# THE INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLEDGE

## Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution, Nigeria

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*Abstract:*
*In the present world, the advancement in technology has made the use of mobile devices a necessity in our day-to-day activities. Mobile devices have provided an easy communication with the banking network via the mobile wallet, which is an application that users can make payment with for goods or money transaction. The aim of this study is to adopt UTAUT2 model to analyze consumer's adoption to the use of mobile wallet within selected tertiary institutions in Edo state, Nigeria. For this research, a questionnaire survey was directed with 350 respondents using the constructs Hedonic Motivation (HM), Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Condition (FC), Price Value (PV), Habit (HT) and Behavioral Intention (BI) of the UTAUT2 model for the adoption studies. From the analysis carried out, a regression and correlation result were presented, the correlation analysis showed that there is a significant relationship between dimensions of performance expectancy (PE) of Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institutions. Also, the result indicates that increase in Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) will increase Performance Expectancy (PE) as they are significantly predictive of Performance Expectancy (PE) of the usage of mobile wallet.*

*Keywords: Adoption, UTAUT2, mobile wallet, institution*

## 1. Introduction

Widespread use of the internet since its inception, E-commerce businesses growth has skyrocketed and many customers tend to purchase their goods and pay for services via the internet through their personal computers or smartphones. Nowadays, transactions are easily done using mobile wallet applications which is installed on mobile devices, its function of paying and keeping the currency is same as the traditional wallet but differ in performing transaction digitally with more parties directly or indirectly (Rana, 2017). (Shin, 2009) described the mobile wallet as a much-advanced versatile application that includes element of mobile transaction, it also stores personal and sensitive information such as passports, credit card information, PIN codes, booking details and lots more.

Mobile payment which is also referred to as mobile wallet and mobile money transfers plays a major role in Nigeria's economy right after the cashless policy was presented to Nigerians in 2012 by the Central Bank of Nigeria (Central Bank of Nigeria, 2012). Major mobile payment companies in Nigeria like Paga, Paystack, Flutterwave, GTPay and others has tremendous increase by customer's usage on their individual platforms. (Adepetun, 2018) stated that the National Bureau of Statistics (NBS) recorded the value of transactions within the country to be N410.5 billion at the second quarter of the year 2018, and it sets a 4.1% increase within that period. Regardless of this record, cash still rules best as the major tool of transactions in Nigeria, due to the fact that developments in technology and the scope of digital services as regards to financial transactions offered by banks and other institutions have only increased vastly over the last 10 - 15 years (Abiodun, 2018).

## 2. Justification of This Research

This research shows the behavior and user acceptance factors of the mobile wallet technology within tertiary institutions in Edo State, Nigeria. For this research, Unified Theory of acceptance and use of technology (UTAUT2) was used, with constructs such as: Social influence, effort expectancy, performance expectancy, facilitating conditions and

Hedonic motivation which are useful in predicting customer's adoption to any technology. The findings in this study should be useful to banks to understand the adoption of mobile wallet by customers and also allows mobile wallet developers build a compiling application, this is in-line with Megadewandanu, Suyoto & Pranowo (2016) and Shin (2009).

## 3. Related Literature

Several researchers have worked on the users' adoption to mobile wallet using different models and theories, (Lwoga & Lwoga, 2017) used the TAM also known as the Technology Acceptance Model that was introduced by Davis F. in 1989 to better explain and predict the intention of users of m-payment services in Morogoro, Tanzania. The research focuses on the effect of security, user-centric, system characteristics and gender.

Hamza & Shah (2014) also used the Technology Acceptance Model (TAM) model to examine the gender difference and factors that would determine students of tertiary institutions in Nigeria adopting the use of mobile payment systems. This institutes includes: North-West University, Kano University Science and Technology (KUST) Wadil and Bayero University Kano (BUK).

Slade, Williams & Dwivdei (2013) aim of study was to unveil the situation with m-payment adoption and provide research direction through the UTAUT2 model for examining the factor affecting the adoption of m-payment in the UK.
In the context of mobile learning, Yang (2013) adopted the extension of the UTAUT model to determine undergraduate students' adoption within China. The data obtained from national university in eastern China was used to test the UTAUT2 model.

## 4. Methodology

The research study focuses on staff and students in selected tertiary institution within Edo state, Nigeria which comprises of Auchi Polytechnic Auchi (AP), University of Benin (UNIBEN), Ambrose Ali University Ekpoma and Edo University Iyamu. Purposive and Snowball sampling techniques was used to select targeted respondents which requires an expert judgement on respondents that uses mobile wallet on their mobile devices and also good network of individuals within the institutes.

Comprising of twenty-six (26) items, the questions was design to suite the constructs in the UTUAT2 model which includes: Performance Expectancy (PE), Social Influence (SI), Effort Expectancy (EE), Facilitating Condition (FC), Price Value (PV), Hedonic Motivation (HM), Habit (HT) and Behavioral Intention (BI). To access the internal consistency of the questionnaire, Cronbach (as cited in Sekaran, 2003) the Cronbach's Alpha method was employed to obtain the reliability of the properties read from the measurement scale and the items that compose the scale.

Using a four (4) Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), the research instrument which is a questionnaire was designed, divided into two parts, section one (1) contains the respondent's demographic information and section two (2) contains a total of twenty-six (26) questions generated from the eight (8) constructs of the UTUAT2 model. Table 1 of the questionnaire contains the questions.

The 500 survey questionnaires were distributed among participants in the selected tertiary institutions in Edo State, only 453 was completed and returned. Of the completed and retrieved questionnaires, 400 meet the requirement of the survey in terms of completeness of fill, uniformity, consistency and accuracy. About 350 was determined as sample size for the study, the data were analyzed using mean rank score analysis, Pearson product moment correlation coefficient and regression analysis to determinant significant factors and test the research hypotheses. The multiple regression analysis using the enter method was employed to identify the dimensions of Dimensions of Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution and its impact on performance expectancy (PE). The data were electronically analyzed with the aid of Statistical Software for the Social Science (SPSS) version 25.0.

### 4.1. Model Specification

The impact of Performance Expectancy (PE) is modeled based on the multiple regression technique containing predicting variables (Hedonic Motivation (HM), Social Influence (SI), Facilitating Condition (FC), Effort Expectancy (EE), Price Value (PV), Habit (HT) and Behavioral Intention (BI)). Thus, prediction equation of the seven dimensions of the UTUAT2 model on impact of Performance Expectancy (PE) in selected Nigerian tertiary institution (UTUAT2) model is as follow:

$$Y = f\left(X_1, X_2, X_3, X_4, X_5, X_6, X_7\right) \ ..... \ (1)$$

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + \alpha_7 X_7 + \varepsilon \ ..... \ (2)$$

$$Y = \alpha_0 + \alpha_1 EE + \alpha_2 SI + \alpha_3 FC + \alpha_4 HM + \alpha_5 PV + \alpha_6 HT + \alpha_7 BI + \varepsilon \ ..... \ (3)$$

Where:

$Y$ = (the dependent variable) Performance Expectancy (PE) and the independent variables are:

$X_1$ = Effort Expectancy (EE),

$X_2$ = Social Influence (SI),

$X_3$ = Facilitating Condition (FC),

$X_4$ = Hedonic Motivation (HM),

$X_5$ = Price Value (PV),

$X_6$ = Habit (HT)

$X_7$ = Behavioral Intention (BI).)

$\varepsilon$ = Error terms assumed to have zero mean and constant variables

Equation (1) is the model of erosion in functional form, equation (2) and (3) represent the model and model specifications.

$\alpha_0$ = intercept or regression constant

$\alpha_i$ = the slope, or regression coefficient of each variables.

## 5. Materials and Methods

### 5.1. Unified Theory of Acceptance and Use of Technology (UTAUT)

The method used in this work was a model recommended by Venkatesh, Morris, Davis & Davis (2003), UTAUT is a technology acceptance model which main aim is to explain user intentions to use an information system and subsequent usage behavior. The approach is made up of four key constructs, which are: the facilitating conditions, the effort expectancy, the social influence and the performance expectancy. The last three (effort expectancy, social influence and performance expectancy) are straight factors of usage behavior and intention, while the first (facilitating conditions) is a direct determinant of user behavior and another model proposed by Venkatesh, Thong & Xu (2012) called UTUAT2 model which is an extension of the UTUAT, the UTUAT2 has an additional three constructs which are: Hedonic motivation, Price Value and Habit, also eliminating the voluntariness moderating variable. This new construct integrated to UTUAT has tailored it to a consumer use content.
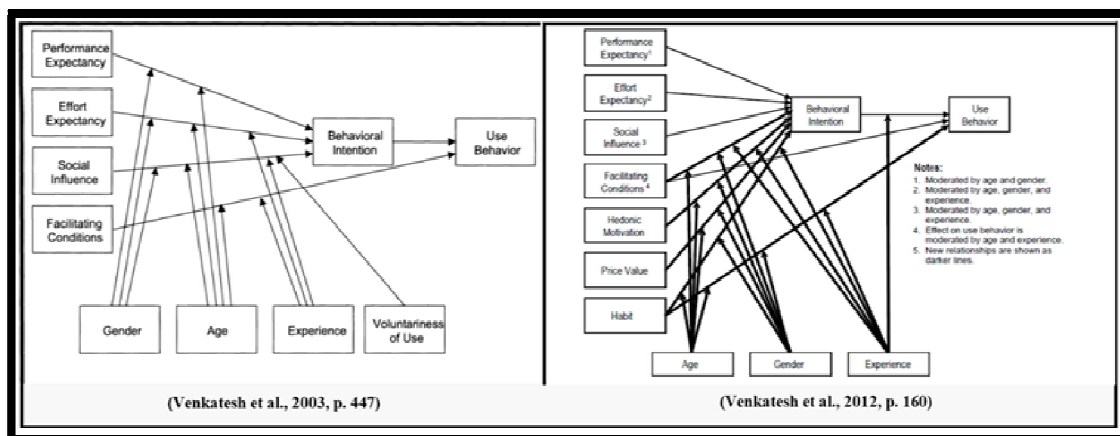


*Figure 1: Showing the Research Model of UTAUT and UTAUT2*

### 5.2. Performance Expectancy

Performance Expectancy can be seen as the progression to which an individual believes that using the system will help to attain advantages in job performance for him or her (Venkatesh et al., 2003). The application of this construct to mobile wallet should show how payment can be done at the individual's comfort zone is more effective than the normal conventional way of queuing in the financial institutions/banks to make payment. Venkatesh et al. (2003) also stated that the performance expectancy is the strongest predictor of consumer's intention and high significant in measurement. This study proposed:

### 5.3. Effort Expectancy

Venkatesh et al. (2003) defines effort expectancy as the degree of ease association with the use of the system. In the context mobile wallet, (Megadewandanu et al., 2016) stated that consumer will show more willingness to use mobile wallet if the system is user friendly, from the point of registration to the graphical interface of the application. This study proposed:

### 5.4. Social Influence

Social influence is the degree an individual perceives the need to use the system based on good recommendation by important people in his/her life (Venkatesh et al., 2003). Friends and love ones can recommend the use of mobile wallet, even good review from the app store can also give an individual the assurance that he or she requires to download the mobile wallet application or use the system. This study proposed:

### 5.5. Facilitating Conditions

Venkatesh et al., (2003) explain the facilitating conditions as the level to which an individual believes that an organizational and technical infrastructure exist to support the use of the system. In a recent study, Nisha, Idrish & Hossain (2015) shows that the facilitating conditions constructs has a significantly high influence as compared to the performance expectancy construct on intention of human behavior towards a system. Therefore, this study proposed:

*5.6. Hedonic Motivation*

       Hedonic motivation is the fun or pleasure individual derived when using the system, Venkatesh et al. (2012) also stated the construct added to the extended UTAUT model plays an important role in determining technology acceptance and usage of the system. This study proposed:

*5.7. Price Value*

       In the literature, price value is the level of difference between consumer use settings and organization use settings (Venkatesh et al., 2012). It was also stated the cost and pricing may affect the use of technology by consumers. This study proposed:

*5.8. Experience and Habit*

       Venkatesh et al., (2012, p. 161) states that "habit is a perceptual construct that reflects the results of prior experience". In the context of mobile wallet, consumer need to have some level of expertise to make use of the application, when the habit is increasing all other constructs will become less important. This study proposed:

*5.9. Hypothesis Development*
- H1: Individual's intention significantly affects the usage of mobile wallet.
- H2: Effort expectancy has a positive effect on individual use of mobile wallet.
- H3: Social influence has a positive effect on individual use of mobile wallet.
- H4: Facilitating condition has a positive effect on individual use of mobile wallet.
- H5: Hedonic motivation has a positive effect on individual use of mobile wallet.
- H6: Price value has a positive effect on individual use of mobile wallet.
- H7: Experience and Habit has a positive effect on individual use of mobile wallet.

## 6. Results of Data Analysis
       The results of data analysis are reported in the tables below.

| Dimensions | Cronbach Alpha | Item Reliability |
|---|---|---|
| Dimensions Of The UTUAT2 Model On Impact Of Performance Expectancy (PE) | **0.873** | **Cronbach Alpha** |
| Effort Expectancy (EE | | 0797 |
| Social Influence (SI) | | 0.889 |
| Facilitating Condition (FC) | | 0.602 |
| Hedonic Motivation (HM) | | 0.864 |
| Price Value (PV) | | 0.765 |
| Habit (HT) | | 0.631 |
| Behavioral Intention (BI) | | 0.863 |

*Table 1: Reliability of Items of Structural of Organisational Citizenship Behaviour*
*Source: Spss Result Extract*

       The reliability of dimensions of the UTUAT2 model on impact of Performance Expectancy (PE) on Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution was assessed using Cronbach's alpha. The reliability coefficients value of all the individual items ranges between 0.602 and 0.889, and the overall computed reliability value for each of the dimensions as shown in Table 4.1. This suggests that all the items measure their underlying dimensions consistently.

       The composite reliability score for each of the seven aggregate dimensions of Performance Expectancy (PE) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution is 0.873. Effort Expectancy (EE), (α=.797), Social Influence (SI), (α=.889), Facilitating Condition (FC), (α=.602), Hedonic Motivation (HM), (α=.864), Price Value (PV), (α=.765), Habit (HT) (α=.631), and Behavioral Intention (BI), (α=0.863), This justifies that all the items for the seven measures of Performance Expectancy (PE) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution are internally consistent.

| Item | Question | N | Mean | Likert | Remark |
|---|---|---|---|---|---|
| PE1 | Using Mobile Wallet Would Improve My Job Performance. | 350 | 4.07 | Agree | 1 |
| PE2 | I Would Find Mobile Wallet Useful In My Job. | 350 | 3.95 | Agree | 2 |
| PE3 | Using Mobile Wallet Would Enhance My Effectiveness On The Job. | 350 | 3.52 | Agree | 3 |

*Table 2: Mean Score Response and Rank Analysis of Performance Expectancy (PE)*
*Source: SPSS Result*

From the mean score response and rank analysis results show that all the respondents agree to all the research items evaluating Performance Expectancy (PE) on Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution. They have experience of using mobile wallet would improve my job performance ranking 1st and finding mobile wallet useful in their job ranked 2nd and using mobile wallet would enhance my effectiveness on the job ranked 3rd. The results confirmed that Performance Expectancy (PE) on mobile wallet adoption among staff and students in Edo State Tertiary Institution are mobile wallet would improve my job performance and mobile wallet useful in their job.

| Item | Question | N | Mean | Likert | Remark |
|---|---|---|---|---|---|
| EE1 | I would find mobile wallet to be flexible to interact with. | 350 | 3.29 | Undecided | 4 |
| EE2 | Learning to operate mobile wallet would be easy for me. | 350 | 3.68 | Agree | 2 |
| EE3 | I would find mobile wallet easy to use | 350 | 3.77 | Agree | 1 |
| EE4 | It easy to become skillful at operating mobile wallet | 350 | 3.45 | Agree | 3 |

*Table 3: Mean Score Response and Rank Analysis of Effort Expectancy (EE)*
*Source: SPSS Result*

The research items evaluating Effort Expectancy (EE) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution, mean response ranking analysis indicates that they would find mobile wallet easy to use ranking 1st and learning to operate mobile wallet would be easy for them ranked 2nd and it easy to become skillful at operating mobile wallet ranked 3rd. The results confirmed that Effort Expectancy (EE) on mobile wallet adoption among staff and students in Edo State Tertiary Institution they would find mobile wallet easy to use ranking 1st and learning to operate mobile wallet would be easy for them

| Item | Question | N | Mean | Likert | Remark |
|---|---|---|---|---|---|
| SI1 | I use mobile wallet because most of my colleagues/course-mate make use of it. | 350 | 3.65 | Agree | 1 |
| SI2 | People who influence my behavior think that I should use mobile wallet. | 350 | 3.65 | Agree | 1 |
| SI3 | People who are important to me think that I should use mobile wallet. | 350 | 3.20 | Undecided | 2 |

*Table 4: Mean Score Response and Rank Analysis of Social Influence (SI)*
*Source: SPSS Result*

The research items evaluating Social Influence (SI) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution indicates agreement to the fact that they use mobile wallet because most of my colleagues/course-mate make use of it and people who influence my behavior think that they should use mobile wallet ranking 1st respectively and people who are important to me think that I should use mobile wallet ranked 2nd. The results confirmed that Social Influence (SI) on mobile wallet adoption among staff and students in Edo State Tertiary Institution they use mobile wallet because most of my colleagues/course-mate make use of it and people who influence my behavior think that they should use mobile wallet.

| Item | Question | N | Mean | Likert | Remark |
|---|---|---|---|---|---|
| FC1 | Specialized instruction concerning mobile wallet was available to me. | 350 | 3.22 | Undecided | 4 |
| FC2 | I have the knowledge necessary to use the mobile wallet. | 350 | 3.86 | Agree | 2 |
| FC3 | I have control over using mobile wallet. | 350 | 4.04 | Agree | 1 |
| FC4 | I can get help from others when I have difficulties using mobile wallet | 350 | 3.80 | Agree | 3 |

*Table 5: Mean Score Response and Rank Analysis of Facilitating Condition (FC)*
*Source: SPSS Result*

All the respondents agree to all the research items evaluating Facilitating Condition (FC) on Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.  The mean response ranking analysis indicates that most of the participants said that they have control over using mobile wallet ranking 1st, having the knowledge necessary to use the mobile wallet ranked 2nd, can get help from others when I have difficulties using mobile wallet ranked 3rd and Specialized instruction concerning mobile wallet was available to me ranked 4th. The results confirmed that Facilitating Condition (FC) on mobile wallet adoption among staff and students in Edo State Tertiary Institution respondents have control over using mobile wallet, having the knowledge necessary to use the mobile wallet and can get help from others when I have difficulties using mobile wallet.

| Item | Question | N | Mean | Likert | Remark |
|------|----------|---|------|--------|--------|
| HM1 | Using mobile wallet is fun | 349 | 3.66 | Agree | 2 |
| HM2 | Using mobile wallet is enjoyable | 350 | 3.62 | Agree | 3 |
| HM3 | Using mobile wallet is very entertaining. | 350 | 3.97 | Agree | 1 |

*Table 6: Mean Score Response and Rank Analysis of Hedonic Motivation (HM)*
*Source: SPSS Result*

The mean ranking analysis shows that there is general agreement that using mobile wallet is very entertaining ranking 1st and using mobile wallet is fun ranked 2nd and using mobile wallet is enjoyable ranked 3rd. The results confirmed that Hedonic Motivation (HM) on mobile wallet adoption among staff and students in Edo State Tertiary Institution are using mobile wallet is very entertaining and using mobile wallet is fun. From the mean score response and rank analysis results show that all the respondents agree to all the research items of Hedonic Motivation (HM) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution.

| Item | Question | N | Mean | Likert | Remark |
|------|----------|---|------|--------|--------|
| PV1 | Mobile wallet changes are at a reasonable price. | 350 | 3.72 | Agree | 2 |
| PV2 | Mobile wallet is a good value for your money. | 350 | 3.76 | Agree | 1 |
| PV3 | At current price, mobile wallet provides a good value. | 350 | 3.64 | Agree | 3 |

*Table 7: Mean Score Response and Rank Analysis of Price Value (PV)*
*Source: SPSS Result*

From the mean score response and rank analysis results show that all the respondents agree to all the research items evaluating Price Value (PV) on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution. The mean response ranking analysis indicates that agreement to the fact that mobile wallet is a good value for your money ranking 1st and Mobile wallet changes is at a reasonable price ranked 2nd and at current price, mobile wallet provides a good value ranked 3rd. The results confirmed that Price Value (PV) on mobile wallet adoption among staff and students in Edo State Tertiary Institution are mobile wallet changes is at a reasonable price and at current price, mobile wallet provides a good value.

| Item | Question | N | Mean | Likert | Remark |
|------|----------|---|------|--------|--------|
| HT1 | The use of mobile wallet has become a habit for me. | 350 | 3.73 | Agree | 3 |
| HT2 | I am addicted to using mobile wallet. | 350 | 3.93 | Agree | 1 |
| HT3 | I must use mobile wallet. | 350 | 3.74 | Agree | 2 |

*Table 8: Mean Score Response and Rank Analysis of Habit (HT)*
*Source: SPSS Result*

From the mean score response and rank analysis results show that all the respondents agree to all the research items measuring Habit (HT)on Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution. The mean response ranking analysis shows that addiction to using mobile wallet ranking 1st and they must use mobile wallet ranked 2nd and use of mobile wallet has become a habit for me ranked 3rd. The results confirmed that Habit (HT) on mobile wallet adoption among staff and students in Edo State Tertiary Institution are addiction to using mobile wallet and they must use mobile wallet.

| Item | Question | N | Mean | Likert | Remark |
|------|----------|---|------|--------|--------|
| BI1 | I intend to continue using mobile wallet in the future. | 350 | 3.79 | Agree | 1 |
| BI2 | I will always try to use mobile wallet in my daily life | 350 | 3.20 | Agree | 3 |
| BI3 | I plan to continue to use mobile wallet frequently. | 350 | 3.22 | Agree | 2 |

*Table 9: Mean Score Response and Rank Analysis of Behavioral Intention (BI)*
*Source: SPSS Result*

From the mean score response and rank analysis results show that all the respondents agree to all the research items evaluating Behavioral Intention (BI) of Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution. The analysis reveals that there is general opinion of the respondents agree to the fact that intention to continue using mobile wallet in the future ranking 1st and plan to continue to use mobile wallet frequently ranked 2nd and they always try to use mobile wallet in my daily life ranked 3rd. The results confirmed that Behavioral Intention (BI) on mobile wallet adoption among staff and students in Edo State Tertiary Institution to continue using mobile wallet in the future and plan to continue to use mobile wallet frequently.

Test of significance of research items of the constructs of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution results are reported in the table 10.

| Item | Question | Mean | t | df | Sig. | Remark |
|------|----------|------|---|-----|------|--------|
| PE1 | Using mobile wallet would improve my job performance. | 4.07 | 60.07 | 349 | 0.00 | Sig. |
| PE2 | I would find mobile wallet useful in my job. | 3.95 | 64.97 | 349 | 0.00 | Sig. |
| PE3 | Using mobile wallet would enhance my effectiveness on the job. | 3.52 | 56.96 | 349 | 0.00 | Sig. |
| EE1 | I would find mobile wallet to be flexible to interact with. | 3.29 | 45.14 | 349 | 0.00 | Sig. |
| EE2 | Learning to operate mobile wallet would be easy for me. | 3.68 | 53.07 | 349 | 0.000 | Sig. |
| EE3 | I would find mobile wallet easy to use | 3.77 | 60.48 | 349 | 0.000 | Sig. |
| EE4 | It easy to become skillful at operating mobile wallet | 3.45 | 48.74 | 349 | 0.000 | Sig. |
| SI1 | I use mobile wallet because most of my colleagues/course-mate make use of it. | 3.65 | 53.14 | 349 | 0.000 | Sig. |
| SI2 | People who influence my behavior think that I should use mobile wallet. | 3.65 | 50.36 | 349 | 0.000 | Sig. |
| SI3 | People who are important to me think that I should use mobile wallet. | 3.20 | 49.05 | 349 | 0.000 | Sig. |
| FC1 | Specialized instruction concerning mobile wallet was available to me. | 3.22 | 47.54 | 349 | 0.000 | Sig. |
| FC2 | I have the knowledge necessary to use the mobile wallet. | 3.86 | 58.12 | 349 | 0.000 | Sig. |
| FC3 | I have control over using mobile wallet. | 4.04 | 66.18 | 349 | 0.000 | Sig. |
| FC4 | I can get help from others when I have difficulties using mobile wallet | 3.80 | 61.22 | 349 | 0.000 | Sig. |
| HM1 | Using mobile wallet is fun | 3.66 | 54.79 | 349 | 0.000 | Sig. |
| HM2 | Using mobile wallet is enjoyable | 3.62 | 50.84 | 349 | 0.000 | Sig. |
| HM3 | Using mobile wallet is very entertaining. | 3.97 | 69.41 | 349 | 0.000 | Sig. |
| PV1 | Mobile wallet changes are at a reasonable price. | 3.72 | 63.31 | 349 | 0.000 | Sig. |
| PV2 | Mobile wallet is a good value for your money. | 3.76 | 62.58 | 349 | 0.000 | Sig. |
| PV3 | At current price, mobile wallet provides a good value. | 3.64 | 59.85 | 349 | 0.000 | Sig. |
| HT1 | The use of mobile wallet has become a habit for me. | 3.73 | 61.82 | 349 | 0.000 | Sig. |
| HT2 | I am addicted to using mobile wallet. | 3.93 | 70.27 | 349 | 0.000 | Sig. |
| HT3 | I must use mobile wallet. | 3.74 | 65.69 | 349 | 0.000 | Sig. |
| BI1 | I intend to continue using mobile wallet in the future. | 3.79 | 66.54 | 349 | 0.000 | Sig. |
| BI2 | I will always try to use mobile wallet in my daily life | 3.20 | 62.58 | 349 | 0.000 | Sig. |
| BI3 | I plan to continue to use mobile wallet frequently. | 3.22 | 59.85 | 349 | 0.000 | Sig. |

*Table 10: Test of Research Items Significance*
*\*Significant at 5%, If P<0.05 At 5%*
*Source: SPSS Result*

Table 9 suggests all the research items measures of all the construct of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution are statistically significant as the probability values associated with the t-stat (0.000<0.05) at 5%. This infers that all the research items were responded to by the staff and students in the selected institutions of study differently.

### 6.1. Model Results

| Variables | R | P | Level |
|-----------|---|---|-------|
| Sport Tourism (SPT) | -- | -- | -- |
| Effort Expectancy (EE) | 0.367 | 0.135 | Low |
| Social Influence (SI) | 0.899** | 0.000 | Excellent |
| Facilitating Condition (FC) | 0.536** | 0.048 | Medium |
| Hedonic Motivation (HM) | -0.483 | 0.124 | Small |
| Price Value (PV) | 0.236** | 0.048 | Poor |
| Habit (HT) | 0.236** | 0.048 | Poor |
| Behavioral Intention (BI) | 0.621** | 0.024 | High |

*Table 11: Correlations of Organisational Citizenship*
*\*\* Correlation Is Significant At 0.05 Level (2 Tailed)*

The data collected was analyzed using Pearson correlation to determine the relationship. The results as shown in Table 11 depicted that the seven dimensions of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution was found to be; Effort Expectancy (EE) (r = 0.367; p =0.135), Social Influence (SI) (r = 0.899; p = 0.000), Facilitating Condition (FC) (JBS) (r = 0.536; p = 0.048), Hedonic Motivation (HM) (r = -0.483; p = 0.124),, Price Value (PV) (r = 0.236; p = 0.048), and Behavioral Intention (BI) (r = 0.621; p = 0.024). This suggests that variables have a positive and significant relationship with Performance Expectancy (PE). However, Hedonic Motivation (HM) affects Performance Expectancy (PE) negatively. In terms of the strength of the relationship, the results have shown that Social Influence (SI) and Behavioral Intention (BI) have a excellent and high positive relationship with Performance Expectancy (PE) on Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

Therefore, the alternate hypothesis was accepted which states that there is a significant relationship between the predictors of Performance Expectancy (PE) on Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution (Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI). This suggests that when there is any change to any of these factors will lead to positive effect on the Performance Expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| 1 | .811a | 0.773 | 0.681 | 0.22084 |

Table 12:  Model Summary
a.    Predictors: (Constant), Eme, Wco, Jbs, Ogj, Orc, Cos

From Table 12, it was shown that the R-square for the model was 0.773 which implies that the dimensions of Performance Expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution (Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI), Effort Expectancy (EE)  and Hedonic Motivation (HM) and Performance Expectancy (PE) explained about 68.1% of the variance in Performance Expectancy (PE). Thus, the remaining 31.9% is due to other factors and residuals. Also, the multiple R (R= .811) revealed a significant high relationship between independent variable (Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI), Effort Expectancy (EE) and Hedonic Motivation (HM) and dependent variable (Performance Expectancy (PE).

| | Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|-------|----------------|-----|-------------|------|-------|
| 1 | Regression | 0.058 | 4 | 0.015 | 0.298 | .001a |
| | Residual | 0.098 | 2 | 0.049 | | |
| | Total | 0.156 | 6 | | | |

Table 13:  ANOVAb
a. Predictors: (Constant), EME, WCO, JBS, OGJ, ORC, COS
b. Dependent Variable:   Performance Expectancy (PE)

Table 13 indicates that the result of the analysis shows that F value was significant (F= 0.298, p=.001). This shows that the model was valid. Thus, based on the findings it can be concluded that there was a linear relationship between the predictors (Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI), Effort Expectancy (EE)  and Hedonic Motivation (HM) and Performance Expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

| Model | | Unstandardized Coefficients | Standardized Coefficients | | | |
|-------|---|------|-----------|------|--------|-------|
| | | B | Std. Error | Beta | t | Sig. |
| | (Constant) | -0.077 | 1.025 | | -0.075 | 0.947 |
| | Effort Expectancy (EE) | 0.302 | 0.741 | 0.302 | 0.486 | 0.675 |
| | Social Influence (SI) | 0.392 | 1.003 | 0.467 | 0.391 | 0.012 |
| | Facilitating Condition (FC) | 0.560 | 0.143 | 0.502 | 0.386 | 0.035 |
| | Hedonic Motivation (HM) | -0.406 | 0.785 | -0.474 | -0.518 | 0.656 |
| | Price Value (PV) | 0.231 | 1.213 | 0.487 | 0.191 | 0.002 |
| | Habit (HT) | 0.423 | 1.213 | 0.487 | 0.191 | 0.002 |
| | Behavioral Intention (BI) | 0.174 | 1.164 | 0.327 | 0.15 | 0.003 |

Table 14: Coefficientsa
a.    Dependent Variable: PE
b.    Independent Variable: EE, SI, FC, HM, PV, HT and BI

Based on the regression analysis, the model consists of seven predicting variables, the estimated model of the study of Performance Expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution is expressed as:

PE= -0.077+0.302EE+0.392SI+0.560FC-0.406HM+0.0423HT+0.174BI

In comparing the contribution of each independent variable, Beta values are used. As illustrated in the standardized coefficient Betas column, Facilitating Condition (FC) makes the strongest unique contribution to explaining performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution with ($\beta$= 0.502), followed by Habit (HT) with ($\beta$= 0.487) and Social Influence (SI) with ($\beta$= 0.467). Hedonic Motivation (HM) made the fourth relative negative contribution, ($\beta$= -0.474) in predicting performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution. In addition, Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) and Effort Expectancy (EE) affect positive on Performance Expectancy (PE) except Hedonic Motivation (HM).

The outcome of the result indicates that increase in Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) will increase Performance Expectancy (PE) as they are significantly predictive of performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

*6.2. Summary of Findings*
- There is agreement that factors of performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution are Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) and Effort Expectancy (EE) affect positive on Performance Expectancy (PE) except Hedonic Motivation (HM).
- strength of medium and small positive correlation exists among predictors on performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.
- The most of the respondents are married aged 31-39years and holder of B.Sc. and HND degrees having working experience between 1-5years who had worked in the institutions for 11-15years and mostly belonging to senior and other staff categories.
- Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) will increase significantly predictive performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

## 7. Conclusion

Based on the hypothesis testing, a correlation and regression result were presented. The correlation analysis revealed that there is a significant relationship between dimensions of performance expectancy (PE) of Mobile Wallet adoption among Staff and Students in Edo State Tertiary Institution. The result indicates that increase in Social Influence (SI), Facilitating Condition (FC), Habit (HT), Price Value (PV), Behavioral Intention (BI) will increase Performance Expectancy (PE) as they are significantly predictive of performance expectancy (PE) of Mobile Wallet: Adoption among Staff and Students in Edo State Tertiary Institution.

## 8. Recommendations
- Dimensions of Mobile Wallet adoption and its impact on performance expectancy (PE) should be employed among Staff and Students in Edo State Tertiary Institution in Nigeria.
- Examination of perception of policy, strategies and instruments of Mobile Wallet adoption for effective performance expectancy (PE) should be key factors.
- The study should be replicated in other institution other than Edo

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**Appendix**

| Factor | Item | Question |
|---|---|---|
| Performance Expectancy | PE1 | Using mobile wallet would improve my job performance. |
| | PE2 | I would find mobile wallet useful in my job. |
| | PE3 | Using mobile wallet would enhance my effectiveness on the job. |
| Effort Expectancy | EE1 | I would find mobile wallet to be flexible to interact with. |
| | EE2 | Learning to operate mobile wallet would be easy for me. |
| | EE3 | I would find mobile wallet easy to use |
| | EE4 | It easy to become skillful at operating mobile wallet |
| Social Influence | SI1 | I use mobile wallet because most of my colleagues/course-mate make use of it. |
| | SI2 | People who influence my behavior think that I should use mobile wallet. |
| | SI3 | People who are important to me think that I should use mobile wallet. |
| Facilitating Condition | FC1 | Specialized instruction concerning mobile wallet was available to me. |
| | FC2 | I have the knowledge necessary to use the mobile wallet. |
| | FC3 | I have control over using mobile wallet. |
| | FC4 | I can get help from others when I have difficulties using mobile wallet |
| Hedonic Motivation | HM1 | Using mobile wallet is fun |
| | HM2 | Using mobile wallet is enjoyable |
| | HM3 | Using mobile wallet is very entertaining. |
| Price Value | PV1 | Mobile wallet changes are at a reasonable price. |
| | PV2 | Mobile wallet is a good value for your money. |
| | PV3 | At current price, mobile wallet provides a good value. |
| Habit | HT1 | The use of mobile wallet has become a habit for me. |
| | HT2 | I am addicted to using mobile wallet. |
| | HT3 | I must use mobile wallet. |
| Behavioral Intention | BI1 | I intend to continue using mobile wallet in the future. |
| | BI2 | I will always try to use mobile wallet in my daily life |
| | BI3 | I plan to continue to use mobile wallet frequently. |

*Table 15: Mobile Wallet Questionnaire.*

| Item | Question | N | Mean | Likert | Remark |
|---|---|---|---|---|---|
| PE1 | Using mobile wallet would improve my job performance. | 350 | 4.07 | Agree | 1 |
| PE2 | I would find mobile wallet useful in my job. | 350 | 3.95 | Agree | 2 |
| PE3 | Using mobile wallet would enhance my effectiveness on the job. | 350 | 3.52 | Agree | 3 |
| EE1 | I would find mobile wallet to be flexible to interact with. | 350 | 3.29 | Undecided | 4 |
| EE2 | Learning to operate mobile wallet would be easy for me. | 350 | 3.68 | Agree | 2 |
| EE3 | I would find mobile wallet easy to use | 350 | 3.77 | Agree | 1 |
| EE4 | It easy to become skillful at operating mobile wallet | 350 | 3.45 | Agree | 3 |
| SI1 | I use mobile wallet because most of my colleagues/course-mate make use of it. | 350 | 3.65 | Agree | 1 |
| SI2 | People who influence my behavior think that I should use mobile wallet. | 350 | 3.65 | Agree | 1 |

| Item | Question | N | Mean | Likert | Remark |
|------|----------|---|------|--------|--------|
| SI3 | People who are important to me think that I should use mobile wallet. | 350 | 3.20 | Undecided | 2 |
| FC1 | Specialized instruction concerning mobile wallet was available to me. | 350 | 3.22 | Undecided | 4 |
| FC2 | I have the knowledge necessary to use the mobile wallet. | 350 | 3.86 | Agree | 2 |
| FC3 | I have control over using mobile wallet. | 350 | 4.04 | Agree | 1 |
| FC4 | I can get help from others when I have difficulties using mobile wallet | 350 | 3.80 | Agree | 3 |
| HM1 | Using mobile wallet is fun | 349 | 3.66 | Agree | 2 |
| HM2 | Using mobile wallet is enjoyable | 350 | 3.62 | Agree | 3 |
| HM3 | Using mobile wallet is very entertaining. | 350 | 3.97 | Agree | 1 |
| PV1 | Mobile wallet changes are at a reasonable price. | 350 | 3.72 | Agree | 2 |
| PV2 | Mobile wallet is a good value for your money. | 350 | 3.76 | Agree | 1 |
| PV3 | At current price, mobile wallet provides a good value. | 350 | 3.64 | Agree | 3 |
| HT1 | The use of mobile wallet has become a habit for me. | 350 | 3.73 | Agree | 3 |
| HT2 | I am addicted to using mobile wallet. | 350 | 3.93 | Agree | 1 |
| HT3 | I must use mobile wallet. | 350 | 3.74 | Agree | 2 |
| BI1 | I intend to continue using mobile wallet in the future. | 350 | 3.79 | Agree | 1 |
| BI2 | I will always try to use mobile wallet in my daily life | 350 | 3.20 | Agree | 3 |
| BI3 | I plan to continue to use mobile wallet frequently. | 350 | 3.22 | Agree | 2 |

*Table 16*