Research Paper

The Moderating Effect of Customer Big Data on the Relationship between Sales Promotion and Customer Loyalty.

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ABSTRACT
The consumer's purchasing behavior is highly unpredictable and what propels buying responses and loyalty is so diverse. It is against this premise that this paper tends to empirically examine the moderating effect of customer big data on the relationship between sales promotion and customer loyalty. The study adopted descriptive research design and the sample consist of 160 consumers drawn from different retail outlets in Port Harcourt and Yenagoa metropolis of Rivers and Bayelsa State respectively. The study used judgmental and convenience sampling techniques to select the respondents and questionnaires were administered personally to the respondents. The Pearson correlation, partial correlation and multiple regression statistical tools were used to test the nine hypotheses. The findings revealed that all the dimensions of monetary and non-monetary sales promotion significantly and positively related to customer loyalty. The study also reveals that customer big data impact positively and significantly on the relationship between sales promotion and customer loyalty. The study conclude that both monetary and non-monetary sales promotions are predictors of customer loyalty but monetary savings, saving in time, convenience and exploration have more robust effects on customer loyalty than product quality, value expression, entertainment and self-esteem. The study recommends that retailers should endeavor to design solid customer big data architecture in their respective outlets to understand the customer better and come up with best promotional offers that could improve customers delight and competitive advantage.
KEYWORDS: *Sales promotion, hedonic benefit, utilitarian benefit, customer loyalty and customer big data.*

I.   INTRODUCTION

Sales promotional strategy is evolving rapidly within the past three decades (Mandez, 2012) and becoming popular among manufacturers, retailers and service providers. The reasons for the popularity and adoption rate are due to the dynamic nature of the business environment, in addition with intense competition, technological advancement, proliferation of brands, declining brand loyalty, increase in size and power of retailers, top management involvement/eagerness for short term goals (Kotler and Armstrong, 2010; Asiegbu & Igwe, 2012; Ahmed & Fatawu, 2014) and unattractive nature of advertising strategy helped to spur the adoption of sales promotion by business firms. Perhaps sales promotion has to do with a broad range of promotional incentives designed to achieve short-term and long term objectives. One of the cardinal objectives of Sales promotion is to retain existing customers, attract new ones (Oyeniyi, 2011; Ahmed & Fafawu, 2014) and make them loyal customers at the expense of maximizing profit.

However, sales promotion could be classified as trade promotions and consumer promotions (Mendez, 2012). Trade promotion focused on providing incentives to market intermediaries (distributors, wholesalers, agents and retailers), while consumer promotions are incentives tailored to final users. In this study we are more interested in studying the retailer interfacing with the final user which is consumer sales promotions. Consumer sales promotion is divided into two sub-areas such as monetary and non- monetary consumer promotions. Monetary and non-monetary promotions provide the consumer with utilitarian and hedonic benefits which influence the buying behavior of the consumer and loyalty, as several studies have proven so (Campbell and Diamond, 1990; Chandon, Wansik, and Laurent, 2000; Luk & Yip, 2008; Oyeniyi, 2011; Sa eed, Nisar, Lodhi, Ahmad & Arshad, 2013). The utilitarian benefit addresses issues like quality, convenience in shopping and

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saving in time, effort, and cost (Luk & Yip, 2008). On the hand, the hedonic benefit takes care of value expression, exploration, entertainment and self esteem (Chandon et al., 2000; Luk and Yip, 2008). Despite the pool of benefits as regards to monetary and non-monetary sales promotions, the marketer is still perplexed in terms of the best promotional strategic decision to be taken in order to attract and retain the consumer. This perplexity has created a lot of challenges to marketers most especially at the retailer to consumer's value chain.

Several scholars have argued that there is no best way of sales promotional strategy to be adopted by firms to stimulate consumer buying behavior and loyalty; the best strategic promotional decisions rest on the customer perception in regards to the benefits to be derived from the promotion, the context, nature of product, characteristics of the market, business environment (Mandez, 2012; Sinha & Verma, 2017) as well as the objectives which the firm tends to achieve. The reason is that some customers may not be influenced by monetary promotions because of their expectations of value, excitement or self-esteem, while some would be highly influenced by monetary promotion due to the fact that they are price sensitive buyers or their present state of disposable income (high or low). This argument has created a lot of conflicting positions in sales promotional literature. For instance, Gilbert & Jackaria (2002), Chandon et al (2000), Kwok & Uncle (2005) concluded that monetary promotion is more favorable and provides utilitarian benefits that spur consumer responses and loyalty. While, Montaner, Chernatony & Bull (2011), Kalaisalvan (2013) opines that consumers are more likely to be influenced by hedonic benefits. Based on these conflicting positions, Sinha & Verma (2017) labeled it as a serious case of "sales promotional dilemma" faced by brand promotional managers thereby affecting the choice of sales promotion decisions among manufacturers and retailers. Admittedly, sales promotional dilemma has made many smart marketing managers and retailers to resort to "customer big data" as a way of leveraging the best sales promotional strategies to be adopted in order to enhance customer loyalty and business performance. Despite the importance of customer's big data a lot of retailers in Nigeria have failed to incorporate it in their sales promotional decisions, thereby creating excess inventory in the warehouse or store which in turn affects their profitability.

The concept of big data is a new terminology under limelight that cut across many professions such as health care, academic institutions, government, financial institutions as well as business (Abhinav, 2019) and very significant in addressing marketing problems within the domain of product development, marketing research, promotions and innovations in order to enhance business prospect and improve customer experience. Customer's big data is the dominant driving force behind the success of many organizations in the world. It has to do with the process of examining huge amount of data that would provide an in depth insight about the customer in order to make informed or rational marketing decision. Perhaps, understanding the customer insight will enable the marketer to know exactly the kind of sales promotion strategy that will appeal more to the consumer in order to attract and make him/her a loyal customer. Thus, the mediating role of customer's big data on sales promotion and customer loyalty is not far-fetched as this study tends to empirically unveil it.

Several researchers have carried out studies relating to sales promotion and customer loyalty (Oyeniyi, 2011; Mandez, 2012; Sa eed et al., 2013; Ramezani & Heidarzadeh, 2014; Yemisi &Femi, 2018; Hatta, Rachbini, and Derriawan, 2018; Kulkarni and Srivastava, 2018), sales promotion and purchasing behavior (Jean & Yazdanifard, 2015; Sinha & Verma, 2017), promotion and online sales/consumer response using big data (Chong, Li, Ngai, Ch' ng & Lee, 2015; Manikas, Godfrey, & Skiver, 2017) but none has empirically investigated the moderating role of customer's big data on sales promotion and customer loyalty. This study tends to close this identified gap in literature.

Therefore, this study seeks to empirically address the moderating impact of customer big data on the relationship between sales promotion and customer loyalty.
Based on the above objective, this study tends to find solutions to the following problems:
• How could monetary or non-monetary sales promotion impact significantly on customer loyalty?
• How could monetary and non-monetary sales promotions jointly impact on customer loyalty?
• How could customer big data moderate the relationship between sales promotion and customer loyalty?

II. LITERATURE REVIEW
2.1 The Concept of Sales Promotion
The term sales promotion has been defined as a direct inducement that provides incentives for the sales team, intermediaries, or the final users with the ultimate objective of creating immediate sales for the company (Haugh, 1983 as cited in Asiegbu & Igwe, 2012). According to Kotler and Armstrong (2010) assert that sales promotion consist of short-term offers or incentives to stimulate immediate sales of a product or service. Sales promotion entails marketing activities that provide incentives and executed for short time period to influence consumer's response (Davies et al., 2004). We can say that sales promotion is an embodiment of incentives designed to provide additional value to customers within a short time period in order to facilitate quick sales. Sequel to the above definitions it is apparent that four key words appeared in all the definitions of sales promotion namely; incentive, customer, short time and sales. It therefore means that sales promotion is being

conceptualized as a temporary effort geared towards improving sales. Though, Gedenk & Neslin (1999) argued that promotion is not restricted to short term sales alone but has a long-term impact on customer's purchase feedback, future patronage, brand loyalty and customer loyalty as well.

Sales promotion decision by manufacturers or retailers emerged as a result of solution to clear the problem of excess good in the warehouse due to low sales (Nwokoye, 1987; Ahams, 2008). This with no doubt reduces the cost of inventory. Apart from reducing inventory cost there are other benefits being provided by sales promotion such as attracting new and old customers, making them to buy more by stockpiling, encourage off-season buying, stimulate impulse buying, encourage purchase trial for new product and it encourages switching of brands. According to Ahmed & Fatawu (2014) assert that sales promotion has a positive relationship with consumer buying behavior and customers are always ready to buy from companies that promotes their products or services.

Fig 1: Conceptual Model of Sales Promotion and Propositions Development
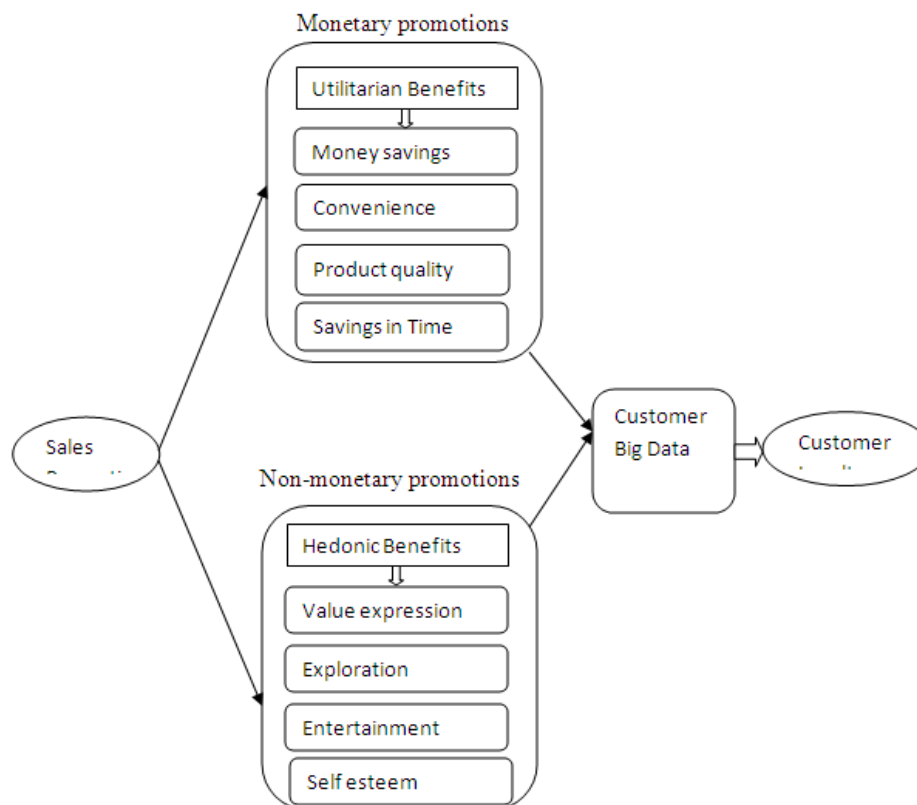
Source: Conceptualized by the researcher (modified from Chandal et al, 2000; Luk & Yip, 2008; Sa eed et al., 2013; Chong et al., 2016.)

2.3 **Dimensions of Sales Promotion**
Sales promotion has two dimensions whether in trade promotion or consumer promotion such as monetary and non-monetary sales promotion but we are going to discuss it from the retailer to consumer's view point.

2.3.1   Monetary Sales Promotion
Monetary sales promotions are regarded as deals which allow the customer to buy a product or service at reduced price by attracting the customer and giving him/her the privilege of money savings, product quality and convenience for buying (Chandon et al., 2000; Luk & Yip, 2008). According to Oyeniyi (2011) opines that monetary sales promotion are incentive oriented promotions and transaction based that provide the customer with immediate rewards and utilitarian benefits. The utilitarian benefits here are basically instrumental, functional as well as cognitive in nature which provides added value to customers as means to an end, by way of increasing the satisfaction of their purchase and shopping experience (Chandon et al., 2000). The utilitarian benefits of monetary sales promotion are been measured in terms of money savings i.e price reduction, convenience in buying, saving in time, product quality (Chandon et al, 2000). Perhaps these measures of monetary sales promotion will be adopted in this study.

Monetary sales promotion such as price packs, shelf discount, free top-ups, coupons, refund and rebates help to stimulate the customer purchase intentions by inducing the customer to buy more than what has been

planned for at first instance. Price sensitive buyers are more prone to monetary sales promotion offers than non-price sensitive buyers. That is why Ahmed and Fatawu (2014) opined that consumers are rational buyers and price oriented. Monetary sales promotion has a negative effect on quality perception, repeat purchase, brand knowledge and customer loyalty as well as increase brand switching tendencies. The reason is based on the premise that whenever the offer ends as regards to the price discount, the customer may likely stop the purchase and switch to other brands because he/she is not committed to the brand and does not want to know much about the brand. In spite of the negative long-run effects, monetary sales promotion has a strong short run effect on consumer purchase behavior and widely applied in different type of goods and capable of generating significant increase in company's profit than non-monetary sales promotion (Hendel & Nevo, 2006; Gilbert & Jackens, 2012). Sa eed et al (2013) and Kulkarni & Srivasta (2018) reinvigorated by saying that price promotion is positively related to brand loyalty and customer loyalty.

Based on the above discussions, we therefore come up with the following propositions:

H_a1: There is significant and positive relationship between money savings as Utilitarian benefit of monetary sales promotion and customer loyalty.

H_a2: There is significant and positive relationship between product quality as utilitarian benefit of monetary sales promotion and customer loyalty.

H_a3: There is significant and positive relationship between convenience as utilitarian benefit of monetary sales promotion and customer loyalty.

H_a4: There is significant and positive relationship between saving in time as utilitarian benefit of monetary sales promotion and customer loyalty.

2.3.2 Non-monetary Sales Promotion

Non-monetary sales promotion is perceived to be non-transactional in nature and relationship oriented that provides hedonic benefits such as value expression, exploration, entertainment and self esteem (Campbell & Diamond, 1990; Chandon et al., 2000). The hedonic benefits provided by non-monetary promotion are non-instrumental, experiential and affective as well as enhancing brand value of the product or service (Mela et al., 1997; Chandon et al., 2000). They are quite intrinsically rewarding and connected to experiential emotions, pleasure and self esteem (Chandon et al., 2000). The non-monetary promotion tools are premium/bonus pack, samples, point of purchase and sweepstakes (Kalu, 1998; Ndu, 2002; Asiegbu & Igwe, 2012). Among the promotional tools highlighted, free samples can play a major role by increasing sales over a long period and develop brand loyalty of customers (Gedenik & Neslin, 1999; Bewa & Shoemaker, 2004). Point of purchase display materials are designed to remind customers, stimulate impulse purchase and allow self-service to be used (Kalu, 1998), while premium/bonus pack are prizes, free gift and other special offers consumers received during purchase from retailers and very effective in enhancing brand image and loyalty (Asiegbu & Igwe, 2012). Perhaps these non- monetary sales promotional tools have a great positive impact on quality perception of customers, long term effect on enhancing brand equity and have a wide level of acceptance as compared to monetary promotion (Camp and Diamond, 1990; Buil et al., 2013; Sinha & Verma, 2017). The assertion as regards to general acceptance of non-monetary promotion could be provoking to some extent on scholars that supports the monetary promotions as a result of the fact that in a society where majority of the consumers are living below the desirable living standard, many of them might not give much attention to non-monetary sales promotion tools but rather influenced by monetary promotions in order to make little savings for themselves to take care of other pressing needs. This argument is supported by the findings from Oyeniyi (2011) that the dwindling income of average Nigerian has a separate influence on consumer's evaluation of sales promotion. This implies that the kind of sales promotion that will induce the customer to buy is a function of his/her current level of income. Non- monetary sales promotion hedonic benefits are measured in terms of value expression, exploration, entertainment and self esteem (Chandon et al., 2000). These measures will be adopted in this study.

Based on the above argument, we put up the following propositions:

H_a5: There is significant and positive relationship between value expression as hedonic benefit of non-monetary sales promotion and customer loyalty.

H_a6: There is significant and positive relationship between exploration as hedonic benefit of non-monetary sales promotion and customer loyalty.

H_a7: There is significant and positive relationship between entertainment as hedonic benefit of non-monetary sales promotion and customer loyalty.

H_a8: There is significant and positive relationship between self-esteem as hedonic benefit of non-monetary sales promotion and customer loyalty.

2.4 Customer Big Data

Customer big data is adopted here as a moderating construct between sales promotion and customer loyalty. The marketing philosophy states that the customer is the king and the most strategic asset to any

surviving business; hence establishing a solid customer base is a key to customer loyalty and business performance. Thus, the implementation of customer related big data becomes necessary to any organization that focuses on meeting the customer needs. This is the reason why some scholars perceived data as "oil" in the digital economy (Wedel & Karman, 2016).

The challenge here is that the term "customer big data" has not been conceptualized in extant literature; therefore, we are linking it with the concept of big data. Big data can be defined as multi-media rich and interactive low cost information resulting from mass communication (Zhan, Tan, Li, & Tse, 2016). According to Abhinav (2019) big data refer to as a complex and large data sets that have to be processed and analyzed to uncover relevant information that can benefit the organizations. However, the term customer big data can be conceptualized as a large volume of structured and unstructured data sets that need to be processed and analyzed to unveil relevant and timely customer information in order to make informed decisions that will benefit the organization. The presence of customer big data enables the company to have insightful knowledge about the market by screening the market to know the kind of sales promotion techniques competitors are using and come up with better offers that will add value to the target market in order to gain competitive advantage. This marketing effort will help to customized promotions that improve sales, retention and customer loyalty (Zhan et al., 2016). One of the major sources of customer big data analytics is digital marketing platforms such as social media, e-mail, online communities, sensor network, mobile phones, search engine optimization, and internet. Retailers in Nigeria are using these sources to enrich their data base to improve customers delight.

Customer big data can be measured in terms of variety, velocity, and volume. The variety has to do with gathering customer information from multiple sources, while velocity deals with speed at which information is being developed in real time, and volume entails the size of data that is generated on daily basis from different sources (Zhan et al., 2016; Abhinav, 2019). These measures will be adopted in this study.
Based on the above discussion, we proposed as follows:
H_a9: Customer big data moderates the relationship between sales promotion and customer loyalty.

2.5 Customer Loyalty

The prime objective of every business organization is to ensure that the customer is satisfied, retained and being loyal as well as saying good things about the company and its offerings at the expense of realizing profit. It is generally agreed that retaining customers is cheaper than attracting new ones (Sa eed et al., 2013). Customer loyalty could be defined as a deeply held commitment towards a preferred brand and continuously re-purchasing the brand over time (Oliver, 1999). According to Kotler (2004 as cited in Yemisi & Femi, 2018) that customer loyalty is a situation in which the customer consistently patronized a given brand or set of brands and reference the brand to others and prefer it over time. We can say that customer loyalty is an in depth affection a customer hold for a brand and persistently purchase the brand over it life cycle.

Customer loyalty can be viewed from two related perspectives such as attitudinal and behavioral perspectives (Prus & Brandt, 1995; Kotler, 2004 as cited in Yemisi & Femi, 2018). The attitude perspective according to these scholars has to do with the customer intentions to re-buy the product or service, the intention to refer the product to others and immunity to resist competitive brands; while the behavioral perspective entails the behavior of re-purchase, buying other product from the company, and referring others to buy from the company's product. Whether behavioral or attitudinal perspective, these actions are being demonstrated by hard core loyal customers. Hard core loyal customers are customers that are deeply committed to the brand, always make a repeat purchase as well as act as brand advocates i.e referring the brand to others. Apart from this category of loyal customers we have the brand switchers. The brand switchers are customers who buy and move from one brand to another brand (Oyeniyi, 2011). They are very difficult to manage; It rest on the marketer to use customer related big data to understand the reasons for their switching behavior and design promotional strategies to capture them permanently.

However, customer loyalty can be measured in terms of re-purchase intentions, primary level (re-purchase) and secondary level (referrals) buying behavior (Jones & Sasser, 1995).

III.   METHODOLOGY

3.1   Research Design

This study is tailored by using quantitative research techniques. In order to clearly understand the moderating effect of customer related big data on the relationship between sales promotion and customer loyalty, a descriptive research design via cross sectional survey research design was adopted to gain firsthand information regarding sales promotional strategy and customer loyalty.

3.2   Population and Sample

The population of this study consists of four categories of consumers that have benefitted from sales promotions within the past two months in the following retail outlets such as Bar/ Restaurant, Super

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market/chain stores, Cable network subscribers and Mobile phone shops in Porthacourt and Yenagoa metropolis of Rivers and Bayelsa State respectively. However, one hundred and sixty (160) respondents were chosen for the study by selecting forty (40) from each retail outlet through judgmental sampling techniques. Some of the consumers were interviewed while the sales promotion was on-going.

3.3   Instrumentation and Measurement

The descriptive survey instrument was a structured questionnaire that has four parts namely section A, B, C and D with three key variables such as predictor variable (sales promotion), the criterion variable (customer loyalty) and moderating variable (customer big data). The predictor variables are monetary savings, product quality, convenience and saving time, value expression, exploration, entertainment and self-esteem. The variables are scaled on five point Likert scale ranging from strongly agreed, agreed, undecided, disagreed and strongly disagreed, being coded 5-1 respectively as adopted from the item scale used by Chandon et al, 2000; Luk & Yip, 2008; Oyeniyi et al., 2011; Saeed et al., 2013; Kulkarni & Srivastava, 2018.

➢   **Monetary savings**: I always save money from promotions; I get a good deal whenever I buy promoted product; I always spend less on promoted products.

➢   **Product Quality**: I bought quality product at same price; I bought a better product than what I used to buy; the promotion made me to upgrade to a better brand.

➢   **Saving Time**: The promo has made me to make good use of my time; the promo has made me to reduce my shopping hours; they attended to me very fast in the promo period.

➢   **Convenience**: The promo has made me to realize that I need the product; the promotion has made the buying easy for me; the promo has made me to remember what I needed.

➢   **Value Expression**: The promo has made me to feel very okay about myself; I am very happy about my purchase experience at the promo; I actually made a smart shopping experience.

➢   **Exploration:** I always feel like trying a new brand; I like to discontinue buying same brand; promotion gives me more insight about some products.

➢   **Entertainment**: The promo is full of fun; I have exciting purchase experience during the promo; I feel very good buying the product.

➢   **Self Esteem**: My shopping experiences actually compliment my status; I feel very good to be respected while shopping; I feel very important when attended to.

➢   **Customer Big Data**: I share opinion with others concerning my promotional experience with the brand online; I make positive and negative reviews concerning the promoted brands; I always re-share relevant and attractive promotional content online on daily basis.

➢   **Customer Loyalty**: I like to buy this product next time, I will not buy other brand rather than this one; I will recommend the brand to my friends and family members.

3.4   Validity and Reliability

The survey instrument was pilot tested by issuing copies to academicians for it correctness in order to ascertain the degree of content and face validity. Few corrections were made to strengthen the validity of the instrument before it was administered to the target respondents. In the aspect of reliability, the cronbach alpha coefficient reliability was used in ascertaining the level of internal consistency of the instrument. The results are tabulated in table 4.3 below. The results of the cronbach alpha indicated that the instrument used was valid and highly reliable as the values exceeded the recommended cut-off mark of 0.78 (Nunally, 1978).

IV.   DATA ANALYSIS AND FINDINGS

4.1 General Analysis of Questionnaire Distribution

The total of 160 questionnaires were distributed to the target respondents (consumers at different retail stores in Port Harcourt and Yenagoa metropolis in Nigeria. 120 valid questionnaire were returned and used for analysis. This represents 75% rate of response. The high response rate achieved is as a result of the fact that most of the respondents were interviewed and responses were retrieved at the spot.

4.2   Analysis of Respondents Demographics

Section A in the instrument was designed to ascertain the demographics of respondents and the summary of findings are tabulated below:

Table 4.2 Respondents Demographics

Variables	Frequency	Percentage %
Gender		
Male	70	58.3
Female	50	41.7
Total	**120**	**100.0**
Age Bracket		
Below 20 Years	17	14.2
21 – 30 Years	33	27.5
31 – 40 Years	38	31.7
41-50 Year	18	15.0
51 and above	14	11.7
Total	**120**	**100.0**
Educational Qualification		
PHD	5	4.2
Masters Degree	27	22.2
Bachelors Degree	44	36.7
HND	21	17.5
OND	18	15.0
WAEC / SSCE	5	4.2
Total	**120**	**100.0**
Income Level		
High Income Earner	25	20.8
Middle Income Earner	50	41.7
Low Income Earner	21	17.5
Not Applicable	24	20.0
Total	**120**	**100.0**
Total	**120**	**100.0**

Source: SPSS Output, 2020.

The demographic statistics in table 4.2 shows that 58% (70) of the respondents are male, while 41.7% (50) are female. Out of the total respondents 14.2% (17), 27.5% (33), 31.7% (38), 15% (18) and 11.7% (14) falls below 20 years of age, 21-30 years, 31-40 years, 41-50 years and 51 and above respectively. More so, in the aspect of educational qualification, 4.25% (5), 22.2% (27), 36.7% (44), 17.5% (21), 15% (18) and 4.2% (5) of the respondents had Ph.D Degree, Masters Degree, Bachelor Degree, HND, OND and WAEC/SSCE respectively. Finally, in regards to respondents income level, 20.8% (25), 41.7% (50), 17.5% (21) and 20.0% (24) are high income earners, middle income earners, low income earners and not applicable respectively. However, from the above analysis it is obvious that male gender, age bracket of 31-40 years of age, B. Sc qualification and middle income earners dominated the study.

4.3 Analysis of Descriptive Statistics and Correlation
Table 4.3 Summary of Descriptive Statistics and Correlation Analysis

Variables	Mean	Standard deviation	Cronbach Alpha	Correlation (r)	Significance level $P<0.05$
1. onetary Savings	3.09	1.56	0.967	.923**	Significant
2. roduct Quality	2.46	1.46	0.970	.937**	Significant
3. aving Time	2.67	1.47	0.977	.978**	Significant
4. onvenience	2.53	1.44	0.981	.935**	Significant
5. alue Expression	1.86	1.10	0.967	.726**	Significant
6. xploration	1.93	1.12	0.983	.799**	Significant
7. ntertainment	2.10	1.23	0.975	.759**	Significant
8. elf-esteem	1.87	1.11	0.970	.735**	Significant
9. ustomer Big Data	2.53	1.50	0.987		
10.	2.53	1.45	0.945		

Customer Loyalty						

Source: SPSS Result, 2020.

4.3.1 Descriptive Statistics
The above summary in table 4.3 shows the results of the descriptive statistics and correlation analysis. From the table, the mean scores of the monetary dimensions of sales promotions such as monetary savings, product quality, saving time, and convenience are 3.09, 2.46, 2.67 and 2.53; while the non-monetary sales promotions such as value expression, exploration, entertainment, and self esteem are 1.86, 1.93, 2.10, and 1.87 respectively. Therefore, the results show that monetary savings appear to be the most desirable dimension of monetary sales promotion that appeals more to consumers in Yenagoa as well as Nigeria in general. Thus, consumers in these city prefer monetary sales promotion more to non-monetary sales promotion because the results are all above the grand mean of 2.31 (3.09+2.46+2.67+2.53+1.86+1.93+2.10+1.87/8). This finding is as a result of the fact that majority of the respondent consumers falls within the middle and low income earning brackets, as such they are price sensitive buyers and extra monies gained from purchases could be used for other valuable purposes.

4.3.2 Correlation Analysis
In order to ascertain the strength of relationship between the predictor variables (i.e monetary and non-monetary sales promotion dimensions) and the criterion variable, the Pearson correlation statistical test was deployed at $P < 0.05$ level of significance and the results are depicted in table 4.3 above. However, the result of the findings as shown in table 4.3 revealed that **hypothesis one (Ha1):** monetary savings and customer loyalty is r=0.923**; **hypothesis two (Ha2)**: product quality and customer loyalty is r=0.937**; **hypothesis three (Ha3):** saving time and customer loyalty is r=0.978**; **hypothesis four (Ha4):** convenience and customer loyalty is r=0.935**; **hypothesis five (Ha5)**: value expression and customer loyalty is r=0.726**; **hypothesis six (Ha6)**: exploration and customer loyalty is r=0.799**; **hypothesis seven (Ha7):** entertainment and customer loyalty is r=0.759**; **hypothesis eight (Ha8)**: self-esteem and customer loyalty is r=0.735**. It is obvious that all the dimensions are significant and positively correlated to customer loyalty at $P < 0.05$, N = 120.

4.3 Partial Correlation Analysis
The partial correlation statistical test was conducted to ascertain the moderating influence of customer big data on the relationship between sales promotion and customer loyalty. The result is shown in table 4.4 below.

Table 4.4 Partial Correlations

Control Variables			Sales Promotion	Customer Loyalty	Customer Big Data
-none-[a]	Sales promotion	Correlation	1.000	.923	.887
		Significance (2-tailed)	.	.000	.000
		Df	0	118	118
	Customer loyalty	Correlation	.923	1.000	.919
		Significance (2-tailed)	.000	.	.000
		Df	118	0	118
	Customer Big Data	Correlation	.887	.919	1.000
		Significance (2-tailed)	.000	.000	.
		Df	118	118	0
Customer Big Data	Sales promotion	Correlation	1.000	.594	
		Significance (2-tailed)	.	.000	
		Df	0	117	
	Customer loyalty	Correlation	.594	1.000	
		Significance (2-tailed)	.000	.	
		Df	117	0	

a. Cells contain zero-order (Pearson) correlations.
Source: SPSS Result, 2020

Hypothesis 9: Customer big data moderates the relationship between sales promotion and customer loyalty.
The finding reveals that there is significant and positive correlation (r_{9a}=0.594**) on the effect of customer big data on the relationship between sales promotion and customer loyalty. The coefficient of determination indicated that 54.9% of customer big data affects the relationship between sales promotion and customer loyalty. This shows that customer big data has a positive effect on the relationship between sales promotion and customer loyalty. It therefore means that the kind of sales promotion the retailer will offer to the

consumers that could predict their loyalty depends on the volume of information retrieved from the customers regarding their promotional preference.

4.4 Multiple Regression Analysis

The multiple regression analysis was undertaken to validate the theoretical assumptions of Ha1, Ha2, Ha3, Ha4, Ha5, Ha6, Ha7 and Ha8 as well as the Pearson correlation coefficient results. The essence of the multiple regression analysis is to ascertain the linear combination of the predictor variables that statistically correlates with the criterion variable which gives credence to the individual variables.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.965[a]	.931	.926	.433

a. Predictors: (Constant), Self-esteem, Monetary savings, Saving time, Entertainment, Product Quality, Exploration, Value expression, Convenience in Shopping.

Source: SPSS Result, 2020

Table 4.6 ANOVA[a] (Model Fit)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	294.163	8	36.770	473.018	.000[b]
	Residual	8.629	111	.078		
	Total	302.792	119			

a. Dependent Variable: Customer Loyalty.
b. Predictors: (Constant), Self esteem, Monetary savings, Convenience in Shopping, Entertainment, Exploration, Saving time, Value expression, Product Quality.

Source: SPSS Result, 2020

Table 4.7 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.085	.066		-1.283	.202
	Monetary Savings	.240	.041	.233	5.796	.000
	Product Quality	.038	.079	.038	.485	.628
	Saving Time	1.040	.079	1.024	13.085	.000
	Convenience in Shopping	-.401	.095	-.378	-4.244	.000
	Value Expression	.001	.124	.000	.004	.997
	Exploration	.263	.094	.171	2.807	.006
	Entertainment	-.005	.076	-.004	-.073	.942
	Self Esteem	-.130	.142	-.083	-.920	.360

a. Dependent Variable: Customer Loyalty.

The results in table 4.7 from the multiple regression analysis shows the impact of sales promotion in terms of monetary and non-monetary sales promotion that provides utilitarian and hedonic benefits to consumers that give rise to customer loyalty. The various dimensions such as monetary savings ($\beta=0.233$ and t= 5.796, P< 0.05), saving time ($\beta= 1.024$ and t=13.085 P < 0.05), convenience in shopping ($\beta= -0.378$ and t=-4.244, P < 0.05) and exploration ($\beta= 0.171$ and t=2.807, P < 0.05) are said to be significant predictors of customer loyalty because they validated the theoretical assumptions of hypotheses Ha1, Ha3, Ha4 and Ha6 and supported the individual correlation (Pearson correlation, r) of Ha1, Ha3, Ha4 and Ha6 at r= 0.000 < 0.05. Perhaps the other four dimensions such as product quality ($\beta=0.038$ and t=0.485, P> 0.05), value expression ($\beta= 0.000$, P > 0.05), entertainment ($\beta= -0.004$ and t= -0.073 P > 0.05) and self-esteem ($\beta=-0.083$ and t=0.083, P > 0.05) are not significant predictors of customer loyalty because they did not provide support for the theoretical assumptions of hypotheses Ha2, Ha5, Ha7 and Ha8 as well as fail to validated the individual correlation (r) of Ha2, Ha5, Ha7 and Ha8. These are significant findings because several research studies have proven that product quality, value expression, entertainment and self-esteem are significant predictors of customer loyalty, but this study has proven otherwise. The reason that could have prompted this significant findings is the socio-economic differences of the environment these studies were conducted. In the sense that in less developed economies that is predominantly dominated by poor consumers who are being regarded as price sensitive buyers and does not see hedonic benefits like fun and respect as priority for purchase but rather the utilitarian savings they could gain from such purchase such as price discount and free top ups.

However, table 4.6 shows that sales promotion statistically and significantly predict customer loyalty at $F_{(8, 111)} = 36.770$, $P < 0.0005$, $R^2 = 0.931$. This implies that the regression model is a good fit of the data. Thus, table 4.5 shows that sales promotion explains 93.1% of the variability of customer loyalty.

V.   DISCUSSION OF FINDINGS

This study x-rayed the moderating effect of customer big data on the relationship between sales promotion and customer loyalty. The findings revealed that monetary sales promotion which provides utilitarian benefits such as monetary savings (Ha1), product quality (Ha2), saving time (Ha3) and convenience (Ha4) are predictors of customer loyalty except product quality (Ha2) which was not supported by the multiple regression analysis. The reason is that majority of the respondent consumers' falls within the middle and low income earning brackets; as such product quality was not considered as criterion for their purchases during sales promotion rather they were more concerned about the extra money they could save from the purchase. This finding reinvigorated the finding of Chandon, Wansink & Laurent (2000) and Oyeniyi (2011) that the degree to which a customer switch or being loyal to a brand in time of sales promotion does not have relationship with the quality of products or services but rather it is the reduced or discounted price that encourages switching and loyal behavior; thereby making quality criterion less attractive. This finding is in disagreement with prior studies like that of Sa eed et al., (2013) that product quality is a predictor of customer loyalty; but we are all in agreement that monetary sales promotion most especially utilitarian saving has a robust impact on customer loyalty than other predictors.

However, in the aspect of non-monetary sales promotion that provides hedonic benefits such as value expression (Ha5), exploration (H6), entertainment (H7) and self-esteem (Ha8), the study revealed that these variables are predictors of customer loyalty; though value expression, entertainment and self-esteem were not validated by the multiple regression results except exploration. These are major findings because several scholars (Chandon, Wansink & Laurent, 2000; Sa eed et al, 2013) are of the view that these non-monetary sales promotion dimensions are key predictors of customer loyalty because it has been proven, but this study is in disagreement with prior studies. The reason is that the dwindling disposable income of the average Nigerian consumer is so low; thereby affecting his or her evaluation of sales promotion in regards to utilitarian benefits as against hedonic benefits. Admittedly, since majority of the consumers in these part of the world are poor, hedonic benefits does not often influence their buying choice, rather monetary savings supersede and powerfully influenced their purchase decision. Perhaps the sixth hypothesis was validated by the multiple regression result that exploration is a predictor to customer loyalty. This finding is actually in agreement with that of Sa eed et al (2013) and Chandon et al (2000). Hedonic exploration dimension of non-monetary sales promotion is said to be significant as a result of the fact that it has dual utilitarian saving and hedonic nature in the sense that consumers are of the view that sales promotion actually exposed them to have insightful knowledge about the existence of other similar, quality and cheaper brands like the one they are familiar with.

Finally, the study revealed that customer big data (Ha9) has a positive effect on the relationship between sales promotion and customer loyalty. This implies that sales promotion effectiveness in terms of customer loyalty is a function of customer big data. This finding is in agreement with Zhan et al (2016) that customer big data helps to customize promotions that improve sales, retention and customer loyalty. In addition, a similar finding conducted by Chong et al (2016) revealed that big data architecture can be used to understand promotional strategies that could increase online consumer product demand or predict sales.

VI.   CONCLUSION

Based on the findings of this study, we conclude that all the dimensions of monetary and non-monetary sales promotion investigated in this study are predictors of customer loyalty; though some of them have weaker effect but monetary savings, saving time, convenience and exploration have robust positive impact on customer loyalty than others. In addition, customer big data plays a major role by moderating the effect of sales promotion and customer loyalty. Customer big data enable the retailers to understand and gain insightful knowledge about the customers in regards to the best promotional strategies that appeal more to them and use same to customize promotions that improves sales and customer loyalty.

The study recommends that monetary sales promotion which provides utilitarian savings should be periodically implemented by retailers in order to attract customers, acquire and make them loyal customers. Secondly, despite the fact that monetary promotion has a robust impact on customer loyalty than non-monetary promotions; non-monetary sales promotion should not be taken for granted because some consumers are not too keen about price discount but have reputation to protect and demand respect from the retailers. Finally, retailers should endeavor to design customer big data architecture in their respective outlets to understand the customer better and come up with best promotional offers that could improve customers delight and competitive advantage.

Limitations of The Study and Further Direction

This study is restricted to sales promotion and customer loyalty using customer big data as a moderating variable. The concept of customer big data is a new phenomenon in marketing and studies relating to it are sparse, which makes the conceptualization to be difficult. The study is limited to consumers in Port Harcourt and Yenagoa metropolis, the retailers were not considered in this study. Further studies should look at the effect of customer big data on sales promotions on retail value chain. Scholars should use our model to expand the concept of customer big data on sales promotion and customer loyalty even beyond the context of sales promotion to product development, marketing intelligence, digital marketing and innovation research.

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