

COVID-19 CONTAINMENT STRATEGIES AND CUSTOMER ENGAGEMENT IN BANKING SECTOR IN RIVERS STATE: AN IMPLICATION FOR MARKETING

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Abstract

The recent outbreak of COVID-19 present challenges in all aspects of humans' endeavors particularly, the business sector. Firms were shut down and economic lives halted, consequently various containment measures were introduced which led to reopening of global economy. However, these measures were no operated without challenges which affect customer engagement in some industries particularly, the banking sector. This study investigates the relationship between covid-19 containment strategies and customer engagement in the banking sector in Rivers State. The study adopted quantitative research design using a survey method. A total of 372 subjects representing customers of commercial banks in Rivers state were surveyed through questionnaire administration. Four research questions were posed and eight hypotheses were tested. Data analysis was done using descriptive statistics of mean and standard deviation while inferential statistics of Multiple Regression was used to test the stated hypotheses on SPSS version 25. Results from the Multiple Regression analysis reveal a very strong significant linear relationship between physical distancing, nose masking, hand sanitizing, temperature screening and customer engagement in the banking sector in Rivers state. The study therefore recommends that: the commercial banks in Rivers state should reduce physical presence by making online transactions more flexible for their customers; that the commercial banks in Rivers state should educate their customers on an effective usage of nose masks; that the commercial banks in Rivers state should warmly attend to

customers by shifting attentions from the virus to customer satisfaction and that the commercial banks in Rivers state should install high temperature screening gadgets with the use of safer hand sanitizers to win customer's confidence.

Keywords: Containment Strategy, Physical Distancing, Nose Masking, Hand Sanitizing, Temperature Screening, Customer Engagement, Customer Commitment

Introduction

The rapid outbreak of COVID-19 presents an alarming health crisis that the world is grappling with. In addition to the human impact, there is also significant economic, business and commercial impact being felt globally. In fact, about 94 percent of businesses across the globe have been impacted and are already seeing COVID-19 disruptions. Companies are navigating a broad range of interrelated issues that span from keeping their employees and customer safe, shoring-up cash and liquidity, reorienting operations and navigating complicated government support programs. Above all, measures are put in place toward customer engagement in a more precise manner. Customer engagement remains fundamental to business success particularly during the COVID era. This is more demanding considering the threats of the virus which keep customer away from business premises. Ingo et al. (2020) posit that to maintain relevance, businesses are considering new approaches to engage their customers; and novel theoretical perspectives can provide an underlying

structure to better understand the engagement phenomenon. Customer engagement which exposes investment of operant resources (i.e., cognitive, emotional, behavioral, and/or social knowledge/skills) and operand resources (e.g., equipment) in brand interactions (Kumar et al., 2019), has received widespread attention (Furrer et al., 2020) particularly during the covid-19 pandemic era. Customer engagement can be seen as individual's voluntary interactions and resource contributions to a firm's representations that go beyond what is fundamental to transactions, (Jaakkola & Alexander, 2014).

Given its interactive core, customer engagement has prime applicability in the service context that is characterized by high interactivity, including among customers, service staff, and fellow customers (Oertzen et al., 2020; Clark et al., 2020). Existing customer engagement literature has developed important acumen, including by defining and Operationalizing the concept, and outlining its contribution to key firm performance indicators including 'sales' (Brodie et al., 2011; Letheren et al., 2019). Customer engagement literature considers the social context in which engagement takes place and recognizes customers as both social and economic actors; thus, also adopting the paradigmatic lens of institutionalism. For example, Brodie et al. (2011) drew from both relationship marketing and service-dominant logic to explore the theoretical foundations of customer engagement, which manifest engagement as a psychological state also with cognitive, emotional and behavioral dimensions. Further, several researchers proposed an additional engagement dimension that reflects a socio-cultural and institutional reference, i.e. social engagement, (Vivek Beatty & Morgan, 2012). The institutional perspective and socio-cultural pressures thus provide another foundation for behavioral, social and cognitive engagement responses.

Engagement paradigm in the banking industry therefore exhibits social, emotional, cognitive and behavioral tendency towards banking services as affected by covid-19 containment measures. This can be measured by customer

commitment and repeat patronage. Emotional paradigm of customer engagement is fostered in various settings and levels, and is contingent on an individual's disposition and willingness to engage in the process. This attributes deals with customer feelings and passions evoked in the service process. Fredricks et al. (2004) posit that a key aspect of behavioral engagement is involvement. Customers demonstrate behavioral engagement by their consistency toward service involvement which is also used to test commitment and repeat patronage in this study. Commitment involves feeling attached to and intending to ensure the continuity of a relationship with a service provider or a brand. Udorn, Bloom and Zeithaml (1998) defined commitment as an affective attachment and an intention to develop and maintain long-term relationships with exchange partners. Another way customer demonstrates engagement is repeating purchase. Repeat patronage customers are customers who are satisfied emotionally, intellectually, physically by an organization offering which could be in form of a product which exceeds their expectations.

Repeat patronage according to Wirtz and Lwin (2009) is the willingness of an individual to re-patronize a services organization. These are purchase that customers make to replace the same items or services they had bought and consumed previously. Repeat patronage is demonstrated in the banking industry by consistency in repurchasing banking services. Customer engagement was of great concern to the banking industry during the covid-19 era and as such, various measures were initiated to protect customers' health. At present, the banks are forced to reconsider how they communicate with customers through various containment measures which include physical distancing, nose masking, hand sanitizing and temperature screening. Physical distance means keeping distance from one another and limiting activities outside the home. Physical contact greetings, such as handshaking and hugging, are prohibited in physical distancing. Physical distancing is vital for protecting at-risk populations from infection. Not only does it help limit their exposure to the virus, but it also helps ensure that health systems have enough supplies and personnel to handle their care if

they need to be hospitalized for COVID-19. Physical distancing practice in the banking industry include keeping customers at least 6 feet away from each other and limit number of customers in the banking hall.

Nose masking is another containment measure implemented by the banks to protect customers. Nose masks are device usually covering the mouth and nose to facilitate delivery of a gas (such as a general anesthetic).face masks are coverings (as of polypropylene fiber or cotton fabric) for the mouth and nose that is worn especially to reduce the spread of infectious agents (such as viruses or bacteria). Nose masks are an important component in controlling COVID-19, and policy orders to wear masks are common. Almost all the states in Nigeria require the use of face masks in public and in businesses to combat the COVID-19 pandemic. Similar regulations exist in Rivers State as touching the mandatory use of face mask in public places. Prior to the COVID-19 pandemic there was scant evidence that mask-wearing by the general public reduced transmission of corona viruses during a pandemic. The airborne nature of SARS-CoV-2 suggests masks could reduce spread, (Tirupathi et al., 2020), and a growing body of evidence supports that high rates of mask use in the general population reduces overall virus transmission, (Chu, 2020).

Another containment measure evident in the bank is the use of hand sanitizer. Hand sanitizer is just alcohol suspended in a hand rub, which neutralizes germs that might be lurking on the hands, including SARS-CoV-2, the novel coronavirus that causes COVID-19. The Centers for Disease Control and Prevention (CDC) recommends hand sanitizers that contain at least 60% ethanol (ethyl alcohol) or 70% isopropanol, (Jake, 2021). Temperature screening is identified as been effective in containing corona virus hence used by banks. Temperature screening use a process called telethermography, or “long distance heat imaging” to measure skin temperature to within a fraction of a degree. Most work reliably at a distance of one to two feet. A safe alternative is to use an automated, touchless temperature screening solution. These are a kind of thermal imaging device that reads body temperature at a

distance. But they are just one of many different kinds of thermal imaging on the market, and not all are designed to measure human body temperature, despite what some vendors may claim.

Studies on the effect of Covid-19 on business remain visible in the academic space. Various researches conducted on this subject had recognized its impact on both businesses performance and social lives. However there is growing concern on the explanation of the containment measures adopted so far and how it affects business customer engagement particularly, in the banking sector.

Statement of the Problem

The banking sector is one of the important pillars of the global economy, because it provides services that impact the daily lives of consumers. The importance of this sector for economic and social prosperity is not in doubt (Berger, Molyneux, & Wilson, 2020; Liang & Reichert, 2020). The banking industry could ensure, due to the specifics of its activity, a key role in the proper functioning of economic and financial mechanisms, with an impact on macroeconomic developments and business dynamics. The banking industry depends majorly on customers to provide deposits thus customer engagement remains significant to the prosperity of the industry. Customer engagement seems to be the buzzword in every industry today. As the banking industry gears up to robust operation, the focus on customer engagement also increases dramatically. Continuous and effective customer engagement strengthens the trust between a bank and it's customers to a great extent. Lesego Puso (2021) maintains that an engaged customers are willing to interact and communicate with the bank and this often translates to owning multiple products, decreasing the risk that they will switch to new competitors. However, the recent breakout of Covid-19 pandemic has affected customer engagement in the banking sector negatively. Pinzaru, Zbucea, and Anghel (2020) observed that covid-19 pandemic has radically changed the way consumers behave around the world.

The COVID-19 pandemic has changed many things in the banking system: the way work are being done, new operations and proceedings. Expanding on this research, COVID-19 has already profoundly transformed organizational cultures in all the banks, (Savić, 2020; Spicer, 2020). Symbols that previously represented normality such as open spaces full of people, full elevators and social life style have been replaced with physical distancing, nose masking, hand sanitizing, temperatures screening and limited customers in the banking halls. These measures adopted, though aimed at health protection, constitute stress and posse unnecessary discomfort to customer. Ololo, et al. (2020) observed that COVID-19 containment measures equally have adverse consequences in the financial flows. Each of these measures adopted posse health, social and emotional threats. The African society is socially in nature; peoples live in together in a closed relationship, with embracing, shaking of hands, hugging, kissing etc. also the compulsory wearing of nose mask in the banking premises is challenging considering its health implications and inconveniences. The compulsory hand sanitizing and temperature screening at banking premise is becoming challenging as customers are treated as though they are carriers of this virus. This customer disservice takes place beginning from the security post down to inside of the banking hall which causes dissatisfaction and threatens customer engagement.

Customer engagement is paramount in the operational success of the banking industry particularly during the covid19 pandemic era, however, various containment measures adopted so far which include physical distancing, compulsory wearing of nose mask, hand sanitizing and temperature screening amongst others had not being confirmed as efficient since they constitute both health, social and emotional challenges to the consumers.

Studies had been conducted on covid19 impact and business performance in various economic sectors in different countries in the world however, the focus of containment measures on customer engagement particularly in the banking industry remains untouched.

Studies that explore covid-19 containment measures had focused customer engagement in vaccination, (Guendalina et al., 2020). Customer engagement is also explored in the banking industry (Neena et al., 2017) and on quality management referencing service quality (Rosa & Tatik, 2019). Most studies on covid-19 containment measures had focused on organizational performance with no attempt on customer engagement in the banking sector particularly in Rivers State to the best of the researcher's knowledge which constitutes research gap sought to be filled by this study. This research is therefore titled, covid-19 containment strategies and customer engagement strategies in the banking sector in Rivers State: An implication for marketing.

Conceptual Framework

This study which sought to establish a relationship between Covid-19 containment strategy and consumer engagement in banking sector in Rivers State is formulated on two variables: the predictor variable "Containment Strategy (CONSTRA)" with the following sub-variables as dimensions: Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA), Temperature Screening (TEMPSC) and the criterion variable "Customer Engagement (CUSTENG) which is measured with Customer Engagement (CUSTCO) and Repeat Patronage (REPEPA). The focus of the study is to determine how Covid-19 containment strategies can relates with customer engagement in banking sector in Rivers State. This is clearly depicted in the diagram below.

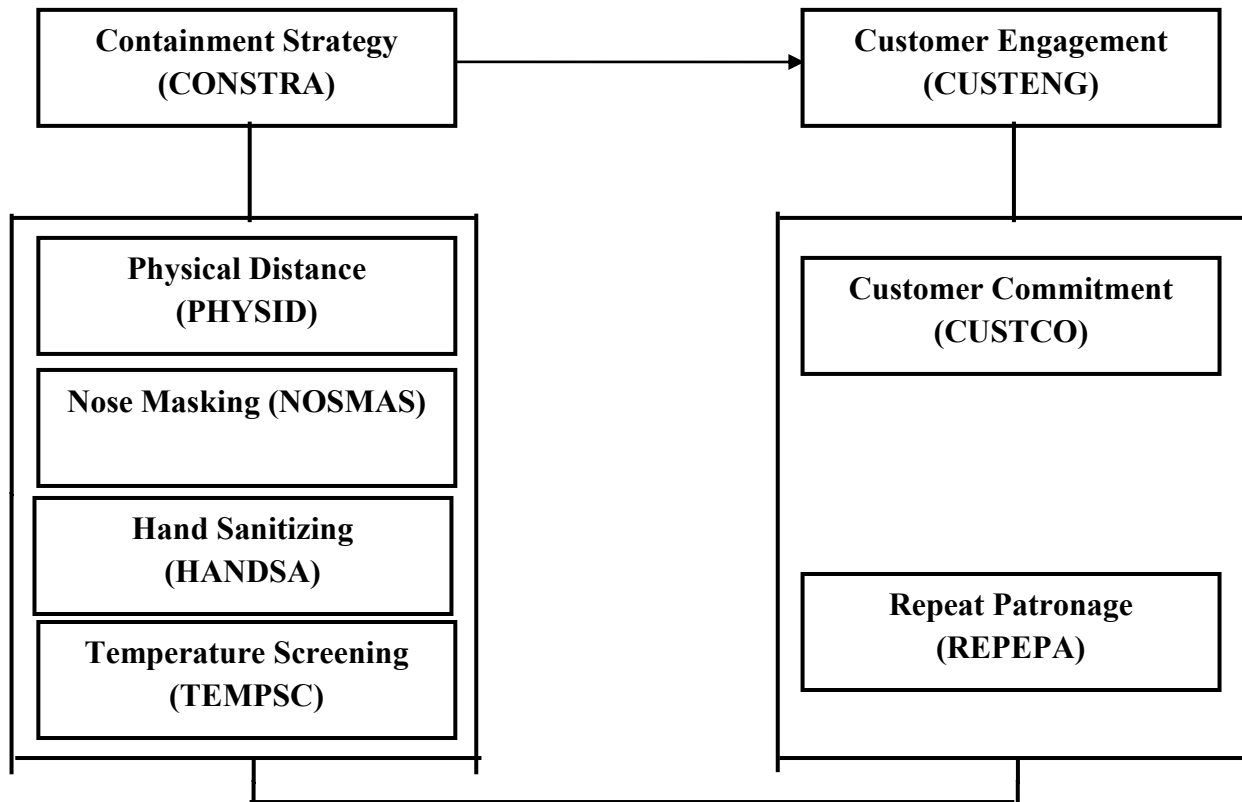


Figure 1: Conceptual framework showing the link between Covid-19 Containment Strategies and Customer Engagement.

Source: *Researchers Conceptualization*

Aim and Objectives of the Study

The aim of the study was to investigate the relationship between Covid-19 Containment Strategies and Customer Engagement in banking sector in Rivers State. The specific objectives of the study are:

1. To examine the relationship between Physical Distancing and Customer Engagement in banking sector in Rivers State.
2. To examine the relationship between Nose Masking and Customer Engagement in banking sector in Rivers State.
3. To examine the relationship between Hands Sanitizing and Customer Engagement in banking sector in Rivers State.
4. To examine the relationship between Temperature Screening and Customer Engagement in banking sector in Rivers State.

Research Questions

The following research questions were designed to guide the conduct of this research.

1. To what extent does Physical Distancing relates with Customer Engagement in banking sector in Rivers State?
2. To what extent does Nose Masking relates with Customer Engagement in banking sector in Rivers State?
3. To what extent does Hand Sanitizing relates with Customer Engagement in banking sector in Rivers State?
4. To what extent does Temperature Screening relates with Customer Engagement in banking sector in Rivers State?

Research Hypotheses

The following hypotheses were tested in this research:

Ho₁: There is no significant relationship between Physical Distancing and Customer Commitment in banking sector in Rivers State.

Ho₂: There is no significant relationship between Nose Masking and Customer Commitment in banking sector in Rivers State.

- Ho₃:** There is no significant relationship between Hand Sanitizing and Customer Commitment in banking sector in Rivers State.
- Ho₄:** There is no significant relationship between Temperature Screening and Customer Commitment in banking sector in Rivers State.
- Ho₅:** There is no significant relationship between Physical Distancing and Repeat Purchase in banking sector in Rivers State.
- Ho₆:** There is no significant relationship between Nose Masking and Repeat Purchase in banking sector in Rivers State.
- Ho₇:** There is no significant relationship between Hand Sanitizing and Repeat Purchase in banking sector in Rivers State.
- Ho₈:** There is no significant relationship between Temperature Screening and Repeat Purchase in banking sector in Rivers State.

Concept of Containment Strategy

Containment includes biosafety and biosecurity requirements for laboratories, vaccine production sites, or any other facility that handles or stores eradicated viruses, to minimize the risk of these viruses being released into the community. Containment strategies involve disease control measures applied to curtail further spread. The initial response to an emerging, communicable, contagious, and infectious disease focuses on containment of the disease at its source, if feasible. Once spread beyond the initial focus occurs and with introduction of the disease into Delaware, the foci of containment measures is individual or community-based containment measures that attempt to slow and limit disease transmissions.

Containment strategies aimed at controlling and slowing the spread of disease might include measures that affect individuals (i.e. infection control, isolation of patients and monitoring their contacts) as well as measures that affect groups or entire communities (i.e. cancellation of public gatherings, implementation of community-wide snow days). Containment

measures are grouped as non-pharmaceutical intervention containment and pharmaceutical containment measures. Pharmaceutical Containment Measures such as antibiotics, antiviral medications, and vaccinations can be used to mitigate or reduce the spread of an infectious disease. Such methods are useful in containing certain contagious diseases or agents which respond to such treatments. Non-pharmaceutical Intervention (NPI) Containment is a mitigation measure to reduce the spread of an infectious disease (e.g. pandemic influenza) but one that does not include pharmaceutical products, such as vaccines and medicines.

The study of covid-19 containment measures and customer engagement is still novel in marketing research hence no dimension is significantly highlighted so far. Nevertheless, the present study adopted physical distancing, nose masking, hand sanitizing and temperature screening as dimensions of covid-19 containment measures.

Physical Distancing

In medical sciences, social distancing refers to a public health practice that urges individuals to maintain their physical distance from each other during a pandemic outbreak to slow the dissemination of the infection (Glass et al., 2006), in sociology, the use of social distancing is mainly related to the study of the impact of ethnicity, social class, and gender on individuals' perceptions of distance (Wided, 2021). Yet, although "social distance" is an established construct in sociology, there is no consensus yet on its definition. Some sociologists have advised the World Health Organization (WHO) to change terminology and use "physical distancing" instead of "social distancing."

Social distance as a theoretical construct has been used in a few marketing studies to understand shopping behavior. Dickson and MacLachlin (1990) extended the concept of social distance studied in sociology by applying it to the field of retail. Kim et al. (2008) investigated the impact of two dimensions of psychological distance: temporal and social on consumers' evaluations of products. Similarly, Zhao and Xie (2011) examined the interplay of

social and temporal distance on consumers' responses to peers' recommendations. As such, despite these studies, the link to consumer social distancing generated by an unexpected situation such as a pandemic and its impact on consumption and business practices as a field of research remains largely unexplored in marketing.

Nose Masking

Nose Mask or Nasal Filter is a device that does the work of filtering the air entering through our Nasal Passages (Medical Term: Nares). Its primary aim is to help filter out the air directly from within our nostrils without having to cover our faces. A Nose Mask or Nasal Filter gives no trouble in talking, eating, drinking etc and one finally feels liberated from bulky Face Masks. The impact of using masks to control transmission in the workplace has not been well studied. In a study of the effect of mask use on household transmission of SARS-CoV-2, masks were found to be highly effective, including for children, and the secondary attack rate for children was found to be only half that of adults, (Wang et al., 2020). A survey during the SARS-CoV-2 outbreak in Hong Kong reported enhanced adherence to public mask wearing as the pandemic progressed over 3 wk, with 74.5% self-reported mask wearing when going out increasing to 97.5%, without mandatory requirements (Cowling, 2020). A similar surveys reported face mask use in Hong Kong during the SARS outbreak in 2003 as 79% (Leung et al., 2004), and approximately 10% during the influenza A (H1N1) pandemic in 2009 (Cowling, 2010). This suggests that the public have enhanced awareness of their risk, and that they display higher adherence levels to prevention strategies than during other epidemics. During the COVID-19 pandemic, many countries have utilized mask mandates as implementation strategy

Perceptions of risk play an important role in mask use (MacIntyre, 2008). Signaling participation in health behaviors by wearing a mask as well as visible enforcement can increase compliance with public mask wearing, but also other important preventative behaviors (Van Houten, 2013). Models suggest that public mask wearing is most effective at reducing

spread of the virus when compliance is high (Tian, 2020). We recommend that mask use requirements are implemented by governments, or, when governments do not, by organizations that provide public-facing services. Such mandates must be accompanied by measures to ensure access to masks, possibly including distribution and rationing mechanisms so that they do not become discriminatory. Given the value of the source control principle, especially for presymptomatic people, it is not sufficient for only employees to wear masks; customers must wear masks as well.

Hand Sanitizing

Hand sanitizer (also known as hand antiseptic, hand disinfectant, hand rub, or handrub) is a liquid, gel or foam generally used to kill many viruses/bacteria/microorganisms on the hands, (Boyce, 2002). In most settings, hand washing with soap and water is generally preferred, (de Witt Huberts et al., 2016). In most healthcare settings, alcohol-based hand sanitizers are preferable to hand washing with soap and water, (Bolon, 2016) because it may be better tolerated and is more effective at reducing bacteria. Alcohol-based versions typically contain some combination of isopropyl alcohol, ethanol (ethyl alcohol), or n-propanol, with versions containing 60% to 95% alcohol the most effective, (Boyce, 2002). Alcohol-based hand sanitizer works against a wide variety of microorganisms but not spores. Compounds such as glycerol may be added to prevent drying of the skin. Some versions contain fragrances; however, these are discouraged due to the risk of allergic reactions. Alcohol has been used as an antiseptic at least as early as 1363 with evidence to support its use becoming available in the late 1800s, (Block, 2001). Alcohol-based hand sanitizer is more convenient compared to hand washing with soap and water in most situations in the healthcare setting, (Bolon, 2016). Among healthcare workers, it is generally more effective for hand antiseptics, and better tolerated than soap and water.

Temperature Screening

As businesses reopen after government-induced restrictions, many public agencies and private

companies, such as banks, golf courses, and stores, are using temperature screening to assess for possible coronavirus disease 2019 (COVID-19) infection both for patrons and for employees. Temperature screenings is conducted using an approved temperature monitoring device to accurately measure the presence of fever (this may include hand held devices or thermal cameras). Temperature screening use a process called telethermography, or “long distance heat imaging” to measure skin temperature within a fraction of a degree. Most work reliably at a distance of one to two feet. Temperature screening may identify people who have an elevated temperature, which is one of the symptoms of COVID-19. Using infrared light to take someone's temperature is a great idea.

Customer Engagement

The origin of the engagement construct can be traced back to the seminal work on employee engagement by Kahn (1990). As Bowden (2009) elaborates, “within organisational behaviour literature, engagement has been defined as task behaviours that promote connections to work and to others, which are expressed physically, cognitively and emotionally and which stimulate personal development and increase employee motivation”. Engagement, thus, includes feelings of confidence, integrity, pride and passion in a brand. Van Doorn et al. (2010) define customer engagement as a form of customers’ behavioral manifestation towards a brand or a firm, beyond purchase, resulting from motivational drivers”. Meskauskas (2006) defined engagement as “turning on a prospective customer to a brand idea enhanced by the surrounding media context”. According to Wagner and Majchrzak (2007), customer engagement refers to the intensity of customer participation with both representatives of the organisation and with other customers in a collaborative knowledge exchange process.

According to Verhoef et al. (2010), “Customer engagement needs to be recognized as an overarching construct that captures non-transactional customer behavior”. Thus, a number of academicians have focused on engagement as an outcome of repeated and

positive interactions that occur between the customer and a brand (Patterson et al., 2006). Mollen and Wilson (2010) state that customer engagement emerges as a consequence of repeated interactions that strengthen the emotional, psychological or physical investments that a customer has made in a brand. Sashi (2012) states that customer engagement focus on providing the customer greater values as compared to the competitors. Based on the initial work done by McEwen, Bowden (2009) thus recognizes engagement as a rational and emotional bonding between the customer and a brand.

Various studies conducted on customer engagement had adopted different measures such as the work by Sondhi, Sharma and Kalla (2017) which adopted trust, satisfaction, loyalty and behavior similarly, Mollen and Wilson (2010) studied customer engagement from emotional, psychological or physical perspective. This study thus adopts customer commitment and repeat patronage as measures of customer engagement.

Customer Commitment

Commitment in a business relationship is a psychological sentiment of the mind, which is basically forming an attitude concerning continuation of a relationship with a business partner (Wetzels et al., 1998). In the relationship marketing literature, commitment has been defined by Morgan and Hunt (1994) as the perceived likelihood that a focal firm will terminate the relationship with another firm in the reasonably near future. Commitment is defined as a permanent wish to maintain a relationship (Sosa-Varela et al., 2011). Nischay, (2015) defined it as an implicit or explicit pledge of relational continuity between exchange partners. Commitment is referred to as an implicit or explicit pledge of relational continuity between exchange partners in the customer-and-seller relationship. Moorman et al., (1999) simplified this definition and referred to commitment as the motivation to stay with a supplier or suppliers. Commitment involves feeling attached to and intending to ensure the continuity of a relationship with a service provider or a brand.

A customer's commitment implies their will to establish a long-term relationship, make certain short-term sacrifices to keep up this relationship, and a feeling of trust towards the stability of the commercial relation (Anderson et al., 1993).

Repeat Patronage

A repeat patronage is the purchase by a consumer of a same-brand product or service as bought on a previous occasion. It can be described as the placing of order after order by a consumer from the same organization. Repeat patronage can also be seen as the buying of a product or services by a consumer of the same brand. Repeat patronage according to Wirtz and Lwin (2009) is the willingness of an individual to re-patronize a services organization. Repeat patronage customers are customers who are satisfied emotionally, intellectually, physically by an organization offering which could be in form of a product which exceeds their expectations. These are purchase that customers make to replace the same items or services they had bought and consumed previously. It is considered as the purchase by a consumer of a same-brand product as bought on a previous occasion. This is an opportunity for marketers to establish long-term customer, relationships. Repeat patronage is often a measure of loyalty to a brand by consumers, higher repeat purchase value means a well retained, satisfied customer, also higher repeat patronage value drives higher customer value, which means a better top line in the loyalty ladder.

Theoretical Framework

This study is underpinned by Protection Motivation Theory. The Protection Motivation Theory was developed by Rogers (1975) for the health promotion and disease prevention sector, and describes how individuals are motivated to react in a protective way towards a perceived threat. Protection motivation theory has four key elements: "threat appraisal", followed by "coping appraisal", which comprises "response efficacy" – the belief that certain processes will mitigate the threat. Response efficacy concerns beliefs that adopting a particular behavioral response will be effective in reducing the diseases' threat, (Van der velde, et al., 1991) and self-efficacy is the belief that one can

successfully perform the coping response. It is an individual's idea of their own ability to implement the required actions to mitigate the threat. Threat appraisal assesses the severity of the situation and examines how serious the situation is. Severity refers to the degree of harm from the unhealthy behavior. It focuses on the source of the threat and factors that increase or decrease likelihood of maladaptive behaviours, (Plotnikoff, et al., 2010). While coping appraisal is how one responds to the situation. The coping appraisal consists of the response efficacy, self-efficacy, and the response costs. Coping appraisal also consists of perceived response efficacy, or an individual's expectation that carrying out the recommended action will remove the threat, and perceived self efficacy, or the belief in one's ability to execute the recommended courses of action successfully, (Rogers, 1975; Rogers,1983).

Protection Motivation Theory can be applied to "any threat for which there is an effective recommended response that can be carried out by the individual" (Floyd, 2000). Maddux and Rogers (1989) found self-efficacy to be "the most powerful predictor of behavioural intentions" that precedes actual behavior, (Beatson & McLennan, 2011). A robust self-efficacy is more likely to (i) lead to the takings of protective action in an appropriate timeframe, (ii) influence the degree of receptivity to information and (iii) promote the likelihood of taking effective remedial action, (Paton, 2013; Floyd, et al., 2000). Aside from personal physical health research, the application of protection motivation theory has extended to other areas. Beatson concluded by advocating the need to "stimulate targeted research which will lead to advances in community bushfire safety practice, and to find out which of the many constructs making up the theories are more important as determinants of bushfire-safety-enhancing behaviours". In a natural hazards context, Protection Motivation Theory was used by Mulilis and Lippa (1990) in a study of a highly realistic scenario (earthquake); they concluded that further research would help define PMT's application. Thus protection motivation theory is adopted in this research to explore disease containment

measures adopted by banks to secure customer engagement during the covid-19 era. Banks protect her customers and staff through application of several measures which include social distancing, nose masking, hand sanitizing and temperature screening amongst others.

Empirical Review

The review of literature found that no study conducted so far directly relate the present study in contents, variables and geographical locations. However, some were found relevant and reviewed in line with our study. These include the study carried out by Guendalina et al., (2020) on measuring Italian citizens' engagement in the first wave of the COVID-19 pandemic containment measures. The study adopts descriptive design using the questionnaire for data collection from 1000 respondents. To investigate the relationship between variables, ANOVA analysis, logistic regression and contingency tables with Pearson's chi-squared analysis were carried out. The study shows that low levels of health engagement are associated with a change in the usual purchase behavior. The study by Guendalina et al., (2020) relates the present study in that it studies covid19 containment measures and citizen's engagement. The studies also adopt same research design, data collection method and data analysis method. However, the study by Guendalina et al., (2020) focuses citizen's engagement measures while the present study is made on containment measures and customer engagement. Also they were conducted in different geographical locations.

Also, Neena et al. (2017) carried out a research titled, customer engagement in the Indian retail banking sector: An exploratory study. The study adopted descriptive design while data was collected from 125 respondents with the use of the questionnaire. Data analysis was conducted using simple percentage and PPMC. It was revealed that there is no significant difference between the middle and longer duration customers insofar as customer engagement is concerned. Also, the level of engagement of each of these two groups is significantly higher than that of customers with experience of less than five years. The study by Neena et al. (2017) relates the present study in that it studied

customer engagement in the banking sector. The study adopts same design with same data collection method. However, the studies used different data analysis methods and were carried out in different geographical locations. While the study by Neena et al. (2017) was done in India, the present study is conducted in Rivers State.

Rosa and Tatik (2019) also investigated the impact of total quality management on service quality, customer engagement, and customer loyalty in banking in Indonesia. The study adopted descriptive research design using questionnaire for data collection from 235 respondents. Partial Least Square SEM analysis was adopted. The study found that TQM practices has positive effect on Service Quality, Service Quality has positive effect on Customer Engagement and Customer Loyalty and Customer engagement has positive effect on Customer Loyalty. The study by Rosa and Tatik (2019) relates the present study in that it studied customer engagement, used same design, data collection method and was conducted in same industry. However, different data analysis tools were adopted and they were conducted in different geographical locations.

Methodology

This study adopted the descriptive survey design. The population of the study is the customers of all the 22 registered commercial banks in Rivers state which is over one million (1,000,000). The sample size consisted of 384 based on Krejcie and Mongan (1970) table for determining the sample size of a given population. These respondents were surveyed through questionnaire administration. The items used measuring each variable in this study were based on theory and largely drawn from the literature. The questionnaire was divided into three sections involving questions relating to respondents' profile, questions relating to covid-19 "containment measures" and questions relating to "customer engagement". The instrument for data collection contains 16 questions for the independent variable and 8 questions for the dependent variables. The instrument has a four point Likert scale ranging from (Very High Extent (VHE) = 4, High Extent (HE) = 3, Low Extent (LE) = 2 and Very

Low Extent (VLE) = 1 making a total of 10 points divide by 4 = 2.5) was used as a benchmark for decision. Responses below 2.5 were considered not significant, while 2.5 and above were deemed significant. The questions were pre-tested for comprehension, relevance of completeness and validity through 100 commercial banks customers and three Lecturers from marketing department of Ignatius Ajuru University of Education Rumuolumini, Port Harcourt.

The pilot survey participants were asked to identify inadequate content of the questionnaire and their response formed the bases for improving upon the final copies. Questionnaire was administered with the help of 4 assistants and an impressive response rate of 96% representing 372 usable copies of questionnaire was retrieved and formed the bases for analysis.

Cronbach alpha was calculated to confirm the reliability of the study construct. The reliability coefficient obtained was 0.85 which exceeded the rule of thumb cut-off mark of 0.70. The data generated were analyzed using mean and standard deviation scores to answer the four (4) research questions. To determine the extent of relationship that exists between the independent and dependent variables (test of hypotheses) at 0.05 level of significance, the researcher used Multiple Regression on SPSS (Statistical Package for Social Sciences) version 25.0.

Univariant Analysis

Research Question 1

To what extent does Physical Distancing relates with Customer Engagement in banking sector in Rivers State?

Table 1: Computation of Mean Responses on Physical Distancing and Customer Engagement in Banking Sector in Rivers State

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
PHYSICAL DISTANCING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.6974	.36793	.135
Physical distancing in banking halls creates communication gap and inconvenience between customer and staff.	372	1	4	3.49	.739	.546
Keeping customer at a far distance create an impression that they are high risk and that they constitute threat to the bank.	372	2	4	3.78	.464	.215
Physical distancing deny customer emotional relationship with the staff of banks thereby reducing engagement behavior.	372	2	4	3.64	.617	.380
Physical distancing denied customer opportunity to confine in management on critical matters thus reduce patronage.	372	2	4	3.88	.355	.126
Valid N (listwise)	372					

SPSS output (Base on questionnaires' data 2021)

The data in (table 1) illustrate the summary of the statistics for the dimension of the predictor variable “Physical Distancing” with

summarized values for central tendency based on the responses to the indicators. The analysis revealed that all items in the scale had weighted

mean scores above the criterion mean of 2.50 and thus, were accepted that physical distancing relates with customer engagement. In summary, with a grand mean of 3.69, the respondents affirmed that physical distancing relates with customer engagement in banking industry in Rivers State to a high extent. This indicates that the customers found difficulties in engaging

with banking service in Rivers State when physical distancing is adopted.

Research Question 2

To what extent does Nose Masking relates with Customer Engagement in banking sector in Rivers State?

Table 2: Computation of Mean Responses on Nose Masking and Customer Engagement in Banking Sector in Rivers State

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
NOSE MASKING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.7196	.33332	.111
The compulsory use of nose mask in the banking halls constitute health challenge to customer and expose them to further health issues.	372	1	4	3.57	.690	.476
Restricting customer without nose mask from entering bank premise is disservice and customer right violation.	372	2	4	3.79	.463	.215
Customers find it embarrassed when forced to wear nose masks particularly during banking transaction.	372	2	4	3.69	.570	.325
Wearing of nose mask restrict communication and interpersonal relationship at the banks.	372	2	4	3.82	.437	.191
Valid N (listwise)	372					

SPSS output (Base on questionnaires' data 2021)

The data in (table 2) illustrate the summary of the statistics for the dimension of the predictor variable “Nose Masking” with summarized values for central tendency based on the responses to the indicators. The analysis revealed that all items in the scale had weighted mean scores above the criterion mean of 2.50 and thus, were accepted that nose masking relates with customer engagement. In summary, with a grand mean of 3.71, the respondents affirmed that nose masking relates with

customer engagement in banking industry in Rivers State to a high extent. This indicates that customer engagement decreases at higher rate upon enforcement of nose masking in banking sector in Rivers State.

Research Question 3

To what extent does Hand Sanitizing relates with Customer Engagement in banking sector in Rivers State?

Table 3: Computation of Mean Responses on Hand Sanitizing and Customer Engagement in Banking Sector in Rivers State

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
HAND SANITIZING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.5697	.41138	.169
Mandatory hand sanitizing in the banks denied customers of brand choice and force even fake products on them.	372	2	4	3.50	.721	.520
Mandatory hand sanitizing creates an impression that the banks are not safe for the customers.	372	2	4	3.57	.658	.433
Compulsory hand sanitizing will limit customers who do not find such practice friendly from patronizing the banks.	372	2	4	3.62	.613	.376
The awareness of health implication of the negative usage of hand sanitizing such exposure to the mount, eyes and nose will limit customers' presence in the banks.	372	2	4	3.58	.673	.454
Valid N (listwise)	372					

SPSS output (Base on questionnaires' data 2021)

The data in (table 3) illustrate the summary of the statistics for the dimension of the predictor variable "Hand Sanitizing" with summarized values for central tendency based on the responses to the indicators. The analysis revealed that all items in the scale had weighted mean scores above the criterion mean of 2.50 and thus, were accepted that hand sanitizing relates with customer engagement. In summary, with a grand mean of 3.56, the respondents

affirmed that hand sanitizing relates with customer engagement in banking industry in Rivers State to a high extent. This indicates that customer engagement decreases at higher rate upon enforcement of hand sanitizing covid19 containment measure in banking sector in Rivers State.

Research Question 4

To what extent does Temperature Screening relates with Customer Engagement in banking sector in Rivers State?

Table 4: Computation of Mean Responses on Temperature Screening and Customer Engagement in Banking Sector in Rivers State

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
TEMPERATURE SCREENING AND CUSTOMER ENGAGEMENT	372	2.25	4.00	3.5859	.43275	.187
Using infrared light to take customer's temperature creates phobia to customer.	372	1	4	3.55	.712	.507

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Temperature screenings may be conducted using unapproved temperature monitoring device since the technology is new in the banks.	372	2	4	3.58	.658	.432
Telethermography and long distance heat imaging used to measure skin temperature create doubt as they may give false result.	372	2	4	3.63	.601	.362
Temperature screening may identify people who have an elevated temperature, without specifying the kind of symptoms.	372	2	4	3.59	.689	.475
Valid N (listwise)	372					

SPSS output (Base on questionnaires' data 2021)

The data in (table 4) illustrate the summary of the statistics for the dimension of the predictor variable “Temperature Screening” with summarized values for central tendency based on the responses to the indicators. The analysis revealed that all items in the scale had weighted mean scores above the criterion mean of 2.50 and thus, were accepted that temperature screening relates with customer engagement. In summary, with a grand mean of 3.58, the

respondents affirmed that hand sanitizing relates with customer engagement in banking industry in Rivers State to a high extent. This implies that customer engagement decreases at higher rate upon enforcement of temperature screening covid19 containment measure in banking sector in Rivers State. A total of eight hypothesized multivariate associations were postulated in the study; all stated in the null form of no significant relationship.

Model Formulation

The formula for multiple regression: $\psi = a_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$ (1)

- Where: ψ = index of outcome variable
- f = function
- a = constant term for the independent variables
- b = index of predictor variable
- x = coefficients
- e = error level

Thus, the models were adopted:

CUSTENG=F (CONSTR) (1a)

CUSTENG = $a_0 + a_1 \text{custeng} + u_1$ (1b)

FIRST MODEL:

CUSTCO=F (PHYSID, NOSMAS, HANDSA, TEMPSC) (2a)

CUSTCO= $B_0 + b_1$ (PHYSID)₁ + (NOSMAS)₂ + (HANDSA)₃ + (TEMPSC)₄ + 0.05 (2b)

SECOND MODEL:

REPEPA= F (PHYSID, NOSMAS, HANDSA,TEMPSC) (3a)

REPEPA= $c_0 + c_1$ (PHYSID)₁ + (NOSMAS)₂ + (HANDSA)₃ + (TEMPSC)₄ + 0.05..... (3b)

CONSTRA = Containment Strategy, CUSTENG = Customer Engagement, PHYSID = Physical Distancing, NOSMAS = Nose Masking, HANDSA = Hand Sanitizing, TEMPSC = Temperature Screening, CUSTCO = Customer Commitment, REPEPA = Repeat Patronage.

The dimensions of Containment Strategy (CONSTRA): Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA) and Temperature Screening (TEMPSC) were correlated against Customer Commitment (CUSTCO) and Repeat Patronage (REPEPA) which are the measures of Customer

Engagement (CUSTENG). The correlation aimed at determining the degree of relationship that exists between covid-19 containment strategies and customer engagement in the banking sector in Rivers State. The correlation values with their related significant values are shown in the tables below.

FIRST MODEL

$$CUSTCO = B_0 + b_1 (PHYSID)_1 + (NOSMAS)_2 + (HANDSA)_3 + (TEMPSC)_4 + 0.05$$

Table 5: Regression Model Summary

Model Summary^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.895 ^a	.802	.800	.16654	1.932	

a. Predictors: (Constant), TEMPSC, PHYSID, HANDSA, NOSMAS

b. Dependent Variable: CUSTCO

(Source: SPSS output)

The above model summary in table 5 produced a correlation coefficient; ‘R’ of 0.895^a which shows a very high relationship between Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA), Temperature Screening (TEMPSC) and Customer Commitment (CUSTCO). The R² stood at 0.802 which implies that about 80% variation in Commitment (CUSTCO) is attributed to changes in the independent

variable. The standard error is 0.16654, thus, measure of variation of the observation made from the (actual values of Y) around the computed value of Y on the regression line is close to 0 and far from 1. The Durbin-Watson “d” = 1.932, is between the two critical values of 1.5 < d < 2.5 and therefore we can assume that there is no first order linear auto-correlation in the data. Hence the model is of absolute good fit.

Table 6: ANOVA

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.205	4	10.301	371.431	.000 ^b
	Residual	10.178	367	.028		
	Total	51.384	371			

a. Dependent Variable: CUSTCO

b. Predictors: (Constant), TEMPSC, PHYSID, HANDSA, NOSMAS

(Source: SPSS output)

The probability value of 0.000 indicates that the regression relationship was significant in determining how Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA), Temperature Screening (TEMPSC) influence Customer Commitment

(CUSTCO) in the banking sector in Rivers State. The F calculated at 5 percent level of significance was 371.431. Since F calculated is greater than the F critical (value = 2.4472), this shows that the overall model was significant.

Table 7: Multiple Regression Analysis on the Dimensions of Covid-19 Containment Strategies Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.419	.108		-3.888	.000
	PHYSID	.213	.035	.210	6.102	.000
	NOSMAS	.396	.040	.355	9.830	.000
	HANDSA	.294	.025	.325	11.786	.000
	TEMPSC	.225	.023	.262	9.900	.000

a. Dependent Variable: CUSTCO

(Source: SPSS output)

Interpretation

The regression equation above established that taking; Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA) and Temperature Screening (TEMPSC) constant at zero, Customer Commitment (CUSTCO) will be -0.419. This shows that if all the dimensions of independent variable were held constant, Customer Commitment (CUSTCO) in the banking sector in Rivers State will be decreasing.

The regression result in table 7 above shows a model constant (a) value of -0.419, and PHYSID(b_{x1}) value of 0.213, indicating that, for every one-unit increase of Physical Distancing (PHYSID) value, the dependent variable; Customer Commitment (CUSTCO) value will decrease by 21%. T-value for PHYSID (b_{x1}) produced 6.102 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis one is rejected which means that a significant linear relationship exist between Physical Distancing (PHYSID) and Customer Commitment (CUSTCO) in the banking sector in Rivers State.

Also, the regression result in table 7 above shows a model constant (a) value of -0.419, and NOSMAS(b_{x2}) value of 0.396, indicating that, for every one-unit increase of Nose Masking (NOSMAS) value, the dependent variable; Customer Commitment (CUSTCO) value will decrease by 39%. T-value for NOSMAS (b_{x2}) produced 9.830 is significant at P value (.000), which is less than the chosen alpha of α (0.05).

Hence, hypothesis two is rejected which means that a significant linear relationship exists between Nose Masking (NOSMAS) and Customer Commitment (CUSTCO) in the banking sector in Rivers State.

Furthermore, the regression result in table 7 above shows a model constant (a) value of -0.419, and HANDSA(b_{x3}) value of 0.294, indicating that, for every one-unit increase of Hand Sanitizing (HANDSA) value, the dependent variable; Customer Commitment (CUSTCO) value will decrease by 29%. T-value for HANDSA (b_{x3}) produced 11.786 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis three is rejected which means that a significant linear relationship exists between Hand Sanitizing (HANDSA) and Customer Commitment (CUSTCO) in the banking sector in Rivers State.

Finally, the regression result in table 7 above shows a model constant (a) value of -0.419, and TEMPSC(b_{x4}) value of 0.225, indicating that, for every one-unit increase of Temperature Screening (TEMPSC) value, the dependent variable; Customer Commitment (CUSTCO) value will decrease by 22%. T-value for TEMPSC (b_{x4}) produced 9.900 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis four is rejected meaning there is a high significant linear relationship between Temperature Screening (TEMPSC) and Customer Commitment (CUSTCO) in the banking sector in Rivers State.

SECOND MODEL:

$$REPEPA=c_0+c_1 (PHYSID)_1+ (NOSMAS)_2 + (HANDSA)_3 + (TEMPSC)_4 +0.05$$

Table 8: Regression Model Summary

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.892 ^a	.796	.794	.13554	1.288	

a. Predictors: (Constant), TEMPSC, PHYSID, NOSMAS, HANDSA

b. Dependent Variable: REPEPA

(Source: SPSS output)

The above model summary in table 8 produced a correlation coefficient; ‘R’ of 0.892^a which shows a very high relationship between Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA), Temperature Screening (TEMPSC) and Repeat Patronage (REPEPA). The R² stood at 0.796 which implies that about 79% variation in Repeat Patronage (REPEPA) is attributed to changes in the independent variable. The standard error is

0.13554, thus, measure of variation of the observation made from the (actual values of Y) around the computed value of Y on the regression line is close to 0 and far from 1. The Durbin-Watson “d” = 1.288, is between the two critical values of 1.5 < d < 2.5 and therefore we can assume that there is no first order linear auto-correlation in the data. Hence the model is of absolute good fit.

Table 9: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.278	4	6.569	357.593	.000 ^b
	Residual	6.742	367	.018		
	Total	33.020	371			

a. Dependent Variable: REPEPA

b. Predictors: (Constant), TEMPSC, PHYSID, NOSMAS, HANDSA

(Source: SPSS output)

The probability value of 0.000 indicates that the regression relationship was significant in determining how Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA), Temperature Screening (TEMPSC) influence Repeat Patronage (REPEPA)

in the banking sector in Rivers State. The F calculated at 5 percent level of significance was 357.593. Since F calculated is greater than the F critical (value = 2.4472), this shows that the overall model was significant.

Table 10: Multiple Regression Analysis on the Dimensions of Covid-19 Containment Strategies Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.117	.105		-1.120	.264
	PHYSID	.105	.022	.140	4.785	.000
	NOSMAS	.300	.031	.306	9.728	.000
	HANDSA	.243	.029	.269	8.437	.000
	TEMPSC	.402	.032	.422	12.671	.000

a. Dependent Variable: REPEPA

(Source: SPSS output)

Interpretation

The regression equation above established that taking; Physical Distancing (PHYSID), Nose Masking (NOSMAS), Hand Sanitizing (HANDSA) and Temperature Screening (TEMPSC) constant at zero, Repeat Patronage (REPEPA) will be -0.117. This shows that if all the dimensions of independent variable were held constant, Repeat Patronage (REPEPA) will be decreasing, the hypotheses are reported.

The regression result in table 10 above shows a model constant (a) value of -0.117, and PHYSID(cx_1) value of 0.105, indicating that, for every one-unit increase of Physical Distancing (PHYSID) value, the dependent variable; Repeat Patronage (REPEPA) value will decrease by 10%. T-value for PHYSID (cx_1) produced 4.785 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis five is rejected which means that a significant linear relationship exists between Physical Distancing (PHYSID) and Repeat Patronage (REPEPA) in the banking sector in Rivers State.

Also, the regression result in table 10 above shows a model constant (a) value of -0.117, and NOSMAS(cx_2) value of 0.300, indicating that, for every one-unit increase of Nose Masking (NOSMAS) value, the dependent variable; Repeat Patronage (REPEPA) value will decrease by 30%. T-value for NOSMAS (cx_2) produced 9.728 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis six is rejected which means that a significant linear relationship exists between Nose Masking (NOSMAS) and Repeat Patronage (REPEPA) in the banking sector in Rivers State.

Furthermore, the regression result in table 10 above shows a model constant (a) value of -0.117, and HANDSA(cx_3) value of 0.243, indicating that, for every one-unit increase of Hand Sanitizing (HANDSA) value, the dependent variable; Repeat Patronage (REPEPA) value will decrease by 24%. T-value for HANDSA (cx_3) produced 8.437 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis seven is rejected which means that a significant

linear relationship exists between Hand Sanitizing (HANDSA) and Customer Commitment (CUSTCO) in the banking sector in Rivers State.

Finally, the regression result in table 10 above shows a model constant (a) value of -0.117, and TEMPSC(cx_4) value of 0.402, indicating that, for every one-unit increase of Temperature Screening (TEMPSC) value, the dependent variable; Repeat Patronage (REPEPA) value will decrease by 402%. T-value for TEMPSC (cx_4) produced 12,671 is significant at P value (.000), which is less than the chosen alpha of α (0.05). Hence, hypothesis eight is rejected which means that a significant linear relationship exists between Temperature Screening (TEMPSC) and Repeat Patronage (REPEPA) in the banking sector in Rivers State.

SUMMARY OF FINDINGS

Based on the analysis of data, the following findings were made:

- That the influence of Physical Distancing, 3.69; Nose Masking; 3.71, Hand Sanitizing, 3.59 and Temperature Screening, 3.58 on Customer Engagement in the Banking Sector in Rivers State is to a high extent.
- Also the study found a very high significant linear relationship between Physical Distancing with a coefficient of 0.213 & sig. value; $0.000 < 0.05$, Nose Masking with a coefficient of 0.396 & sig. $0.000 < 0.05$, Hand Sanitising, with a coefficient of 0.294 & sig. $0.000 < 0.05$, Temperature Screening, with a coefficient of 0.225 & sig. $0.000 < 0.05$ and Customer Commitment (CUSTCO) in banking sector in Rivers State.
- Furthermore, the study also found a high significant linear relationship between Physical Distancing with a coefficient of 0.105 & sig. value; $0.000 < 0.05$, Nose Masking with a coefficient of 0.300 & sig. $0.000 < 0.05$, Hand Sanitising, with a coefficient of 0.243 & sig. $0.000 < 0.05$, Temperature Screening, with a coefficient of 0.402 & sig. $0.000 < 0.05$ and Repeat Patronage (REPEPA) in banking sector in Rivers State.

Discussion of Findings

This study which investigated the relationship between covid-19 containment strategies and customer engagement in the banking sector in Rivers State supports previous studies. The researchers' intention was to determine Physical Distancing, Nose Masking, Hand Sanitizing and Temperature Screening correlates with customer commitment and repeat patronage in the banking sector in Rivers State.

Analysis of primary data collected from 372 respondents representing customer of commercial banks in Rivers State shows that Covid-19 containment strategies is significantly associated with customer engagement in the banking sector in Rivers State. These findings agree with Guendalina et al., (2020) who show that low levels of health engagement are associated with a change in the usual purchase behavior. Wang et al. (2020) revealed that, masks were found to be highly effective, including for children. In another finding, Cowling (2020) reported that self-reported mask wearing when going out increasing to 97.5%, without mandatory requirements. This suggests that the public have enhanced awareness of their risk, and that they display higher adherence levels to prevention strategies than during other epidemics. Also, Rosa and Tatic (2019) found that Service Quality has positive effect on Customer Engagement. Tian (2020) also suggests that public mask wearing is most effective at reducing spread of the virus when compliance is high. On the discussion of customer engagement, Sashi (2012) states that customer engagement focus on providing the customer greater values as compared to the competitors.). Mollen and Wilson (2010) state that customer engagement emerges as a consequence of repeated interactions that strengthen the emotional, psychological or physical investments that a customer has made in a brand.

Conclusion and Recommendations

From the mean results of findings and testing of hypotheses using multiple regression analysis it was concluded that covid-19 containment strategies influences customer engagement in the banking sector in Rivers State.

Based on our findings and conclusion the researchers therefore recommend that:

1. The commercial banks in Rivers state should reduce physical presence by making online transactions more flexible for their customers.
2. That the commercial banks in Rivers state should educate their customers on an effective usage of nose mask.
3. That the commercial banks in Rivers state should warmly attend to customers by shifting attentions from the virus to customer satisfaction.
4. And that the commercial banks in Rivers state should install high temperature screening gadgets with the use of safer hand sanitizers to win customer's confidence.

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Appendix

Independent Variable Questionnaire Items

No.	Physical Distancing and Customer Engagement	VHE	HE	LE	VLE
1.	Physical distancing in banking halls creates communication gap and inconvenience between customer and staff.				
2.	Keeping customer at a far distance create an impression that they are high risk and that they constitute threat to the bank.				
3.	Physical distancing deny customer emotional relationship with the staff of banks thereby reducing engagement behavior.				
4.	Physical distancing denied customer opportunity to confide in management on critical matters thus reduce patronage.				
	Nose Masking and Customer Engagement				
5.	The compulsory use of nose mask in the banking halls constitute health challenge to customer and expose them to further health issues.				
6.	Restricting customer without nose mask from entering bank premise is disservice and customer right violation.				
7.	Customers find it embarrassed when forced to wear nose masks particularly during banking transaction.				
8.	Wearing of nose mask restrict communication and interpersonal relationship at the banks.				
	Hand Sanitizing and Customer Engagement				
9.	Mandatory hand sanitizing in the banks denied customers of brand choice and force even fake products on them.				
10.	Mandatory hand sanitizing creates an impression that the banks are not safe for the customers.				
11.	Compulsory hand sanitizing will limit customers who do not find such practice friendly from patronizing the banks.				
12.	The awareness of health implication of the negative usage of hand sanitizing such exposure to the mount, eyes and nose will limit customers' presence in the banks.				
	Temperature Screening and Customer Engagement				
13.	Using infrared light to take customer's temperature creates phobia to customer.				
14.	Temperature screenings may be conducted using unapproved temperature monitoring device since the technology is new in the banks.				
15.	Telethermography and long distance heat imaging used to measure skin temperature create doubt as they may give false result.				
16.	Temperature screening may identify people who have an elevated				

	temperature, without specifying the kind of symptoms.				
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Dependent Variable Questionnaire Items

No.	Customer Commitment				
1.	Customer commitment entails feelings of confidence, integrity, pride and passion in a brand.				
2.	The intensity of customer participation in an organisation is determines by collaborative knowledge exchange process won by higher quality of service.				
3.	Customers manifest behavioral commitment towards firms, beyond purchase when safety necessary safety measures are put in place.				
4.	Customer commitment emerges as a consequence of repeated interactions that strengthen customer’s emotional and psychological disposition.				
	Repeat Patronage				
5.	Customer repeat patronage of services when the services received exceeds their expectations.				
6.	Customer repeat patronage is confirmed by rational and emotional bonding between the customer and the firm.				
7.	Firms that focus on providing the customer greater values are cherished and received higher repeat patronage.				
8.	Customers repeat patronage when they are satisfied emotionally, intellectually and physically by organizational offerings.				

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Variance
PHYSICAL DISTANCING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.6974	.36793	.135
Physical distancing in banking halls creates communication gap and inconvenience between customer and staff.	372	1	4	3.49	.739	.546
Keeping customer at a far distance create an impression that they are high risk and that they constitute threat to the bank.	372	2	4	3.78	.464	.215
Physical distancing deny customer emotional relationship with the staff of banks thereby reducing engagement behavior.	372	2	4	3.64	.617	.380
Physical distancing denied customer opportunity to confine in management on critical matters thus reduce patronage.	372	2	4	3.88	.355	.126
Valid N (listwise)	372					

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Variance
NOSE MASKING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.7196	.33332	.111
The compulsory use of nose mask in the banking halls constitute health challenge to customer and expose them to further health issues.	372	1	4	3.57	.690	.476
Restricting customer without nose mask from entering bank premise is disservice and customer right violation.	372	2	4	3.79	.463	.215
Customers find it embarrassed when forced to wear nose masks particularly during banking transaction.	372	2	4	3.69	.570	.325
Wearing of nose mask restrict communication and interpersonal relationship at the banks.	372	2	4	3.82	.437	.191
Valid N (listwise)	372					

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Variance
HAND SANITIZING AND CUSTOMER ENGAGEMENT	372	2.50	4.00	3.5697	.41138	.169
Mandatory hand sanitizing in the banks denied customers of brand choice and force even fake products on them.	372	2	4	3.50	.721	.520
Mandatory hand sanitizing creates an impression that the banks are not safe for the customers.	372	2	4	3.57	.658	.433
Compulsory hand sanitizing will limit customers who do not find such practice friendly from patronizing the banks.	372	2	4	3.62	.613	.376
The awareness of health implication of the negative usage of hand sanitizing such exposure to the mount, eyes and nose will limit customers' presence in the banks.	372	2	4	3.58	.673	.454
Valid N (listwise)	372					

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Variance
TEMPERATURE SCREENING AND CUSTOMER ENGAGEMENT	372	2.25	4.00	3.5859	.43275	.187
Using infrared light to take customer's temperature creates phobia to customer.	372	1	4	3.55	.712	.507
Temperature screenings may be conducted using unapproved temperature monitoring device since the technology is new in the banks.	372	2	4	3.58	.658	.432
Telethermography and long distance heat imaging used to measure skin temperature create doubt as they may give false result.	372	2	4	3.63	.601	.362

Temperature screening may identify people who have an elevated temperature, without specifying the kind of symptoms.	372	2	4	3.59	.689	.475
Valid N (listwise)	372					

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.895 ^a	.802	.800	.16654	.932

a. Predictors: (Constant), TEMPSC, PHYSID, HANDSA, NOSMAS

b. Dependent Variable: CUSTCO

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.205	4	10.301	371.431	.000 ^b
	Residual	10.178	367	.028		
	Total	51.384	371			

a. Dependent Variable: CUSTCO

b. Predictors: (Constant), TEMPSC, PHYSID, HANDSA, NOSMAS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.419	.108		-3.888	.000
	PHYSID	.213	.035	.210	6.102	.000
	NOSMAS	.396	.040	.355	9.830	.000
	HANDSA	.294	.025	.325	11.786	.000
	TEMPSC	.225	.023	.262	9.900	.000

Dependent Variable: CUSTCO

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.892 ^a	.796	.794	.13554	1.288

a. Predictors: (Constant), TEMPSC, PHYSID, NOSMAS, HANDSA

b. Dependent Variable: REPEPA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.278	4	6.569	357.593	.000 ^b
	Residual	6.742	367	.018		
	Total	33.020	371			

a. Dependent Variable: REPEPA

b. Predictors: (Constant), TEMPSC, PHYSID, NOSMAS, HANDSA

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	-.117	.105		-1.120	.264
	PHYSID	.105	.022	.140	4.785	.000
	NOSMAS	.300	.031	.306	9.728	.000
	HANDSA	.243	.029	.269	8.437	.000
	TEMPSC	.402	.032	.422	12.671	.000

a. Dependent Variable: REPEPA

Reliability Statistics

Cronbach's	
Alpha	N of Items
.855	16