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Performance of the Website of the Postgraduate College of the University of Ibadan, Nigeria

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Abstract

The aim of the study was to investigate the performance of the Postgraduate College of the University of Ibadan website by conducting a survey of the postgraduate students using the college portal, and other services. The study was guided by variables from WebQual4.0, DeLone and McLean's (1992) Information System Success and UTAUT Concepts. The study shows that the postgraduate college website has helped many of the respondents to increase their proficiency in performing basic tasks on the website such as course registration, printing of receipts, upload of documents and so on. The study also shows that increased use of the college website has increased the proficiency level of the users in using the website for registration activities. The study also reveals that using the postgraduate college website has enhanced the respondents' ability to perform some career related activities, which implies that the level of effectiveness of the Postgraduate College website is fairly high. Generally user experience and service quality have very correlations with user satisfaction.

Keywords: Performance of Website, Postgraduate College, University of Ibadan, Nigeria, UTAUT, Information technology

Introduction to the Study

The website of an institution is one of the most frequent sources of information for students wishing to enlist in the institution as well as for other clients and stakeholders of the institution. A website symbolizes a university's principles, goal, vision and perspectives. It serves as a mechanism for delivery of services that assist in various projects a stakeholder needs to accomplish. The website also serves as a means of communication whereby an institution can communicate with its stakeholders (Mentes and Turan, 2012). Therefore, every university website is expected to play informational and transactional roles by making information available to everyone.

The purpose of university website is to provide students, lecturers, employees and other active users with useful and timely information and resources in a very efficient manner, to support university services and student registration and all different activities on the website. Sadly, website design is mostly guided by software, organizational structure, or company, rather than by its accessibility from the point of view of users. Website designers ultimately create websites that do not meet the needs of the key users, apart from the fact that creation of websites is a tiring

process which requires enormous investment; it will have a negative effect on the owner of the website if the performance of the website falls below expectation, therefore, the assessment of the Postgraduate College University of Ibadan website output is a significant activity because the performance of the website is influenced by several variables or parameters. Ajoye and Nwagwu (2014) recommended that the stakeholders in the university should implement an effective IT policy that would instill the efficient management of the Postgraduate College web portal in addition to large scale investment in internet infrastructure for maximum user satisfaction.

The academic website serves as a means of communication with lecturers, students, faculties, alumni and guests. The academic website is not only an affordable and appropriate technique to connect with various stakeholders; it is also a means for an institution to shape its image. Moreover, academic institutions need to indulge within their strength to keep positive images with their various constituents, and the way to do this is to take full advantage of the opportunities the website provides (Caglar and Mentis, 2012). Almost all academic institutions take full advantage of their websites as a key public relation and marketing tool to reach potential students (Gordon and Berhow, 2009). Potential students may be more likely to apply to the academic institutions that provide useful and clear information on its website.

Information provision is the basic goal of any website while its content is the key factor driving users to the website; but the user satisfaction has been acknowledged as the most useful measurement of an information system's success. User satisfaction can be affected by security and privacy issues although Cheung and Lee (2005) observed that security could be a component of system quality. The constructs of system quality focus mainly on the components of a system which influence its ease of use, flexibility and efficiency. Aladwani and Palvia (2002) found that user satisfaction is strongly dependent on the quality of access that is determined by speed of access. In addition Nielsen (1999) emphasized that quality of access is a function of website availability. This reveals that a website must be about its users, a user-friendly website improves usability and this result to satisfaction (Khalifa and Liu, 2002). When a website is well organized and straightforward to use, it gives simple and clear directions to minimize difficulties in navigation. The simplicity of use, according to Rai, Lang, and Welker (2002), is the most important indicator of system quality.

The rise of web-based information systems, as well as significant changes in the end-user computing environment has pushed the university to find new ways to meet end-user information requirements. This means building website is not enough but the website must be actively and correctly presented, there must be increment of investment in information systems infrastructure while also embracing new and dynamic innovations. This will not only keep websites competitive, but it will also ensure that users get the most out of the new system. Measuring the success of an information system is a vital approach for an organization to justify its success in the development of an information system.

Performance of the university website can be viewed as the extent to which products on the site can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction from the website. Academic institutions are also using the web to establish visibility and to offer computing services to its students, staff and faculty. (Harpel-Burke, 2006) identifies three major functions of a university website; promotion and marketing, Online services and providing a vehicle to communicate between individuals and groups. When potential students check out the academic institutional website, the anticipations is that any issues regarding a particular program being offered will be responded to. Though websites are designed and

developed in a different ways, it is possible that the visitors will find it very difficult in getting the solutions they need due to issues of websites performance (Bautista, 2010).

The Postgraduate College University of Ibadan website has witnessed great changes since the transformation from postgraduate school to Postgraduate College in 2018. The web portal gives access to large viewers and enhances functional performance introducing new innovative products; application process, students transcript and online payment. Among the various products the online payment is a significant contributor to the success of the website as it has really eased of the stress of having to go to bank before transactions like school fees, transcript fee, verification, confirmation and verification fees, graduation fees and all sort of payment can be made from any location even from the comfort of your room. Transcript request is another improvement on the website since 2019, before students have to come to the Postgraduate College to submit their request form after payment and must come back monitor the progress of their request.

DeLone and Mclean (2002) proposed a model for information system success, considering web quality as the most important determinant of user satisfaction, according to their model; web quality may be divided into information quality, system quality and service quality. Information quality refers to the quality of information that is provided online by websites while system quality includes all those features that diminish users' difficulties during their interaction with a website as well as enhance their entertainment. Service quality is concerned with the quality of a service or product which is provided by a website. This simply means the time and effort spent by users while trying to source for information determines how user- friendly such web portal is. In other words, a well-organized site that is easy to use and provides simple and clear instructions avoiding confusion can be considered user-friendly. The focus of this study is to determine how postgraduate student clients of the Postgraduate College University of Ibadan perceive performance, Quality (WQ) such as system quality, information quality, service quality and other issues, and user issues based on information systems success models.

Statement of the Problem

In the recent years, the University of Ibadan's Postgraduate College has addressed the issue of the quality of its website. The term "quality" encompasses a wide range of factors, including service quality, user experience, user satisfaction, and so on. In short, all the students' resources that could ever possibly be needed are intended to be made available on the website; with the attractive characteristics of the web based information system. As at today, the college's website is accessible anywhere as long as there is internet connection, a web browser, and the appropriate login details. This means that users can access the website even when they are away from the campus. It also brings the possibility of staff working from home, improve services and promotes postgraduate education in Nigeria.

There are different categories of users on the Postgraduate College website. Among these are the postgraduate students, the lecturers, the staff and the alumni. It has been observed that students rarely make use of the website even with the improvement that has occurred since the transition from postgraduate school to Postgraduate College. Rather they prefer to visit the college for their transactions. All the same the number of services on the portal is increasing and more students are migrating to online services.

Ajoye (2014) had conducted a study on user satisfaction of the University of Ibadan Postgraduate school website. She observed that despite the major changes in the end-user computer environment and the development of web-based information systems, little study on measuring

user satisfaction with web-based information systems has been conducted. The website of the University of Ibadan is the image of the institution. The website exists in a dynamic environment, with the needs of students and staff rapidly evolving. Technologies for maximizing the benefits of websites are also ever expanding. Furthermore, with the rapid growth in the number of universities in Nigeria, there is also increase in competition for high quality students and visibility. Thus, studies are required to continuously generate information for continuous updating and improving of the quality of the services offered by the university through the website, and this present study provides such support.

Since the transition from postgraduate school to Postgraduate College in 2018, the web portal of the Postgraduate College, University of Ibadan has seen a significant change. The website gives access to large viewers and enhances functional performance introducing new innovative products; application process, students transcript, and online payment. These numerous information products, particularly online payment, have contributed significantly to the website's success by drastically reducing the time-consuming procedures of registration and other requests. However, users still have troubles using the website; instead, they'd rather pay someone to assist them with their application and requests. Therefore, it is critical to determine the performance of the website, explore the direct and indirect factors underlying the students' challenges with the use of the website and also ensure their satisfaction.

Purpose of the study

The aim of the study was to investigate the performance of the Postgraduate College of the University of Ibadan website by conducting a survey of the postgraduate students using the college portal, and other services.

Objectives of the study

The specific objectives are:

1. To determine the system quality of University of Ibadan Postgraduate College website.
2. To investigate information quality of the website of the University of Ibadan Postgraduate College.
3. To investigate user satisfaction of the website of the University of Ibadan Postgraduate College.
4. To examine technological and infrastructure challenges of users of the University of Ibadan Postgraduate College's website.
5. To determine the usefulness of the information provided in the website of the University of Ibadan Postgraduate College's website.
6. To examine the user friendliness of the University of Ibadan Postgraduate College's website

Research Hypotheses

The following hypotheses were tested:

Hypothesis One: There is no significant relationship between information quality and user satisfaction of the Postgraduate College portal.

Hypothesis Two: There is no significant relationship between system quality and user satisfaction of Postgraduate College website

Hypothesis Three: There is no significant relationship between service quality and user's satisfaction of the Postgraduate College website

Hypothesis Four: There is no significant relationship between service quality and user's satisfaction on the Postgraduate College website of the University of Ibadan.

Hypothesis Five: There is no significant relationship between performance expectancy and user's satisfaction on the Postgraduate College website of the University of Ibadan.

Literature Review

Theoretical Framework

The study was guided by (i) WebQual4.0 (Barnes and Vidgen 2002), (ii) DeLone and McLean's (1992) Information System Success and (iii) some UTAUT Concepts.

WebQual 4.0 and DeLone and McLean's (1992) Information System Success

WebQual4.0 is a website quality evaluation framework that consists of three dimensions namely information quality, service quality and usability (Barnes and Vidgen, 2002). Usability reflects better on the level of abstraction of information and service quality and was adapted from the literature in the field of human computer interaction and web usability (Barnes and Vidgen, 2002). Usability is usually substituted with the system quality because according to Barnes and Vidgen (2002) usability is related to human computer interaction which could also depict the system quality measurement. DeLone and McLean's (1992) information system success cuts across the use of system quality, information quality, use, user satisfaction, individual impact and organizational impact. DeLone and McLean (1992) argued that both system quality and information quality could influence usage and user satisfaction both singularly and jointly.

Gao (2013) suggested that system quality had a positive effect on consumer satisfaction and this makes consumers to be more likely to be satisfied with adequate and accurate information. System refers to the content delivery process (DeLone and McLean, 1992). For e-commerce transactions, the measures of system quality were usefulness, usability, responsiveness, reliability and flexibility (DeLone and McLean, 2004). McKinney et al. (2002) suggested that dimensions of system quality were access, usability, navigation and interactivity.

According to Gao (2013), websites system quality is measured using the four dimensions of navigation, visual appeal, response time and interactivity. According to Chang and Chen (2008); Hernandez et al. (2009); Wang et al. (2015) and Ali (2016), system quality does pose significant effect on customers satisfaction. Hsu, Chang and Chen (2012) investigated the impact of website quality on customer satisfaction and purchase intention towards perceived playfulness and

perceived flow as mediator. They found that system quality has positive relationship in influencing customer satisfaction.

With regards to information quality, consumers visit university websites to look for important information such as department of study, Head of Departments, among others. (Marketing Charts, 2012). Hence, information is an essential part of websites and information quality influences the online use of the websites (Gao, 2013). Therefore, websites can attract, retain and stimulate consumers through providing valuable information (Kim and Niehm, 2009 cited by Gao, 2013). Studies such as Kim and Stoel (2004); Gao (2013) suggested that information quality had a positive effect on consumer satisfaction and this makes consumers to be more likely to be satisfied with adequate and accurate information. Chang and Chen (2008); Hernandez et al. (2009); Wang et al. (2015) and Ali (2016) noted that information quality does pose significant effect on customers satisfaction. Hsu, Chang and Chen (2012) investigated the impact of website quality on customer satisfaction and purchase intention towards perceived playfulness and perceived flow as mediator. They found that information quality has positive relationship in influencing customer satisfaction.

According to Chang and Chen (2008); Hernandez et al. (2009); Wang et al. (2015) and Ali (2016), service quality does pose significant effect on customer satisfaction. Hsu, Chang and Chen (2012) investigated the impact of website quality on customer satisfaction and purchase intention towards perceived playfulness and perceived flow as mediator. They found that service quality has positive relationship in influencing customer satisfaction. Mindy and Jeong (2017) did an investigation among the website quality, customers' perceived service quality, their satisfaction, return intention and loyalty towards lodging industry. The result found that service quality is a major variable in enhancing users' satisfaction.

Also, Lee and Lin (2005) cited by Chauhan et al. (2019) affirmed that customer perception of online service quality had significant relationship with customer satisfaction towards enhancing purchase intention. Luser, Zornoza and Tena (2001), also affirmed that service quality is an important variable in achieving customer satisfaction in an online environment. This has made Xu (2017) raise the issues and concerns related to inconsistent service quality of websites of universities.

User friendliness should be at the heart of website designer by bearing in mind the elements of user friendliness which are; Readability, Navigation and Mobile compatibility and so on. Soegaard (2021) and Singh (2013) noted that user friendliness website could affect user satisfaction and hence makes users not to be able to use a website which will affect visitors' rate due to the fact of several challenges of lack of user friendly online environment. This is because, it encompasses more than just a concern for specific design features or characteristics but also include the underlying principles of the design of the user interface, as derived from a wider concept of human-computer interaction (Micheline, 1992). According to Soegaard (2021), the concept user friendly is synonymous to usability and user experience design (UX Design) in respect to system usage which includes the use of websites such as universities websites. Ali et al (2014) noted that a growing interest already exist in designing and developing attractive, user-friendly systems such as websites towards gaining the acceptance of end user. It focuses on developing different user interfaces towards finding the best way to design and develop a user-friendly user interface websites to increase the usability level of the websites

Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) is one of the recent technology models commonly used to investigate user acceptance of information technology. This theory seeks to explain the intention of users to use information technology as well as their subsequent use behaviour. It is part of the earliest theoretical models used in the fields of Sociology, Information Science and Psychology to explain and predict the user acceptance and use of Information Technology. This model was postulated by Venkatesh et al. (2003) and it consists of four concepts that can be observed and measured (construct) by playing an important role in the use of concepts from behavioural intention and use behaviour, namely performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating condition (FC). In addition, UTAUT includes four intermediate individual variation variables, gender, age, experience and voluntariness of use, which predicts the relationship between primary factors and behavioural intention and use behaviour (Venkatesh et al., 2003).

According to the UTAUT, Performance Expectancy involves the extent to which the user believes that using the system will bring about a better result or output. Effort Expectancy expresses the degree to which the user believes that using the system will be convenient. The effort expectancy factor has an influence on behavioural intention in both voluntary and compulsory use environments. Social Influence refers to the degree the user’s loved ones or persons important to the user believe that the individual should make use of the new system. Afonso et al. (2012) posited that social influence factor reflects the influence of influencing factors on the behaviour of users, such as opinions of friends or hierarchical superiors. Facilitating conditions refer to the degree to which users believe that there are organisational and technical infrastructure put in place to support the use of Information Technology. The model was represented in the diagram below:

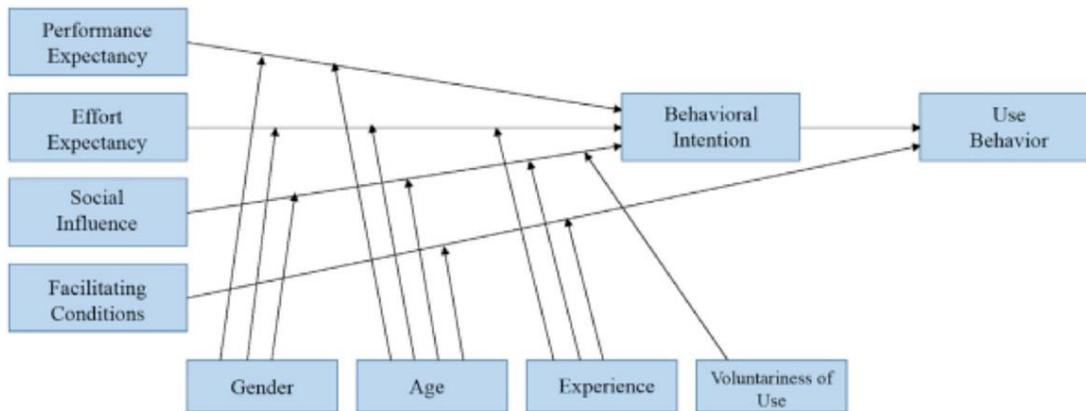


Figure 1: Unified Theory of Acceptance and Use of Technology: Venkatesh *et al.* (2003)

According to Venkatesh et al. (2003), Performance expectancy poses a unique, significant and positive influence on the behaviour of users which in this study could refer to as website satisfaction among university website users. Performance expectancy is further explained by the concepts of security (confidentiality, integrity and availability of information used), reliability (the probability that the system remains successful in achieving its intended objectives) and identity assurance (the assurance that only authorized individuals are given access) (Ho et al., 2003; Catherine et al., 2017). Hence, Catherine et al. (2017) affirmed that the major variables to measure performance expectancy are security, reliability and identity assurance.

Catherine et al. (2017) did an investigation of effort expectancy, performance expectancy, social influence and facilitating conditions as predictors of behavioural intentions to use ATMs with fingerprint authentication in Ugandan Banks, and found that performance expectancy is a very strong predictor of users' behaviour. Also, the studies of McKechnie et al. (2006); Ha and Stoel (2009); Smith et al. (2013); Chang et al. (2016) have noted the importance of performance expectancy in an online environment hence could also influence users satisfaction in such online environment. Loureiro, Cavallerob and Miranda (2018) noted that performance expectancy is a core element of online satisfaction and has contributed extensively to the Unified theory of acceptance and use of technology (UTAUT).

Performance expectancy refers to the extent to which an individual believes that using the system will help him/her to attain gains in job performance (Venkatesh et al. 2003). It also defined as the degree to which website users perceive that using a system such as the university websites will enable them achieve improved output performance in their online website activities (Onaolapo and Oyewole, 2018). Onaolapo and Oyewole (2018) also averred that it is of direct relevance to the use of university websites by users in and out of the universities. In practice, performance expectancy is similar to the perceived usefulness in TAM and it's a major attribute that tends to influence the attitude of individual in the use of a system such as using an institutional website (Chau, Stephens and Jamieson, 2004).

According to Ho, Stephens and Jamieson (2003), performance expectancy is the degree to which an individual or user believes that using a particular system would fulfill the organization's security access requirements. According to Brown and Venkatesh (2005) and Venkatesh et al. (2003), performance expectancy refers to the use of online technology that could assist the consumers perform certain activities such as information search and other tasks in purchasing processes. Moreover, Al-Qeisi et al. (2014) affirmed that performance expectancy is more important in explaining website usage than other variables in the UTAUT, especially with respect to the regular use the websites which in this study refers to the regular use of university websites in Nigeria. Hence, Bugembe (2010); Khayati and Zouaoui (2013); Tossy (2014); Venkatesh et al. (2003); Onaolapo and Oyewole (2018); among others affirmed that performance expectancy is a major construct of the Unified Theory of Acceptance and Usage of Technology (UTAUT) model that has received substantial attention in different fields of human endeavors and research.

Research Framework

Based on the theories reviewed above, a conceptual model was developed for this study (figure 2). The model explains the relationship between the measures of website quality and user satisfaction. The model shows that each of the website quality measures significantly affect user satisfaction,

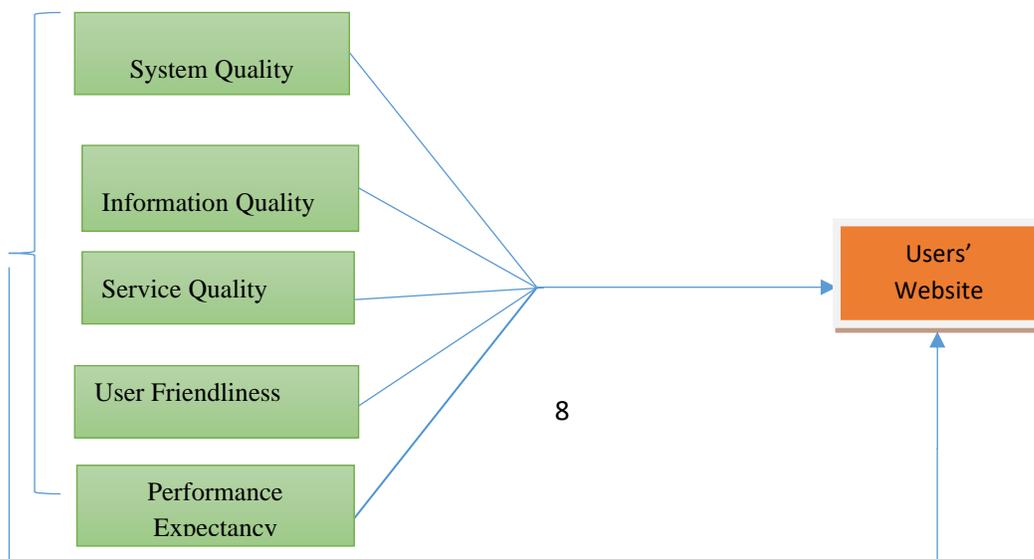


Figure 2: Conceptual Model for the Study

and that the combination of all the qualities will determine the level of user satisfaction derived from the website. In the model, system quality, information quality, service quality, user friendliness and performance expectancy are independent variables while user satisfaction is a dependent variable.

Methodology

Research Design

A descriptive survey design was adopted in carrying out this study and quantitative method of data collection will be followed. The word “survey” implies that a specific sample size of postgraduate students would be selected to represent the population of postgraduate students in the University of Ibadan, Nigeria, and analysis would be made with the selected sample size and inference would then be drawn from the results of the study to the population of interest which are the postgraduate students of the University of Ibadan, Nigeria.

Location and Population of the Study

The study focuses on postgraduate students of the University of Ibadan, Nigeria. The postgraduate students of the University of Ibadan, Nigeria are basically students who have returned for an advanced degree towards enhancing their career prospects and also their propensity to get employed. Also, the focus would be on the postgraduate users of the University of Ibadan Postgraduate College website and the services it provides to the users. The population of postgraduate students in the University of Ibadan is 11000 (registered students as at the time of this study). The five faculties/centers/institutes selected are presented in Table 1.

Table 1: Faculties/Centres/institute selected

S/N		Population	Sample size
1	Agriculture	330	47
2	Education	814	117
3	Science	671	97
4	Social Sciences	332	48
5	Technology	336	48
	Total	2483	357

The second stage involves the use of a proportionate sampling technique to select a sample size from the population of postgraduate students.

Research Instruments

The major research instrument used for data collection was the questionnaire. The questionnaire was designed to meet the various research objectives, questions and hypotheses of the study. In addition, it was structured and categorized in sections with respect to the variables of interest in this study. There are three major sections in the questionnaire. These sections include the demographic characteristics of the respondents, users' satisfaction, performance expectancy, and website quality variables. Apart from the section for the demographic characteristics of respondents, information from respondents of other sections was captured in a four Likert scale of "agreed", "strongly agreed", "disagreed" and "strongly disagreed" from whence each respondent was allowed to tick the most appropriate that provides answer to the question or item in the questionnaire. The questionnaire was designed based on the construct of DeLone and McLean (2003) model with some of the questions adapted from the study of Ajoye (2012), while some of the questions were self-constructed.

Structure of the Questionnaire

The questionnaire was structured into seven sections to gather data on respondents' (a) demographic characteristics, (b) user satisfaction, (c) user experience, (d) information quality, (e) service quality, (f) user friendliness and (g) performance expectancy

Section A: Demographic Characteristics

The demographic characteristics on which data were collected include age, faculty, department, gender, program and mode of study.

Section B: User Satisfaction with UI PG College Website

This section includes 8 items. It captures students' satisfaction with (a) overall quality of the college website, (b) overall quality of the information on the college website, (c) overall service of the college web portal, (d) graphics display quality of the college website, (e) speed of the college website, (f) navigation of the college website, (g) type, size and legibility of fonts used for the website design, and (h) easy differentiation of the links on the website.

Section C: User Experience on System Quality of UI PG College Website

This section consists of 10 items. It captures students' user experience on (a) ease of use of the college website, (b) flexibility of use of the website, (c) reliability of the website, (d) ease of navigation of the website, (e) response time of the website, (f) global standard of the of the college website, (g) layout of the website output, (h) presentation of information of the website, (i) speed of the website, and (j) loading time of webpages and images. These questions were adapted from

Section D: Information Quality of UI PG College Website

This section consists of 8 items. It captures the quality of information on the college website on (a) timeliness, (b) easy to understand, (c) completeness, (d) easily accessible, (e) reliability, (f) accuracy, (g) currency, and (h) relevance. These questions were adapted from

Section E: Service Quality of UI PG College Website

This section consists of 6 items. It captures the quality of services rendered by the college website such as (a) Student Registration, (b) Fees payment and financial clearance, (c) Examinations, (d) Grants and Scholarship, (e) Course Registration, and (f) Online payment.

Section F: User Friendliness of UI PG College

This section consists of 5 items. It captures the user-friendliness of the website in terms of (a) ability to perform necessary tasks on first interaction with the website, (b) difficulty in performing basic tasks, (c) language of the website, (d) ease of navigation of various webpages, and (e) frustration in using the college website. These questions were adapted from Muhammad et al. (2011).

Section G: Performance Expectancy of UI PG College Website

This section consists of 4 items. It captures the performance expectancy of users on (a) usefulness of the website for registration, (b) increase in proficiency of registration activities, (c) increase in the likelihood of easy registration, and (d) increase in proficiency in career-related activities.

Data collection

A total of 357 questionnaires were administered, out of which 330 were duly filled and returned, representing a response rate of 93.9%. The other 27 questionnaires were either lost or excluded from the analysis, due to the contained incomplete information given by the respondents. The high response rate could be attributed to the fact that the researcher is a staff of the Postgraduate College and as such, has a great level of physical interaction with students on a daily basis.

Data Analysis

Data collected from the respondents was subjected to quantitative analysis using the Pearson Product Moment Correlation.

Results

A total of 357 questionnaires were administered, out of which 330 were filled and returned, representing a response rate of 93.9%. The high response rate could be attributed to the fact that the researcher had a good level of physical interaction with the students during instrument administration and provided guides when necessary.

Demographic Characteristics of Respondents

Table 1 shows that 67 (20.3%) of the respondents are between the ages of 21 and 25, 128 (38.8%) are between the ages of 26 and 30. Also, 63 (19.1%) are between ages 31 to 35, 36 (10.9%) are between the ages of 36-40, 16 (4.8%) are between the ages of 41 to 45, 11 (3.3%) are between ages 46 to 50, while 9 (2.7%) are age 50 and above. The table also shows that 170 (51.5%) of the respondents are male while 160 (48.5%) are female. The table further reveals that 25 (7.6%) of the respondents are Postgraduate Diploma (PGD) students, 257 (77.9%) are M.Sc. students, 6 (1.8%) are M.Phil. students, while 42 (12.7%) are PhD. Students. The table also shows that 12 (3.6%) of the respondents are part time students while 318 (96.4%) are full time students.

Table 2 further grouped the respondents according to faculties; 5 (1.5%) of the respondents is from the Institute of African Studies, 24 (7.3%) are from faculty of Agriculture. Also, 21 (6.4%) are from the faculty of Arts, 21 (6.3%) are from faculty of Basic Medical Sciences, 4 (1.2%) are from faculty of Clinical sciences, 1 (0.3%) from CPEEL, 59 (17.9%) are from faculty of Education. Table 1 also shows that 28 (8.8%) are from faculty of Technology, 55 (16.6%) are from faculty of Science, 1 (0.3%) from Institute of Education, 1 (0.3%) from faculty of Law, 2 (0.6%) from College of Medicine, 21 (6.7%) are from Faculty of Multidisciplinary Studies. Further, 5 (1.5%) from faculty of Pharmacy, 20 (6%) are from faculty of Public Health, 18 (5.5%) are from faculty of faculty of Renewable Natural Resources, 11 (3.3%) are from the University of Ibadan School of Business, 33 (10%) are from faculty of The Social Sciences.

Table 2: Demographic characteristics of the respondents

Demographic Variable	Frequency	Percentage
Age		
21-25	67	20.3
26-30	128	38.8
31-35	63	19.1
36-40	36	10.9
41-45	16	4.8
46-50	11	3.3
50 and above	9	2.7
Total	330	100.0
Gender		
Male	170	51.5
Female	160	48.5
Total	330	100
Program of Study		
PGD	25	7.6
M.Sc.	257	77.9
M.Phil.	6	1.8
PhD	42	12.7
Total	330	100
Mode of Study		
Part Time	12	3.6
Full Time	318	96.4
Total	330	100

Evaluating the Hypotheses

This section presents the results of the tests of each hypothesis that was stated at the beginning of the study. To test these hypotheses, Pearson Product Moment Correlation analysis was run to gauge the relationship.

Hypothesis 1: There is no significant relationship between information quality and user satisfaction of the Postgraduate College portal.

Table 3 shows that $r=0.651$, $n=330$, $p=0.000$), indicating a strong and positive relationship between information quality and user satisfaction. However, information quality was only able to explain 42% of user satisfaction.

Table 3: Result of the test of the hypotheses

Variables	Correlation	R ²
Information Quality	R=0.651; p=0.000	42.38
System quality	R=0.700; p=0.000	49.00
User experience	R=0.723, p=0.000	52.27
Service quality	R= 0.422, p=0.000	17.81
Performance expectancy	R= 0.483, p=0.000	23.33

Hypothesis 2: There is no significant relationship between system quality and user satisfaction of the Postgraduate College website

With $R = 0.700$ and $p=0.000$, there is also a strong positive relationship between system quality and user satisfaction, and system quality explained 49% of user satisfaction.

Hypothesis 3: There is no significant relationship between user friendliness and user satisfaction of the Postgraduate College website

A $p= 0.000$ and $R = 0.723$, there is a very strong positive relationship between user friendliness and user satisfaction and 52% of user satisfaction is explained by user friendliness of the website.

Hypothesis 4: There is no significant relationship between service quality and user's satisfaction on the Postgraduate College website of the University of Ibadan.

The correlation between service quality and user satisfaction, $R = 0.422$ indicates a fairly strong positive relationship between service quality and user satisfaction. But the relationship is significant ($p=0.000$), and only 17% of user satisfaction could be explained.

Hypothesis 5: There is no significant relationship between performance expectancy and user's satisfaction on the Postgraduate College website of the University of Ibadan.

The magnitude of correlation, R is 0.483, signifying a fairly strong positive association between performance expectancy and user satisfaction and $p=0.000$. It is hereby concluded that there is a significant relationship between performance expectancy and user satisfaction, and 23% of user satisfaction could be explained by performance expectancy.

Discussion of Findings

The aim of this study was to investigate the performance of the Postgraduate College University of Ibadan website by conducting a survey to determine user satisfaction among the postgraduate students using the Postgraduate College portal for registration and online payment. The discussion is arranged into sections based on the research question and hypotheses of the study. Findings of this study show that using the Postgraduate College website has helped many of the respondents to increase their proficiency in performing basic tasks on the website such as course registration, printing of receipts, upload of documents and so on. The study also shows that increased use of the college website has increased the proficiency level of the users in using the website for registration activities. The study also reveals that using the Postgraduate College website has enhanced the respondents' ability to perform some career related activities, which implies that the level of effectiveness of the Postgraduate College website is fairly high. This contradicts the submission of Olaleye et al. (2018) that several university websites are of low quality and are therefore difficult to access, some are aesthetical but with poor content. The fact that the respondents are able to use the website for various purposes and improve their level of proficiency on the website signifies that the website is serving the purposes for which it was intended and serving the purpose quite well. However, the study found that the level of effectiveness of the college website can still be improved upon as quite a number of the respondents still expressed that they encounter one difficulty or the other when trying to use the website for various purposes.

Findings of this study show that the information gotten from the Postgraduate College website is always timely, easy enough to understand, reliable, accurate, current, relevant and easily accessible. In other words, the website serves as a very effective means of communication for the Postgraduate College. This indicates that the information obtained possesses all the qualities of good information as submitted by Murtala (2012) which are: accuracy, clarity, completeness, relevance, timeliness, accessibility and reliability. Hence, the Postgraduate College can communicate any new development or schedule of events to the students and the students are sure to receive and comprehend such information such that they are able to make relevant decisions. This is in accordance with the assertion of Andalib and Danaee (2013) that website has become a major tool and playing major role as a public relation for universities thus becoming the first point of contact by individuals such as students who want to search from either national or international location to know more about the institution. As such, the information on a university's website must be accurate, complete, timely, clear enough and easily accessible.

The study reveals the experience of postgraduate students when interacting with the Postgraduate College website. It was gathered that most of the respondents have a positive experience in their interaction with the college website. The findings revealed that the respondents find the college website to be fast, flexible, reliable, and easy to use and that the webpages load fast enough. The study also found that the users found the website layout simple and attractive enough and as such, it is easy to navigate through the different webpages on the website. This indicates that the concept of user experience does not only apply to the output obtained after using the website but includes the process involved in obtaining such output. For instance, if users find the webpages on a website difficult to navigate or the layout clumsy and the design cumbersome, they are likely to be frustrated and tensed up, such that they are not able to have a meaningful interaction with the website, thus making them unwilling to visit such website subsequently. This is in tandem with the findings of Collier and Bienstock (2006) that when any consumer feels

satisfied with the experience they have on a website, such as individuals would preferably remain loyal and would use the website again with a high level of satisfaction derived from the use of such websites. It also supports the submission of Zhang (2011) that organisation websites are designed based on customers' needs; this gives the customer a smooth experience and increases customer satisfaction. This study however shows that the Postgraduate College website give its users a positive and pleasant user experience, contrary to the findings of Olaleye et al. (2018) that universities in developing countries are also trying to heighten their effort but are providing unsatisfactory experience to customers and various individuals.

The study established that the Postgraduate College website renders various services to its users. This is due to the fact that part of the reasons why the website was created is to reduce or possibly eradicate manual activities in the Postgraduate College premises such as courses registration, fees payment and financial clearance and submission of credentials. As such, the study found out that the website renders services such as application for admission, students' registration, fees payment and financial clearance, examinations, grants and scholarship advertisement, course registration, online payment and so on.

This study reveals that a large number of the Postgraduate College website users were able to perform basic tasks on the website even on their first interaction with the website. The findings further shows that the respondents found the language of the website understandable and appropriate, meaning that the users could easily pick up information and guidance from the website. In addition, the users expressed that they are able to easily navigate through the various webpages on the college website. This signifies that the Postgraduate College website is very user-friendly. The user-friendliness of the website is also evident in the fact that a fewer number of respondents expressed that they get frustrated while using the website. This implies that user friendliness does not only talk about the ease of use or easy accessibility of a website but the structure, layout and design principles which attract users to a website. This lends credence to the assertion of Singh (2013) that user friendliness encompasses more than just a concern for specific design features or characteristics but also include the underlying principles of the design of the user interface, as derived from a wider concept of human-computer interaction. Singh (2013) further highlights some of the characteristics of a user-friendly website to include: easy accessibility, well planned information architecture, well formatted content, fast load times, effective navigation, and so on. The study has shown that the Postgraduate College website possesses all these characteristics. Hence, it can be safely concluded that the website is user-friendly.

This study has revealed that the user satisfaction of the Postgraduate College is on a fairly high level. When asked to rate the level of satisfaction, most of the respondents indicated that they are somehow satisfied with some of the qualities of the website such as the overall quality, graphics display quality, overall service quality, ease of navigation, legibility of font size and type, and the speed of the college website. This indicates that just few of the users are totally or very satisfied with the website quality as well as their experience on the website. This signifies that the overall quality of the website can still be improved upon in order to increase the level of satisfaction of the users. This agrees with the statement of Ali (2016) that the website being the online store of a company or business requires that companies, businesses and service providers understand customers' perceptions of the most important website attributes that may be more appealing to them for enhanced relationship between the customers and the business.

Findings show that a positive relationship exists between Information Quality and User Satisfaction. In other words, the quality of information gotten from the portal by the users can

determine the level of satisfaction the users will derive from using the website. Since the quality of information gotten from a source is measured by characteristics such as completeness, clarity, accuracy, timeliness and relevance, it therefore connotes that the more of these characteristics present in the information gotten from the website, the more satisfaction the users derive from using the website. This is consistent with the evidence put out in studies that have examined the relationship between Information Quality and User Satisfaction (Wu and Wang, 2006; Chiu et al., 2007; Ajoye and Nwagwu, 2014). The findings of this study, being consistent with studies already mentioned in literature, further confirm the necessity of information quality in increasing user satisfaction. Thus, this finding further lends credence to the submission of Ajoye (2012) that information quality, measured in terms of understandability, completeness, timeliness, currency, accuracy and relevance of the information, plays a significant role in determining user satisfaction of the UI PG college web portal.

The study has shown that there is a significant relationship between system quality and user satisfaction. This further affirms the importance of this concept in giving website users maximum satisfaction. Generally, users expect that a website should be flexible, reliable, easy to use, respond quickly, while operating on a user interface that makes it better than or at least comparable with other websites. This study however confirms that the overall quality of the system significantly affects the level of satisfaction derived by a user. This is similar to the findings of other scholars such as Chang and Chen (2008); Hernandez et al. (2009); Wang et al. (2015) and Ali (2016) who posited that website quality which include information quality, system quality, ease of use, privacy, service quality and responsiveness, among others do pose significant effect on user satisfaction. This study also agrees with the findings of Ajoye (2012) who found that perceived ease of use which is a measure of system quality significantly affects the level of user satisfaction.

The study reveals that a significant relationship exists between user experience and user satisfaction. This means that the experience encountered by a user while interacting with a website, whether positive or negative, is capable of influencing the level of satisfaction derived by such user from using the website. It therefore becomes necessary for businesses and organisations to ensure that their website provides their prospective and existing customers with a pleasant or positive experience. This determines whether or not the user will be willing to continue using the website or not.

This study found that service quality is an important attribute in determining the user satisfaction level of the PG college website. Service quality of the website is measured in the effectiveness of the website in performing the basic services rendered by the website such as student registration, admission application, fees payment and financial clearance, grants and scholarship advertisement and online payment. This means that users of the website are satisfied when they are able to easily and effectively obtain these services from the website, thus gaining value for the time, money and effort expended. A careful comparison of this studies with that of other scholars with similar study such as Leonard-Barton and Sinha (1993), Yoon et al. (1995), Shaw et al. (2002) and Ajoye and Nwagwu (2014) revealed that there seem to be a mixed support for this relationship. This is likely due to the variance in the methods adopted by the researchers in measuring this concept. However, the findings of this study agree with that of Ajoye and Nwagwu (2014) that there is a positive relationship between service quality and user satisfaction of the PG college web portal. This is also consistent with the findings of Chauhan et al. (2019) that customer perception of online service quality had significant relationship with customer satisfaction towards enhancing purchase intention. Therefore, this study further confirms the

findings of Ajoye (2012) that service quality is a significant attribute in determining the user satisfaction of the UI PG college web portal.

This study revealed that performance expectancy has a significant relationship with user satisfaction level of the PG college website. In other words, the extent to which the website is able to meet up with the expectation of the users determines the level of satisfaction the user will derive from using such website. For instance, it is believed that users generally have expectations when they intend to use an information system, they expect that using such system will help them achieve certain objectives or perform certain tasks. The result of using such system, whether positive or not, will significantly influence the satisfaction level of the users. This finding is consistent with the submission of Chau, Stephens and Jamieson (2004) that performance expectancy is a major attribute that tends to influence the attitude of individuals in the use of a system such as an institutional website.

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