package is designed to satisfy consumer functional and emotional needs. Therefore it is important for designers of packaging to have adequate information on the changing needs of customers and the attitudes or impressions they have on particular designs and how these affect purchase decisions.

Research objectives

This research is pivoted on the following objectives:

- a) To determine the effects of package colours on consumer purchase decisions;
- b) To examine the impact of product package material on consumer purchase decisions;
- c) To ascertain the contribution of package instructions on influencing consumer purchase decisions and
- d) To analyse the influence of product package typography on consumer purchase decisions.

II. Literature review

Product

The importance of the product as a key ingredient in the marketer's "tool box" has been emphasized for decades. Marketing-the oldest profession on the planet (Russell, 2010), has been conceptualised as

comprising the 4Ps developed by Jerome McCarthy in the 1950s. The potency of marketing lies within a company's ability to deliver the right product, rightfully promoted, at the right price and at the right place. In general, scholarly literature in economics and business suggests that products are a subset of a broader category of goods. Therefore, a product can be said to be anything offered for sale or use to another individual (Russell, 2010). In this sense, the term product covers everything that goes into the development of the tangible and intangible object. It is important to note that this definition does not only refer to tangible products but it also includes even the intangible products such as services.

On the other hand, the term "product" has been broadly conceptualised to refer to things produced. However, contemporary marketing thinking suggests that products are the "heartbeat" of a company's marketing strategy solely because the other 3P's are regarded as complementary to the core (product) strategy. Kotler et.al (2006) view a product as anything that can be offered to a market that might satisfy a want or need. This includes the quality of the product, material chosen, the colour/size/scent/taste and/or every physical aspect of the product, (Russell, 2010). In essence, the above elements are regarded as key ingredients of a well designed product strategy which can compete effectively in a clutter of related products. Consumer purchase decisions are not only based on the functional attributes of the product, but rather on the extras, the frills and extended benefits and thus the importance of product augmentation wherein is the package design, as a tool for competitive advantage cannot be neglected.

Accordingly, this paper defines product as the "marketing offer" entailing that which a business enterprise produces and/or offers to the market for a commercial value whether they are tangible or intangible. In other words, products refer to "something" inherent with the ability to satisfy or otherwise customer needs and wants. The central theme in this paper is the aspect of product packaging. It seems as if a product is incomplete until its "dressed up". In addition, the essence of marketing is to manipulate consumer purchase decisions either directly or indirectly through the use of the product-mix elements such as packaging, labelling and branding. In the same vein, product package design elements (colour, typography, usage instructions, package material, shape, size, form, size) are deemed critical in shaping and guiding consumer purchasing decision making process.

Dairy Products in Zimbabwe

The dairy industry in Zimbabwe is one of the most important sub-sectors of agriculture with its products contributing to the improvement of nutritional value of the human diet (Chimboza and Mutandwa, 2007). Prior to the formation of the GNU and subsequent introduction of a multi-currency financial system in 2009, the dairy industry like any other commercial activity in Zimbabwe suffered from a de-stabilised macroeconomic system. The industry was confronted with enormous operational challenges driven by persistent droughts, hyperinflationary economy, agrarian reform which saw many commercial farmers deserting their farms, equipment and production facilities for the ill-skilled, incapacitated, resource constrained indigenous producers. A snapshot of the Zimbabwe's dairy industry by Fidelis Zvomuya (Dairy Mail Africa October, 2007:13) showed that 200 farmers and 158 000 dairy cows disappeared from the industry since 1990. Milk production dwindled by 65% from 256 million litres in 1990 to 90 million litres in 2006.

However, the currently obtaining macro-economic environment and political landscape stemming out of the formation of the Government of National Unit in 2009 and the eventual adoption of the multi-currency financial systems has seen a transformation in the dairy industry. The Zimbabwean market which was previously dominated by dairy products produced mainly by Dairiboard Zimbabwe Limited (DZL) saw new entrants from both the domestic and international markets. Most importantly, the market which was characterised by basic milk products (fresh and powdered milk during the hyperinflationary years) produced by a few large suppliers experienced phenomenal resuscitation and unprecedented growth in the last few years with the introduction of other milk by-products produced domestically. According to the Dairy Produce Marketing and Levy Act, the dairy industry means anything and everything connected with the production, manufacture, preparation and marketing of dairy produce. It is therefore comprised of firms involved in the manufacturing and processing of dairy products. On the other hand, milk products include butter, butterfat, cheese, cream and any other related product that include skimmed, condensed and evaporated milk.

Subsequently, there has been an influx of new milk and milk products and brands such as Dendairy, Probrands Creamer, Hodzeko, Inkomaas, Mnandi and Shoppers choice among others. In addition, new dairy producers commenced operation, for instance, Alpha and Omega dairy, Gushungo dairy, Kershelmar dairy among others. Survival in this highly competitive environment is thus a function of an interplay of several factors over and above the traditional 4Ps (product, place, price, promotion). The companies' marketing strategy should be wary of the critical role packaging plays in compelling customers to purchase the products. Currently, the trend the world-over is to pay special attention to the way products/brands are packaged in terms of colour, materials, typography and verbal and informational elements as these shape consumers purchase decisions. In

essence, the product's aesthetic package design elements have become instrumental in influencing either positively or negatively consumer purchase behaviour.

Packaging

Kotler and Keller (2012) define packaging as "...all the activities of designing and producing the container for a product". It is considered as the buyer's first encounter with the brand. It draws the consumers' attention and encourages product choice. In effect, the product package design acts as a brief commercial for the brand prior to purchase and in the latter stages, the package design affects consumer's post purchase experiences. Conventional marketing thinking suggests that the primary goals of packaging include identifying the brand, communicating information, facilitating distribution and logistics, preserving the product and assisting product consumption, (Bhattacharya, Sen and Korschun in Kotler and Keller, 2012). In a bid to attain the outlined objectives, marketers should choose the aesthetic and functional variables of packaging meticulously so that they realise the intended impact. However, this study looks at the aesthetic considerations which include the package colours, material, instructions and typography.

Aesthetics package design elements

The concept of aesthetics has been designated to an experience, theory of art and the doctrine of beauty (<u>www.ashgate.com</u>). It is defined as the set of principles of philosophy that deals with the nature and appreciation of beauty and artistic taste, (Dictionary.com). In marketing, the branch that deals with the development of products and services reiterates the need to consider the beauty and art in the design of the outward features of the product. In this paper, aesthetics entail the package colours, material, instructions and typography that are employed by manufacturers and retailers to beautify their market offerings. In most instances, the aesthetics design elements are meant to appeal to the target market and stimulate consumer purchase behaviour. The rationale is to outwit competitor offerings through unique, beautiful and attractive packaging that stands out of the clutter of thousands of competing products and brands and eventually triggers purchase behaviour.

Package colours

Marketing literature reveals that package colours have the ability to evoke feelings, emotions behaviours in different consumers (Mutsikiwa et.al, 2013, White and White, 2006). The colours have the potential to create a deep and long lasting impression and image about the product or brand. In the packaging of products, marketers use colours to catch the customers' attention which in turn creates either a negative or positive feeling about the particular product/brand. Asadhollahi and Givee (2007) suggest that the package colours communicate, reflect and exhibit some salient features and intangible attributes of the brand. It therefore means that the colours convey special messages about the brands which ultimately create a unique selling proposition. However, it is important to note that, in packaging food products, the package colours usually take the colours of the actual product. There is need for marketers to fully understand and appreciate the different meanings of colours across different cultures and comprehend the interpretation of different colour combinations as this is critical when consumers make purchase decisions.

Package materials

The history of the use of package materials is as old as man. Early packaging materials to be used include the leaves, animal skin, pottery vessels, and woven bags. However, these have evolved to processed materials such as plastic bottles and papers, wooden vessels, corrugated boxes, metal containers and others. Twede (2005) says that the earliest recorded use of paper for packaging dates back to 1035, when Persian merchants bought vegetables, spices and hardware which were wrapped in paper in Cairo, Egypt. According to Maloney (2003), a host of significant innovations in packaging design were pioneered in the military for the purpose of distributing and storage of material, supplies and foods to match the quality requirements. In the marketing field, product package design has evolved to become a critical ingredient for building the equity of the brand over and above influencing consumer purchasing decision. Rettie and Brewer (2000) argue that the package design has become a fundamental avenue for communicating significant brand attributes and as such it can be employed as competitive tool.

Package instructions

When consumers purchase products, their intention is to use and/or consume the product without any difficulty, thus package instructions act as the "manual" imprinted with the message on how to maximise the utility provided for by the product. Prior to purchase, consumers search for and evaluate information relating to product usage, expiration dates, ingredients, volume, weight, and disposal (Kupiec and Revell, 2001). In some countries, governments enforce through an act, the mandatory provision of specific details about the product

mainly for health and safety reasons. Package instructions may help consumers to make informed purchase decision (Silayoi and Speece, 2004). With rising levels of consumer education and awareness, it is inevitable for marketers to carefully plan their information display on product packages so as to eliminate confusion and somewhat convince customers at the point-of-purchase. In the purchase of food products, nutritional information, ingredients, conditions of use and storage instructions are critically important determinants of consumer buying behaviour.

Package typography

In designing the product package typography-the art and technique of arranging type inorder to make language visible, it is important to ensure that the packaging look professional inorder to compete particularly in the food business (www.fyi.uwex.edu.aic). Whilst excellence in product quality guarantees repeat purchases, it is excellence in product package design that determines the trial purchases. Underwood (2003) suggest that the product package typography affect 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. Legibility and readability of the product package are critical concepts of the product typography mostly because, when products are displayed in the shelf, the rationale for package typography is to reduce time spent looking for the particular brand, by ensuring the customer easily locates, identify and notices their preferred brand. Therefore, marketers believe that the brand name, company name, place of origin, company address and others are important components of the package typography which are essential in attracting consumers' attention and ultimately influence their purchase decisions.

Purchase decisions

Everyday consumers are faced with purchase decisions. Not all purchase decisions are treated in the same manner because some decisions are more complex than others and therefore call for more effort by the consumer. Yet other decisions are routine and require little effort (Schiffman, Kanuk, and Hansen, 2008). The term decision entails the selection of an option from at least two alternative brand choices. Regardless of the varying decision-making situations and the levels of consumer decision-making the following factors influence the purchase decisions of consumers. These factors include external (culture, subculture, groups, situation, social class and family; internal (perception, attitude, knowledge, personality, lifestyle, involvement and roles) and marketing factors (product, package aesthetics, promotion, distribution, service and price). However, in this paper, the following aesthetic package design variables are going to be examined to see how they influence consumer purchase decisions (see Figure 1). The aesthetic package design elements play a significant role in representing the brand for many consumers (Laforet, 2010). These factors draw consumer attention and play a pivotal role with low level involvement products as consumers normally predict the functional performance of the dairy products through a combination of these elements in Figure 1. In addition, package design elements provide potent information which help to reduce the perceived risks associated with the brands. Silayoi and Speece (2004) and Laforet (2010) agree that a unique package design triggers consumer curiosity which leads to rapid purchase decisions.

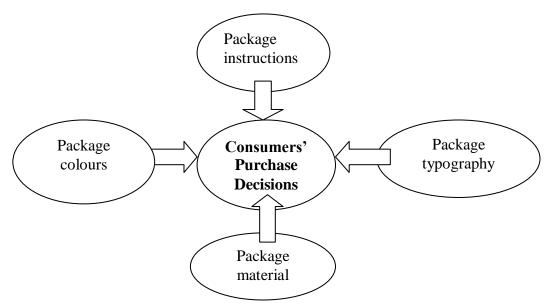


Figure 1: Aesthetics package design elements that affect consumers' purchase decision.

III. Research Methodology

In this study the researchers employed a descriptive research design for it allowed them to establish a correlation between aesthetics package design elements and consumer purchase decisions. A sample size of 150 respondents was used to collect the data and information intended to answer the research question. This was composed of 90 females and 60 males. The random sampling technique was employed whereby the study respondents were conveniently intercepted in main retail outlets while shopping. The researchers specifically targeted consumers who had dairy products in their shopping baskets so as to get the actual reasons behind their purchase decisions. The response rate was 100% as the questionnaires were interviewer administered.

A closed-ended questionnaire was the main research instrument which was used. It was divided into four constituent parts namely: package colours; package materials; package instructions and package typography. A Likert scale was used for each constituent part ranging from 1 to 5 (1 as the lowest ranking and 5 the highest ranking). A pre-testing of the research questionnaire was done on 15 respondents who presumably resembled the characteristic features of the intended research participants. The rationale behind pretesting was to uncover the flaws of the questionnaires so that befitting adjustments could be made. This helped the researchers as they managed to remove unnecessary and irrelevant questions and improve on questionnaire wording to avoid ambiguity and making sure that the questionnaire solicits for reliable and valid information.

IV. Data analysis and results

The main objective of this paper was to see the impact of aesthetics package design elements on consumer purchase decisions. The Pearson Chi square test was computed to test the significance of the relationships between the aforementioned independent and dependant variables. The Pearson Chi-square statistic was computed using SPSS version 16. The results of the computation are depicted on the following tables.

Table 1: Shows linear regression results on ANOVA

ANOVA					
Model	Sum of Squares	df	Mean square	F	Sig.
Regression	122.673	19	6.456		.000
Residual	.000	130	.000		
Total	122.673	149			

a. Predictors: (constant), package colour, package material, package instructions, package typography

b. Dependent variable: Do you consider aesthetic variables when purchasing dairy products?

To test the relationship between aesthetics package design elements and consumer purchase decisions, ANOVA test was conducted where P-value was considered significant at 5%. The above table shows the results whereby the regression value of approximately123% and a residual value of 0% indicate that the model is fit for predicating consumer purchase decisions of dairy products. This is also confirmed by the significance value of .000 indicating that there is a strong linear relationship between aesthetics package variables and consumer purchase decisions.

Colour variables	Pearson's correlation Sig. (1-tailed)	Standardised Coefficients (Beta)	T-test
White	.000	.077	1.029
Cream	.000	.077	1.036
Yellow	.095	480	-7.784
Blue	.000	.793	11.018
Others	.000	428	-6.654

Table 2: Pearson's and Regression correlation results on colour variables

The first objective of this study was to determine the effects of package colours on consumer purchase decisions and the results are summarised on the above table. It can be noted that indeed white colour has a significant effect on the consumer purchase decisions of dairy products. This is confirmed by the Pearson's coefficient value of (.000) and t-test result of (1.029) which is within the acceptable range. The results also show that the cream colour is influential in the purchase of dairy products as shown by a P-value of (.000) and t-test result of (1.036). However, there is discordant with the yellow colour which according to the results does not significantly influence the purchase decisions of the consumers of dairy products. The computations clearly attest to this notion as depicted by a P-value of (.095) which is above the expected (.005) and t-test values of (-

7.784) respectively depicting insignificant contribution of the yellow colour to consumer purchase decisions. On the other hand, the colour blue is accepted at less rigorous analysis of data as indicated by the t-test value of 11.018 which falls outside the range of $-2 \le t \ge 2$ although it has a significant P-value of (.000) Whilst other colours have got positive contribution considering the Pearson coefficient value (P=.000), respondents have indicated that the degree to which they influence their purchase decisions is insignificant as reflected by the t-test value of (-6.654) which falls out of the expected range.

In so much as the package colours have positive contributions to consumers purchase decision of dairy products as shown by the Pearson coefficient values, in practice, the relative contribution of each individual colour differ as reflected by the different and t-test values.

Package materials	Pearson's correlation Sig. (1-tailed)	Standardised Coefficients (Beta)	T-test
Plastic paper	.000	739	-12.322
Plastic bottle	.004	310	-5.304
Box container	.001	639	-9.932
Metal container	.485	.108	1.903
Others	.138	.191	3.142

Table 3: Pearson's and Regression correlation results on package materials

The results in table 3 above show that the first three package materials (plastic paper, plastic bottle, box container) have a strong relationship with consumer purchase decisions as indicated by the significant values of .000; .004 and .001 respectively. The nature of the relationship is negative as reflected by the t-test values (-12.322; -5.304 and -9.932). This denotes that plastic paper and bottle and box containers do not in any way influence the propensity of consumers to purchase dairy products as confirmed by the t-test results which are way outside the acceptable region. On the other hand, the metal containers have a significant contribution towards consumer purchase decisions as shown by the t-test result of (1.903) which is within the acceptable range. This demonstrates that the metal container is mostly preferred by consumers probably because it appeals to the consumers better than plastic package material. Other packaging materials do not positively influence the buying decisions of consumers as shown by the Pearson correlation coefficient value of (.138) which is greater than the P-value (0.05) and also the t-test results (3.142) which is a distant out of the acceptable range.

These statistics reveal that the package material is not very important in determining consumer purchase decisions of the dairy products. This however does not imply that good packaging material is absolutely insignificant in influencing consumer purchase decisions. The role of the package material for any product should not therefore be undermined for various reasons, such as health, perishability, texture and humidity conditions of the product.

Package instructions	Pearson's correlation Sig. (1-tailed)	Standardised Coefficients (Beta)	T-test
Volume/weight	.011	.231	2.702
Ingredients	.074	192	-2.426
Precautions	.000	422	-5.745
Shelf-life	.002	040	600
Others	.000	477	-6.846

Table 4: Pearson's and Regression correlation results on package instructions

The objective of this question was to solicit for information on the degree to which package instructions influence consumers' purchase decisions. Results in table 4 above show that four of the package instruction variables (volume/weight, precautions, shelf-life and others) are important predictors of consumer purchase decisions as shown by the significant values (.011; .000; .002 and .000) respectively with the exception of ingredients (.074). The actual influence of these variables on consumers' purchase decision of dairy products is somewhat minimal as shown by the t-test results of (weight/volume= 2.702, ingredients= -2.426, precautions=-5.745 and others= -6.846) which all fall outside the acceptable range. The only exception is shelf-life which has a t-test result of (-.600) which falls within the acceptable range indicating that most consumers of dairy products are particularly concerned about the expiry dates more than anything else on product instructions. This is reflective of consumers' attitudes towards purchasing and consuming fresh dairy products.

Package typography	Pearson's correlation Sig. (1-tailed)	Standardised Coefficients	T-test
ty pography	Sig. (1 tailed)	(Beta)	
Brand name	.002	124	-1.920
Company name	.000	503	-8.424
Place of origin	.013	.195	3.279
Company address	.000	549	-9.097
Others	.001	246	-3.864

Table 5: Pearson's and Regression correlation results on package typography

The fourth and final objective of this study was to analyse the influence of the product package typography on consumer purchase decisions of dairy products. The above table reveals that there is a relationship between the package typography variables (brand name, company name, place of origin, company address and others) and consumer purchase decisions as reflected by the Pearson correlation coefficient values of (.002; .000; .013; .000; and .001) respectively. However, according to the t-test results, only the brand name plays a very significant role in determining the consumer purchase decisions of dairy products as depicted by (t = -1.920) which is within the acceptable range. This attests to the notion that over time, consumers tend to know and connect with their brands to an extent that they know the experiential, emotional and symbolic benefits attached to the brands. It is also evident that dairy consumers do not consider the company name, place of origin, company address and other related elements as shown by the t-test results of (-8.424; 3.279; -9.097; and -3.864) which are outside the acceptable range. This can be attributed to the fact that a brand is endowed with the elements.

V. Managerial implications

It is critically important for management to realise that the product package colours have a high potential of triggering purchase behaviour amongst consumers. However, there is need to note that the contribution of each distinct package colour is unique and vary with different product categories, therefore the need to ensure that colours are rightfully matched inorder to enhance the efficiency and effectiveness of their ultimate synergistical contribution to purchase behaviour. Although study results reveal that the product package material is less significant in influencing consumer purchase decisions, this does not therefore imply that consumers do not regard the relevance and appropriateness of the package material. In essence, consumers would want to buy and consume the dairy products whilst they are still fresh and in their original state for health reasons.

Apparently, results indicate that consumers are strictly worried about the shelf-life of dairy products notwithstanding the weight/volume, precautions, ingredients and other package instructions variables. Management should not therefore over-emphasize the importance of shelf-life alone and neglect other variables but rather maintain them as any perceived change may negatively impact on the consumer purchase behaviour. Finally, the brand name appears to be the only appealing product typography attribute that evoke purchase behaviour mainly because in essence, a brand represents the company, place of origin, address and a host of other attachments. As a result, a good manager should be able to blend the aesthetics package design elements properly to optimise on every opportunistic touch-point that provokes consumer purchase decisions.

VI. Further research

In this paper, the researchers confined the study to Southern Zimbabwe excluding the other regions therefore it could be appropriate to carry out a survey that covers the entire country. In addition, the researchers considered only Zimbabwean dairy products as if they are the only dairy products in the market yet there is an influx of imported dairy products from the neighbouring countries such as Zambia, Malawi and South Africa. It could thus be another gap that requires to be treaded upon in the future.

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