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## VIRTUAL REALITY AND PATRONAGE OF HOSPITALITY SECTOR IN PORT HARCOURT

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DIKE, LAWRENCE BEKWELE & ANTHONY CHUKS NWADOR  
Department of Marketing,  
Ignatius Ajuru University of Education, Rumuolumeni Port Harcourt

### ABSTRACT

This study investigated Virtual Reality and Patronage of Hospitality Sector in Port Harcourt. One Hundred and Forty manager staff of hospitality sector staff in Port Harcourt were studied. Out of the 140 questionnaires distributed, 120 copies representing 91% were duly completed and returned upon which the analysis as done. The four research questions were answered using mean and standard deviation, while the four hypotheses were tested using the Pearson Product Correlation Coefficient (PPMC). The reliability testing was done using SPSS version 23 Crumbach Alpha at  $.95 > .71$  indicating that the instrument were highly reliable. The 40 items questionnaire instrument was validated by a senior lecturer in the department of Marketing, Ignatius Ajuru University of Education. The findings showed that Hypothesis one p-value of  $.671 > .05$  which implies that virtual reality has no influence on hospitality patronage in Port Harcourt hypothesis 2 p-value of  $.041 < .05$  which implies that Customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt. Hypothesis 3 p-value of  $.447 > .05$  which implies that customer virtual presence does not affect service quality of hospital patronage in Port Harcourt. Hypothesis 4 p-value of  $.012 < .05$  implying that there is customer virtual perception influences repeat purchase of hospital patronage in Port Harcourt. The study recommended that Since virtual reality has no influence on hospitality patronage in Port Harcourt, practitioners should lay more emphasy and effort in ensuring greater awareness of the new technology. Customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt, the management of hospitality homes should therefore invest in virtual reality as it will influence purchase intention of customers. Customer virtual presence does not affect service quality of hospital patronage in Port Harcourt, management of hospitality homes should engender more presence of virtual presence. Customer virtual perception influences repeat purchase of hospital patronage in Port Harcourt, virtual perception should therefore be made attractive to tourists and for hospitality patronage in Port Harcourt.

**Key Words:** Virtual Reality, Patronage, Hospitality Sector, Port Harcourt

### INTRODUCTION

The advent of technological innovation and digitalization are affecting customers and the hospitality industry more than before (Hassan & Rahimi, 2016). This development influences how hospitality and touristic products are

considered, perceived and patronized (Huang, BackmanBackman& Chang, 2016). Understanding this development will enable marketers to devise strategic means of serving customers decision, their needs and wants in the hospitality industry. Hospitality and the tourism firms are making appreciable use of new technologies to increase chances to succeed or to survive in the competitive marketing industry (Cuomotoras, 2015).

Virtual Reality tool is one of these technologies that are expected to have great impact on the customers patronage of the hospitality sector, providing opportunities, strength and challenges, and its application in the hospitality sector will continue to increase both in number and significance (Guttentay, 2010, Tussyadiah, Wang, Jung & Tomdick, 2018).

To appreciate the importance of virtual reality in an organization is to recognize its perceived ease of use and perceived usefulness in the organization task portfolios. However, regardless of the economic and social significance of virtual reality technology in the Nigeria especially in Port Harcourt, it does appear that at the moment, very few or no literature material that the researcher knows exist of virtual reality as it affects patronage of hospitality sector. It is against this background that this research was carried out to empirically examine the influence of Virtual Reality technologies on hospitality patronage in Port Harcourt and its environs.

## STATEMENT OF PROBLEM

Most hospitality and marketing organizations have failed to adopt and explore the core benefit of virtual realities technology in providing quality customer service (Nah, Eschenbremer & Dewesters, 2011; Ressler, 2017). Consequently this scenario has resulted to poor service delivery, Abysmal performance and insecurity as evidenced in the serial killings witnessed in Port Harcourt causing panic and concerns for stakeholders, governments and tourists and users of hospital products in Rivers State and Port Harcourt in particular.

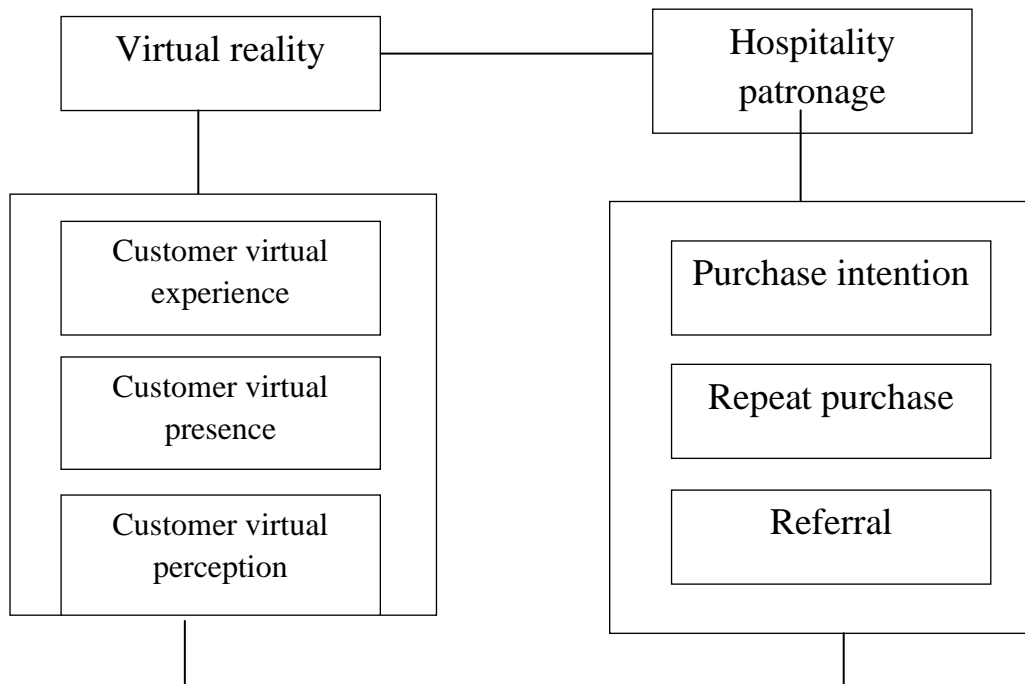
A lot of scholars have studied virtual reality and its impact in the hospitality industry (Baran, 2016), virtual reality: presence and change; empirical evidence from tourism and hospitality sector (Tussyadiah, Wang Jung & ClandieTomderic 2017). However, importance has not been given to the



application of virtual reality tools and device in promoting “hospitalistic” products in Port Harcourt and its environs. No doubt, there are studies on tourism and hospitality patronage in Port Harcourt but no empirical studies to the knowledge of this researcher has been done within the domain of virtual reality and patronage in hospitality sector in Rivers State, especially in Port Harcourt and its environs, thus the gap this study intends to fill.

## CONCEPTUAL CLARIFICATION

Conceptual framework of the relationship between virtual reality and patronage of hospitality industry in Port Harcourt



**Fig 1.1:** Conceptual framework showing the relationship between Virtual Reality and hospitality patronage.

**Source:** Diemer, Alpers, Peperkorn, Shibon & Muhlberger (2015).

The impact of perception and presence on emotional reaction: a review of research in virtual reality and London and Bilta, (1993).

## OBJECTIVE OF THE STUDY

The main objective of this study is to investigate the link between virtual reality and hospitality patronage in Port Harcourt, specifically thus the study aims at

- i. Evaluate the influence of virtual reality on hospitality patronage.

- ii. Examine customer virtual experience and purchase intention
- iii. To identify customer virtual perception and repeat purchase
- iv. To identify customer virtual presence and referrals

### Research Question

This study will attempt to answer the following questions

- i. To what extent does virtual reality influence patronage of hospitality of organization?
- ii. To what extent does customer virtual experience affect patronage of hospitality organizations?
- iii. To what extent does customer virtual presence affect patronage of hospitality organizations?
- iv. To what extent does customer virtual perception influence referrals of patronage of hospitality organization?

### Scope of the Study

The content scope of this study is on the virtual reality and patronage of hospitality firms and the geographical scope is the hospitality industry in Port Harcourt, and its environs. The unit of analysis is the customer of hospitality firms in Port Harcourt and its environs.

### Research Hypothesis

The following hypotheses were formulated for the study

**Ho<sub>1</sub>:** Virtual reality has no influence on hospitality patronage in Port Harcourt.

**Ho<sub>2</sub>:** Customer virtual experience does not affect purchase intention of hospitality patronage in Port Harcourt.

**Ho<sub>3</sub>:** Customer virtual presence does not affect service quality of hospital patronage in Port Harcourt.

**Ho<sub>4</sub>:** Customer virtual perception does not influence repeat purchase of hospital patronage in Port Harcourt.

## REVIEW OF RELA LITERATURE

### Theoretical Framework

This paper reviewed the Technological Determinism theory, Reductionist theory and Technology Adoption Model (TAM). Smith and Marx (1994) holds that the Technological Determinism theory believes that technology has a key role and leading power in the society and posited that Technology



determines social modification which impacts the way individual's reason and interact among themselves. On its part, the Reductionist theory believes that in a society, technology determines the development of her cultural value and social structure. Pavlon(1989) argues that the Technology Adoption Model constructs of perceived ease of use and perceived usefulness have strong influence in the acceptance of systems by the user. This is the assumed reasons why people are receptive to new technology. TAM well known theories of innovation diffusion. The Reasoned Action and the Technology Task fit supports this argument since it enables the user to ease off its portfolios of task appropriately. It can be used to predict consumer behavior in e-commerce and quality of information which has a significant impact on perceived usefulness which inturn encourages and converts a consumer to buy (Ahn, 2007). Hence, this study is anchored on the Technology Adoption Model (TAM).

### Concept of Virtual Reality

Virtual reality is one of the new technologies that is expected to have great impact on the hospitality and tourism industry (Gutentag, 2010). Virtual reality is a computer mediated environment that provides users with cues from reality to facilitate their purchase behavior and decision (Wang & Data, 2010) virtual reality experience provides opportunities for hospitality and tourism organizations to present their offers to visitors, creating awareness, in a competitive market environment. Blesieda (2017) while emphasizing the significance of virtual realities experience stated that "hospitality and tourism began with books to photograph and then to video and now moving to virtual reality". Virtual tours offers action-supportive information on what users can do with the environment which is considered as a favourable and support for traveling and hospitality planning (Tussyadia, Wang Jung & Tom Djeck, 2018). Virtual reality content is directed at hospitality and tourism patronage (Balesieda 2017) and provides user with its ability for more direct experience about the hospitality rather than just reading other guests or tourists narrative or watching video and photo (Shangzhi 2016) and to increase conversion (Baran, 2016).

Virtual reality has been touted as a substitute for hospitality entertainment and actual travel (Cheong, 1995, Sussman and Vanhegan, 2009) which can be beneficiary for the management of protected areas such as vulnerable natural and cultural heritage sites where limiting number of tourists or restricting

visitation is desirable. Virtual reality is considered a positive contribution to environmental sustainability (Dewanly, 1999) and powerful hospitality and marketing tool (Huang, Backman, Backman and Chang, 2006, William, 2006; Williams & Hobson 1995).

## **DIMENSIONS OF VIRTUAL REALITY**

### **Virtual reality experience**

This refers to perceived enjoyment which is to an extent to which the activity of using VR technology to experience and enjoy hospitality in its own right (Davis, Bagozzi & Warshaw, 1992). Virtual Reality experience induces more favourable attitude toward patronage of hospitality sector. Such experience is immersed in the virtual world and affects the sensory parts of the customers.

### **Virtual Reality Presence**

VR presence explains the effectiveness of Virtual Reality. Customer presence in virtual reality is the state where a user is feeling lost or immersed in the mediated environment, the degree to which he/she feels physically in a virtual environment (Shubert, Friedman & Regenebrecht, 2001, Slater & Steed, 2000; Slater & Ujoh, 1993, Slater & Wilbur 1997, Stever, 1992). What this import is that a customer is immersed in the virtual world where he/she get under studying of the service and product offer of an hospitality firm.

### **Virtual Reality Perception**

Perception is also a key dimension of virtual reality environment. VR perception refers to the process, way, by which consumer select, organize and interpret a stimulus into a meaningful consistent and coherent picture of a product and service in a virtual world. Black (2008) sees customer perception as applying to the sensory perception to marketing and advertising, just as sensory perception relates on how human receives and process through five senses. Consumer perception forms opinion about company and its product offer through the purchase they make.

## **CONCEPT OF HOSPITALITY PATRONAGE**

In the service sector, the nature of hospitality is broader, it takes lodging a guest, planning events, theme, park, transportation and additional fields into account. A hospitality unit includes several components like a restaurant, servers, house-keeping, food & beverage services, front office,



food production, engineering and housekeeping maintenance, management, marketing and human resource. The industry is a vital contributor to many countries economic development world over (Mohajerani&Miremadi, 2012) in gaining patronage and strong positive quest experience, due to changing dynamic nature of guest needs and consumers expectation. Hospitality managers are devising strategies in creating positive reputation for service (Liat& Rashid, 2013).

## MEASURES OF HOSPITAL PATRONAGE

### Intention to Purchase

Intention to purchase is inarguably engaged as an index of consumer purchase behavior bothers on issues of product evaluation (Grewal, Krishnan, Baker & Borin, 1998) purchase intention represents motivational components of a behavior, including the degree of conscious effort that a consumer will exert to perform a behavioural task (Ajzen, 1991). Some scholars have indicated that perceived risk, perceived value, quality, price, trust and familiarity are the cause or reason for consumer attitude and purchase behavior towards a brand (Diallo, Chadon, Cliquet&Phillipe; 2013; Zeuhaml 1988; Dick, Jain & Richardson 1996) purchase intention mirrors the tendency that consumer will purchase certain products or services in the short term buying decisions following his evaluations of alternatives available.

### Repeat Purchase

Repeat purchase is a consumer behavior performance attributed to the fact that consumer's satisfaction with a given product will stimulate harmonious patronage. It could be refer to the buying of a product or service by a customer of the same brand. Repeat purchase is noticeable in consumers who are satisfied emotionally, intellectually, physically by a company's product or service which surpasses what they anticipate (Foster, Grant, Idson& Higgins, 2011). Repeat purchase is the willingness of a person to re-patronize a service product and organization (Wirtz&Lwin, 2009) customers consistently patronize a service anchored on perceived trust as they believe the organization will deliver product and services satisfactorily (Caudiu& Murphy, 2000). This means that the higher the repeat purchase value leads to higher consumer value and less dissatisfied customer (Gee, Coatis & Nicholson, 2008).

### **Referral/Word of Mouth**

Referral is the act of telling others about a satisfactory experience of the service and its provider (Kelly, 1993). It is an informal advice and information about product, service and social issues that exchanges between individual and among them (Blodget & Anderson 2000). It is experiential marketing and helps to acquire, maintain customer loyalty and enlarge customer base (Ahn, 2006). Referral marketing uses incentives to encourage the distribution of information and uses relationship with friends to share meaningful narratives about business. When thus information is combined with the right rewards and incentives, it can acquire new customers etc lower cost and higher rate than through other marketing channels (Jonathan, 2012). Customer referral programs are a form of stimulated word of mouth that provides incentives to existing customers to bring in new customers (Phillip, Bernard & Christopher, 2011).

## **RELATIONSHIP BETWEEN VIRTUAL REALITY AND HOSPITALITY PATRONAGE**

### **Relationship between Virtual Experience and Purchase Intention**

A number of scholars have explored the benefit of VR within hospitality context. The main benefit of virtual benefit include enhancement of experience, facilitation of immersive, engaging, social and entertaining (Guttentag 2010, Tromp 2017) potential to provide accessible hospitality and tourism for all (Guttentag 2010, William & Hobson 1995) marketing, promotion, sales and distribution (Gibson, 2010, Williams & Hobson 1995). However, virtual reality experience impact on customer attitude and purchasing behavior. Virtual environments have been identified as emerging marketing channels (Barnes and Mattson 2008; Shen and Eder 2009), whereby consumer can engage in information search, trial and purchasing. These virtual environment offer important advantage over traditional, two dimensional website through increased functional and social interactivity and can provide valuable brand experience that lead to increased customer loyalty and sales (Araksi and Lang 2008) organization with a brand presence in virtual environment are attempting to create and increase brand awareness with the hope that they eventually influence real world purchase intention and behavior (Arakji, & Lang 2008; Barnes & Mattson, 2008).





### **Relationship between Virtual Presence and Repeat Purchase**

Virtual reality presence may offer great impact on customer repeat purchase. The consequence of a customer presence in a virtual environment increase his/her enjoyment which leads to desire for more experience and purchase (Larsson, Vastjal&Kleiner 2001; Li, Dangherty&Biocca, 2001) that means, virtual environment that engenders a high level of presence are perceived to be more enjoyable (Sadowski& Staley 2002). It can be deduced that sense of presence during VR experience within the hospitality or tourism destination leads to enjoyment and repeat purchase of the VR experience.

### **Relationship between Virtual Perception and Referral**

VR experience within the domain of hospitality and tourism destination leads to enjoyment and repeat purchase which could stimulate VR perception and attitudes toward a positive referral or word of mouth marketing of the VR experience of the service of the hospitality firms (Ajzen and Fishbein, 1977). VR perception influences referral in the ability to create recognizable real objects in the space and provide an in-depth knowledge and information about the experience in the virtual world.

### **Empirical Review**

In understanding Virtual Reality and Patronage of Hospital sector, Diego, A.B and Carmen, H. (2019) conducted a content analysis research of thirty (30) publications on the Historic city, its transmission and perception via augmented and virtual reality and hospitality and tourism patronage published in Germany from 2007 to 2017 and argued that the application of VR technological tools are capable of facilitating new forms of access to information and divorce way of learning and for promotion and marketing of diffuse destinations and make excellent instrument for improving virtual experience and attracting new tourist profile. Tussyadiah, Jung, Dan and Claudia Tom Dieck (2018) conducted an empirical study on Virtual reality, presence and attitude change. Empirical evidence from tourism, with 202 participants in Hong Kong and another 724 participants in United Kingdom using spearman rank order correlation co-efficient. The finding revealed that rapid development of Virtual Reality Technology offers opportunities for a widespread consumption of VR tourism content and presents better and understand effectiveness of VR experience including more favourable attitude toward hospitality and tourism destination and shaping visitation intention and patronage.

Rainodi, M. Lisnerska, A., Driescher, V., and Zvereva, D. (2018) conducted a research on students Virtual Reality: an innovative tool in destinations' marketing in Croatia. Questionnaires were administered on 101 respondents. The study takes a closer look into destination promotional material by analyzing and comparing a self-designed brochure with an existing VR video of the city of Dubrovnik. The finding revealed that VR transforms information search experience into a faster, more interactive and more detailed process compared to traditional promotional material. The result is also beneficial for VR for tourism and hospitality promotion.

Amplifying the import of Virtual Reality, Baker, Hubona and Scrite (2019) conducted an investigation on the impact of web based and virtual world shopping experiences on consumer purchase attitudes, on 474 shoppers in America, using a convert sampling method. 237 questionnaires were returned, 92 were female while 145 were male. Using the partial least square (PLS) based structural equation modeling (SEM). Findings of the study revealed that there is the impact of trust on attitudes toward e-commerce shopping in that virtual world environment than in the web-based environment.

Griffin, Giberson, Lee, Guttentag and Kandaurova (2017) conducted a study on Virtual Reality and implication for destination marketing in United States of America. 121 undergraduate students respondents were asked to complete a survey on their perception of South Africa as a tourist designation with the VR tool. In VR condition, participants viewed a 360 video created by the south Africa tourism board using the VR head mounted display in 3 minutes 45 seconds.

Participants were given the same amount of time to click and read through pages displaying contents and photos representing the activities from the video on the website. All questionnaire items were presented in a likert scale or bi-polar format ranging from 1-7. Result revealed that participants have high intention to visit than in the website condition and has emotional promotion about their experiences than the website condition.

### Gap in Literature

Studies abound on virtual reality and its application for hospitality marketing. For instance Yung, and KhooLattimore (2017) conducted a research on new realities; a systematic literature review on virtual reality and augmented reality in hospitality research, revealed that growing interest in



VR/AR is yet to provide a systematic knowledge that has been built from academic papers and identified lack of theory based research in VR/AR as well as low awareness in technology, liability and time commitment.

Ja Kim, Lee and Jung (2018) studied exploring consumer behavior in virtual reality tourism using an extended stimulus organism-response model to find out what makes consumers visit destination presented by VR. Beck, Rainold, and Egger (2019) studied the virtual reality in hospitality and tourism; a state of the art review. These studies and other had looked at virtual reality as a marketing tool for promotion and communication purposes during pre-travel plan, and environmental sustainability tool. No literature to the best of the knowledge of the researcher of this study has evaluated Virtual Reality and Patronage of hospitality sector within the Hospitality Industry in Port Harcourt and its environs. Thus, this study was set to close this conceptual gap.

Methodologically, this study closes the methodological gap. Previous studies in this topical area were conducted using qualitative approach and with some using a mixed study. Only a few had used pure quantitative methodology. Thus this study closes this methodological gap to advance the body of hospitality experience literature especially the impact and application of virtual reality content to hospitality marketing in Nigeria especially in Port Harcourt, Rivers State.

## METHODOLOGY

This exploratory study adopted a causal investigation to establish a relationship between virtual reality and patronage of hospitality sector Port Harcourt and its environs. The population of this study is 143 customers of 5 classified and graded hotels with 1000 bed space respectively. Available record obtained from the Nigeria Hotel Association Rivers State chapter puts hotels in Port Harcourt and its environs at 400 (four hundred) but five are graded and classified based on availability of facility as specified by the Nigeria Tourism Development Corporation and the Rivers State Ministry of Culture and Tourism. These hotels are:

- i) Hotel presidential
- ii) Protea hotel
- iii) Le meridian, Ogeyi's place
- iv) Novotel hotel

v) Sasun hotel

Using the Taro Yamen sample size determinant to determine the sample size at 5 percent confidence level of significance as follow

$$n = \frac{N}{1 + N (e)^2}$$

$$n = \frac{143}{1 + 143 (0.05)^2}$$

$$n = \frac{143}{13.5}$$

$$n = 140$$

Therefore the sample size of the study is 140. The 5 point likert scale questionnaire anchored on Strongly Agree, Agree, Neutral, Strongly Disagree and Disagree as the measuring instrument and data collection for the study with 5-point item statements for the questionnaire.

140 questionnaires were distributed among customers of five hotels and each firm received 74 copies of questionnaires respectively. A convenience sample method was adopted while trained research assistants were engaged for this study. 124 of 143 questionnaires were returned, representing 91 percent. Questionnaires were validated on face, construct and content value and were vetted by senior lecturers in the department of marketing, Ignatius Ajuru University of Education. Data collected were analyzed using descriptive statistics. Primary data were processed and analysis with the statistical package for social science SPSS. Items were found to be threshold of 0.7. The composite cronbach alpha of 0.95 indicates that the instrument is reliable. Hypotheses were tested and measured using the spearman rank order correlation co-efficient (rho). Next section is the data analysis and results of the study.

### Answer to Research Questions

A total of 140 questionnaires were distributed. 124 copies or 91% of the questionnaire were duly completed and returned and this study will base its analysis on the returned 140 copies of the questionnaire. The research questions will be answered using the statistical descriptive tool of mean and standard deviation using the mean criterion of 3 points/score (for 5-likert scale).



**Research Question 1:** To what extent does virtual reality influence patronage of hospitality of organization?

**Table 1 Answer to Research Question 1**  
 Descriptive Statistics

s/n. items	N	Mean	Std. Deviation	Remark
1. It has virtual reality device	124	2.7625	.81887	Disagree
2. It has virtual attraction	124	3.1500	1.17893	Agree
3. The dining experience is amazing and interactive	124	2.8500	1.18107	Disagree
4. The rooms are affordable and easy to book	124	2.3750	.86236	Disagree
5. The property is easy to identified and located in a vintage position	124	2.1000	1.18642	Disagree
<b>Total</b>	<b>124</b>			

Table 1 above shows in item 1 mean score of 2.7625 and STD .80887 that the respondents disagreed that It has virtual reality device. Item 2 mean score of 3.0500 and STD 1.17893 indicate that the respondents agreed that it has virtual attraction. In item 3 mean score of 2.8500 and STD 1.18107 shows that the respondents disagreed that the dining experience is amazing and interactive. In item 4 mean score of 2.3750 and STD .86236 shows that the respondents disagreed that the rooms are affordable and easy to book. In item 5 mean score of 2.1000 and STD 1.18642 indicate the respondents disagreed that the property is easy to identified and located in a vintage position.

**Research Question 2:** To what extent does customer virtual experience affect patronage of hospitality organizations?

**Table 2: Answer to Research Question 2**  
 Descriptive Statistics

s/n. Item	N	Mean	Std. Deviation	Remark
6. Experience destination before booking	124	1.1600	.35932	Disagree
7. Opportunity for disabled	124	2.3875	1.22726	Disagree
8. Ability to experience life in past and future	124	2.6000	1.57994	Disagree
9. More enjoyable	124	1.9125	1.13844	Disagree

10. No delays	124	3.5125	1.54832	Agree
<b>Total</b>	124			

Table 2 shows in item 6 mean score of 1.1600 and STD .35932 implies that the respondents disagreed that Experience destination before booking. In item 7 mean score of 2.3875 and STD 1.22726 indicate that the respondents disagreed Opportunity for disabled. In item 8 mean score 2.6000 and STD 1.57994 implies that the respondents disagreed that Ability to experience life in past and future. In item 9 with mean score of 1.9125 and STD 1.13844 shows respondents disagreed that more enjoyable. Item 10 mean score of 3.5125 and STD 1.54832 implies that the respondents agreed that there are no delays.

**Research Question 3:** To what extent does customer virtual presence affect patronage of hospitality organizations?

**Table 3: Answer to Research Question 3**

Descriptive Statistics				
s/n Items	N	Mean	Std. Deviation	Remark
11. Not experiencing real thing	124	1.8250	1.26065	Disagree
12. Multiple identifies, different gendered virtual bodies	124	2.3125	1.73274	Disagree
13. It increases psychological problem	124	3.1375	1.68195	Agree
14. It causes psychological problem	124	3.438	1.5739	Agree
15. I will patronize hotels with VR	124	2.2625	1.56095	Disagree
<b>Total</b>	124			

Table 3 above shows in item 11 mean score of 1.8250 and STD 1.26065 which implies that the respondents disagreed that they are not experiencing real thing. In item 12 mean score of 2.3125 and STD 1.73274 shows that the respondents disagreed that Multiple identifies, different gendered virtual bodies. Item 13 mean score of 3.1375 and STD 1.68195 dictates that the respondents agreed that It increases psychological problem. Item 14 with mean score of 3.438 and STD 1.5739 equally shows that the respondents agreed that It causes psychological problem. In item 15 mean score of 2.6625



and STD 1.56095 proved that the respondents disagreed that they will patronize hotels with VR.

**Research Question 4:** Customer virtual perception does not influence repeat purchase of hospital patronage in Port Harcourt

**Table 4: Answer to Research question 4**

Descriptive Statistics				
s/n item	N	Mean	Std. Deviation	Remark
16. Hospitality becomes artificial entertainment	124	2.1275	1.59900	Disagree
17. I will recommend to friends	124	2.1750	1.50758	Disagree
18. I prefer VR to catalogue & website	124	2.2750	1.77161	Disagree
19. I can remember everything	124	3.7510	1.45393	Agree
20. The experience is great	124	3.6875	1.58788	Agree
<b>Total</b>	124			

Table 4 above shows in item 16 mean score of 2.1275 and STD 1.59900 showing that Hospitality becomes artificial entertainment. In item 17 mean score of 2.1750 and STD implies that the respondents disagreed that they will recommend to friends. In item 18 mean score of 2.2750 and STD 1.77161 ensures that the respondents disagreed that they will prefer VR to catalogue & website. In item 19 mean score of 3.7510 and STD 1.45393 results that the respondents agreed that can remember everything and in item 20 mean score of 3.6875 and STD 1.58788 equally shows that the respondents agreed that the experience is great.

### Testing of Research Hypotheses

The research hypotheses will be tested using Pearson Product Moment Correlation Coefficient (PPMC) to determine the relationship between variables at .05 significance level (using SPSS computer package)

**Research hypothesis 1:** Virtual reality has no influence on hospitality patronage in Port Harcourt.

**Table 5: Testing of research hypothesis 1**  
Correlations

		Item 1	Item 2	Item 3	Item 4	Item 5
Item 1	Pearson Correlation	1	.026	.531**	.411**	.040
	Sig. (2-tailed)		.632	.000	.000	.452
	N	124	124	124	124	124
Item 2	Pearson Correlation	.026	1	-.057	.530**	.369**
	Sig. (2-tailed)	.632		.290	.000	.000
	N	124	124	124	124	124
Item 3	Pearson Correlation	.531**	-.057	1	.581**	.055
	Sig. (2-tailed)	.000	.290		.000	.304
	N	124	124	124	124	124
Item 4	Pearson Correlation	.411**	.530**	.581**	1	.458**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	124	124	124	124	124
Item 5	Pearson Correlation	.040	.369**	.055	.458**	1
	Sig. (2-tailed)	.452	.000	.304	.000	
	N	124	124	124	124	124

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Research hypothesis 2:** Customer virtual experience does not affect purchase intention of hospitality patronage in Port Harcourt.

**Table 6: Testing of hypothesis 2**  
Correlations

		Item 6	Item 7	Item 8	Item 9	Item 10
Item 6	Pearson Correlation	1	.073	.222**	.179**	.182**
	Sig. (2-tailed)		.172	.000	.001	.001
	N	124	124	124	124	124
Item 7	Pearson Correlation	.073	1	.516**	-.046	.394**
	Sig. (2-tailed)	.172		.000	.388	.000
	N	124	124	124	124	124
Item 8	Pearson Correlation	.222**	.516**	1	.159**	.015
	Sig. (2-tailed)	.000	.000		.003	.775
	N	124	124	124	124	124





Item 9	Pearson Correlation	.179 **	-.046	.159 **	I	-.191 **
	Sig. (2-tailed)	.001	.388	.003		.000
	N	124	124	124	124	124
Item 10	Pearson Correlation	.182 **	.394 **	.015	-.191 **	I
	Sig. (2-tailed)	.001	.000	.775	.000	
	N	124	124	124	124	124

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Hypothesis 3:** Customer virtual presence does not affect service quality of hospital patronage in Port Harcourt.

**Table 7: Testing of Hypothesis 3**  
**Correlations**

		Item 11	Item 12	Item 13	Item 14	Item 15
Item 11	Pearson Correlation	I	-.067	.514 **	.358 **	-.052
	Sig. (2-tailed)		.210	.000	.000	.329
	N	124	124	124	124	124
Item 12	Pearson Correlation	-.067	I	.581 **	.055	.768 **
	Sig. (2-tailed)	.210		.000	.304	.000
	N	124	124	124	124	124
Item 13	Pearson Correlation	.514 **	.581 **	I	.458 **	.476 **
	Sig. (2-tailed)	.000	.000		.000	.000
	N	124	124	124	124	124
Item 14	Pearson Correlation	.358 **	.055	.458 **	I	-.059
	Sig. (2-tailed)	.000	.304	.000		.274
	N	124	124	124	124	124
Item 15	Pearson Correlation	-.052	.768 **	.476 **	-.059	I
	Sig. (2-tailed)	.329	.000	.000	.274	
	N	124	124	124	124	124

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Research hypothesis 4:** Customer virtual perception does not influence repeat purchase of hospital patronage in Port Harcourt.

**Table 8: Testing of hypothesis 4**  
**Correlations**

		Item 16	Item 17	Item 18	Item 19	Item 20
Item 16	Pearson Correlation	1	.744 **	-.081	.559 **	.597 **
	Sig. (2-tailed)		.000	.131	.000	.000
	N	124	124	124	124	124
Item 17	Pearson Correlation	.744 **	1	-.049	.666 **	.362 **
	Sig. (2-tailed)	.000		.362	.000	.000
	N	124	124	124	124	124
Item 18	Pearson Correlation	-.081	-.049	1	.428 **	.027
	Sig. (2-tailed)	.131	.362		.000	.612
	N	124	124	124	124	124
Item 19	Pearson Correlation	.559 **	.666 **	.428 **	1	.485 **
	Sig. (2-tailed)	.000	.000	.000		.000
	N	124	124	124	124	124
Item 20	Pearson Correlation	.597 **	.362 **	.027	.485 **	1
	Sig. (2-tailed)	.000	.000	.612	.000	
	N	124	124	124	124	124

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## DISCUSSION OF FINDINGS

Table 5 above shows in hypothesis one p-value of  $.671 > .05$  which implies that virtual reality has no influence on hospitality patronage in Port Harcourt. The null hypothesis is therefore accepted. The position of the respondents is that virtual reality does not necessarily lead to hospitality patronage in Port Harcourt. The stance of the response aligns with Gutentag, ( 2010) stating that virtual reality is one of the new technologies that is expected to have great impact on the hospitality and tourism industry Virtual reality is a computer mediated environment that provides users with cues from reality to facilitate their purchase behavior and decision (Wang & Data, 2010) virtual reality experience provides opportunities for hospitality and tourism organizations to present their offers to visitors, creating awareness, in a competitive market environment. That virtual reality is a new technology may have affected its relatedness with the hospitality industry in Port Harcourt.



Table 6 shows in hypothesis 2 p-value of  $.041 < .05$  which implies that Customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt. The position of the respondents indicate that customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt. The null hypothesis is therefore rejected. The stance of the respondents is collaborated by (Guttentag 2010, Tromp 2017) stating that the main benefit of virtual benefit include enhancement of experience, facilitation of immersive, engaging, social and entertaining potential to provide accessible hospitality and tourism for all (Guttentag 2010, William & Hobson 1995) marketing, promotion, sales and distribution (Gibson, 2010, Williams & Hobson 1995). However, virtual reality experience impact on customer attitude and purchasing behavior. Virtual environments have been identified as emerging marketing channels (Barnes and Mattson 2008; Shen and Eder 2009), whereby consumer can engage in information search, trial and purchasing. This concludes that virtual reality leads to sales promotion of hospitality industry which may lead to patronage by the customers.

Table 7 shows in hypothesis 3 p-value of  $.447 > .05$  which implies that customer virtual presence does not affect service quality of hospital patronage in Port Harcourt. The position of the respondents indicates that customer virtual presence does not affect service quality of hospitality patronage in Port Harcourt. The null hypothesis is therefore accepted. The stance of the respondents contradicts Larsson, Vastjal & Kleiner 2001; Li, Dangherty & Biocca, 2001) stating that the consequence of a customer presence in a virtual environment increase his/her enjoyment which leads to desire for more experience and purchase that means, virtual environment that engenders a high level of presence are perceived to be more enjoyable (Sadowski & Staley 2002). It can be deduced that sense of presence during VR experience within the hospitality or tourism destination leads to enjoyment and repeat purchase of the VR experience.

Table 8 shows in hypothesis 4 p-value of  $.012 < .05$  implying that there is customer virtual perception influences repeat purchase of hospital patronage in Port Harcourt. The null hypothesis is therefore rejected. The position of the respondents indicates that customer virtual perception may lead to repeat purchase in hospitality industry in Port Harcourt. The judgement of the respondents agree with Ajzen and Fishbein, (1977) stating that VR experience within the domain of hospitality and tourism destination leads to enjoyment and repeat purchase which could stimulate VR perception and

attitudes toward a positive referral or word of mouth marketing of the VR experience of the service of the hospitality firms.

## SUMMARY OF FINDINGS

1. Hypothesis one p-value of  $.671 > .05$  which implies that virtual reality has no influence on hospitality patronage in Port Harcourt
2. Hypothesis 2 p-value of  $.041 < .05$  which implies that Customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt.
3. Hypothesis 3 p-value of  $.447 > .05$  which implies that customer virtual presence does not affect service quality of hospital patronage in Port Harcourt.
4. Hypothesis 4 p-value of  $.012 < .05$  implying that there is customer virtual perception influences repeat purchase of hospital patronage in Port Harcourt.

## CONCLUSION

Virtual reality is an emerging technology in Port Harcourt. Hospitality practitioners in the city should embrace it since it leads to business promotion and service awareness to customers. It will also boost the bottom line or profitability of the hospitality industry.

## RECOMMENDATIONS

Based on the findings the following recommendations have been reached:

1. Since virtual reality has no influence on hospitality patronage in Port Harcourt, practitioners should lay more emphasis and effort in ensuring greater awareness of the new technology.
2. Customer virtual experience affect purchase intention of hospitality patronage in Port Harcourt, the management of hospitality homes should therefore invest in virtual reality as it will influence purchase intention of customers.
3. Customer virtual presence does not affect service quality of hospital patronage in Port Harcourt; management of hospitality homes should engender more presence of virtual presence.
4. Customer virtual perception influences repeat purchase of hospital patronage in Port Harcourt, virtual perception should therefore be made attractive to tourists and for hospitality patronage in Port Harcourt.



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