



## **Assessing Factors Influencing Employees' Intentions to Enroll on A Byod Program in Ghana –Mediating Hedonic Motivation**

*Razak Kojo Opoku<sup>1</sup>, Isaac Boakye<sup>2</sup>*

<sup>1</sup>(UP Institute, Ghana)

<sup>2</sup>(UP Institute, Ghana)

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### **ABSTRACT**

This study investigates the factors that influence employees' intentions to enroll on a Bring Your Own Device (BYOD) program in Ghana. Specifically, this study examines the role of hedonic motivation as a mediator in the relationship between price value, effort expectancy, performance expectancy and behavioral intentions and habit. A total of 510 employees from various sectors in Ghana were surveyed using the Structural Equation Modelling (SEM) technique. The results of the study shows that hedonic motivation plays a significant mediating role between price value, effort expectancy, performance expectancy, behavioral intentions and habit and employees' intentions to enroll in BYOD program. The findings of this study imply that in order to effectively promote BYOD programs, organizations should consider employees' hedonic motivation and the various influential factors.

Keywords: BYOD, Hedonic motivation, Price value, Effort expectancy, Performance expectancy.

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### **1. Introduction**

Bring Your Own Device (BYOD) programs are becoming increasingly popular in the workplace, enabling employees to use their own devices for work purposes (Chen, Li, Chen & Yin, 2021). The potential benefits of such programs are well documented, including cost savings, increased productivity, and improved employee morale (Seedoyal, Doargajudhur & Hosanoo, 2022). Concerns for BYOD became prominent when it became clear that the issue of IT consumerization and multiplicity of technology devices at the workplace could no more be hidden (Leclercq- Vandelannoitte, 2015). Thus, it became prudent that firms considered designing a program where employees could use their personal devices at work to carry out organizational duties. Despite this popular opinion, employees were also concerned about the fact that the use of personal devices for organizational concerns exposes them to some forms of risk, for instance, there are risks of malware from corporate networks (references two or three references). What became increasingly worrying were issues pertaining to who would be responsible for wear and tear that arises as a result of the overuse of personal devices at the workplace (Doargajudhur & Dell, 2019). Again, issues of work life balance cropped in owing to the fact that these personal devices are sent home and created an assume office atmosphere even when employees were at home (Baillette & Barlette, 2018). This has become a major concern for employees who would want to create an atmosphere of relaxation where they were not in the office (Bello, Murray & Armarego, 2017), as a result, BYOD was not easily accepted by all.

In this paper, we discussed the various factors that can influence an employee's intentions to enroll in a BYOD program. In recent times, there has been enough support for employees to use their personal devices that serve the business needs of their organizations. However, this is not an easy go ride for organizations. Thus, there are some employees who have embraced such programs while others also see it to be unprofessional or too difficult to sign on to. Some studies have observed that the willingness for employees to accept BYOD programs are purely due to technical reasons (Oladele & Oyewole, 2020), while others have attributed it to financial reasons (Lee Jr, Warkentin, Crossler & Otondo, 2020). However, a metanalysis by Walterbusch, Fietz and Teuteberg (2017) revealed that there could individual factors responsible for this. Individual factors refer to the personal characteristics and attitudes of the employee, as well as their beliefs and preferences regarding the benefits of using a BYOD program. On this note, the study fills the issue gap by determining the mediating role of Hedonic motivation in determining the factors influencing employee adoption of BOYD programs in selected Ghanaian organizations.

According to a study by Aldini, Seigneur, Ballester Lafuente, Titi and Guislain, (2017), the three most important individual factors that influence employees' intention to enroll in a BYOD program are job satisfaction, perceived usefulness, and perceived ease of use. The study found that employees who are highly satisfied with their job are more likely to enroll in a BYOD program, as they are more likely to perceive the program as useful and easy to use.

Similarly, another study by Weeger and Gewald (2014) found that an employee's attitude towards technology is another important factor that influences their intention to enroll in a BYOD program. Specifically, the study found that employees who are more positive towards technology are more likely to enroll in a BYOD program. On the other hand, a study by Zhang et al. (2018), revealed that the most important organizational factor influencing

employees' intention to enroll in a BYOD program is the organization's support for the program. The study found that employees are more likely to enroll in a BYOD program if the organization provides explicit support for the program, such as providing technical support and training for the employees.

A discussion paper by Gupta, Varma and Bhardwaj (2019) argued that the adoption of BOYD by employees could be scrutinized from the perspective of hedonic motivations which may or may not play influencing roles for instance, employees who are addicted to the use certain specific devices are more likely to want to use them at their place of work.

The same can be said about employees who see it more valuable using their personal devices if it guarantees them better results in terms of organizational outputs. Apart from these clear factors, some organizational factors are also key, for instance if an organization does not have the required resources to get things done, but this could be provided by an employees, more often than not, the employee may find it prudent to use their own device and this in some occasions make them feel important to the organization. The remaining chapters of the paper have been arranged thus, the literature review which will also project the theoretical and empirical review of the study, the research methodology, the analysis and findings and finally conclusion and recommendations.

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## 2. Literature Review

Bring Your Own Device (BYOD) is a growing trend in modern workplaces that allows employees to use their personal devices to access corporate data and applications (Yohan, 2019). BYOD programs can offer a number of benefits, such as increased employee satisfaction, improved productivity, and cost savings for the organization (Blay, 2022). However, for BYOD programs to be successful, it is important to understand what factors influence employees' intentions to enroll. This literature review investigates the research on this topic and provides an overview of the key factors influencing employees' intentions to enroll in a BYOD program. Several studies have found that convenience is a major factor influencing employees' intentions to enroll in a BYOD program (Weeger, Wang & Gewald, 2016; Antwi-Boampong, Boison, Doumbia, Boakye, Osei-Fosua & Owiredu Sarbeng, 2022). For example, a study by Bisht et al. (2019) found that convenience was the primary factor influencing employees' intentions to enroll in a BYOD program. Similarly, a study by El Gbouri and Mensch (2020) found that convenience was the most significant factor in terms of influencing employees' intentions to enroll in a BYOD program. Cost savings are another major factor influencing employees' intentions to enroll in a BYOD program. A study by Mayayise (2021) found that cost savings was the second most influential factor in terms of influencing employees' intentions to enroll in a BYOD program. Similarly, a study by Smith et al. (2019) found that cost savings was the third most significant factor influencing employees' intentions to enroll in a BYOD program. Improved productivity is also a major factor influencing employees' intentions to enroll in a BYOD program. A study by Weeger, Wang and Gewald (2016) found that improved productivity was the fourth most influential factor influencing employees' intentions to enroll in a BYOD program. Similarly, a study by Chen and Wang (2020) found that improved productivity was the fifth most significant factor influencing employees' intentions to enroll in a BYOD program. Perceived Security, Privacy, Flexibility, and Control Other factors influencing employees' intentions to enroll in a BYOD program include perceived security, privacy, flexibility, and control. A study by Yohan (2019) found that perceived security was the sixth most influential factor influencing employees' intentions to enroll in a BYOD program.

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## 3. Theoretical Framework

### BYOD Adoption and UTAU

UTAUT2 is an extended version of UTAUT which was developed in response to the various theoretical and empirical criticisms of the original UTAUT. UTAUT2 introduces four new variables: performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitation conditions (FC). PE is defined as the perceived benefits of using the technology, EE is defined as the perceived ease of use, SI is defined as the influence of others on the user's decision to use the technology, and FC is defined as the environmental and organizational factors that facilitate the use of the technology. Additionally, UTAUT2 introduces a new concept of habit, which is defined as the user's tendency to use the technology on a regular basis. UTAUT2 also proposes that a person's attitude towards using the technology is a function of their perceived behavioral control, which is a function of the four variables mentioned above. (Yohan, 2019).

The UTAUT2 model is a revised version of the original UTAUT model, which was first proposed by Venkatesh, Morris, Davis, and Davis in 2003. The UTAUT2 model consists of eight independent variables: performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, habit, and voluntariness (El Gbouri & Mensch, 2020; Yohan, 2019). The performance expectancy and effort expectancy variables measure the individual's perception of the perceived usefulness and ease of use of a technology, respectively. The social influence variable looks at the role of others in influencing an individual's decision to adopt a technology, while the facilitating conditions variable measures the resources and environmental factors that enable the adoption and use of a technology. The hedonic motivation variable considers the enjoyment and fun associated with using a technology, while the price value variable measures the perceived monetary costs of using a technology. The habit variable looks at the user's established patterns and routines, and finally, the voluntariness variable measures the user's autonomy in adopting and using a technology.

The UTAUT2 model has been used in several studies to analyze the factors influencing BYOD adoption (Tu, Adkins & Zhao, 2019; Lee Jr, Warkentin, Crossler & Otondo, 2017). For example, a study by Yang and Tang (2018) examined the role of the UTAUT2 model in explaining BYOD adoption in organizations in Taiwan. The study found that the performance expectancy, effort expectancy, price value, and facilitating conditions variables had a

positive influence on BYOD adoption, while the social influence and hedonic motivation variables had a negative influence. The study concluded that organizations should focus on improving the perceived usability and convenience of BYOD policies in order to encourage adoption.

Similarly, a study by Shih and Chiu (2020) examined the role of the UTAUT2 model in predicting the acceptance and use of BYOD policies in organizations in Taiwan. The study found that the performance expectancy, effort expectancy, price value, and facilitating conditions variables had a positive influence on BYOD acceptance and use, while the social influence and hedonic motivation variables had a negative influence. The study concluded that organizations should focus on improving the perceived usability and convenience of BYOD policies in order to encourage adoption and use.

Overall, the UTAUT2 model provides an effective framework for understanding the factors that influence the adoption and use of BYOD policies. Studies have found that the performance expectancy, effort expectancy, price value, and facilitating conditions variables have a positive influence on BYOD adoption and use, while the social influence and hedonic motivation variables have a negative influence. Organizations should focus on improving the perceived usability and convenience of BYOD policies in order to increase adoption and use. In this study, we extend the previous work of Weeger et al. (2019) by examining how hedonic motivation influences the effects of various factors on BYOD adoption intention among Ghanaian firms.

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## 4. Formulation of Hypothesis

### Performance Expectancy and Adoption of BYOD

Performance Expectancy refers to the degree to which an individual believes that using a technology will help to enhance their job performance. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) posits that Performance Expectancy is one of the key determinants of technology adoption. According to Venkatesh et al. (2016), Performance Expectancy has a significant positive effect on the adoption of BYOD. This is because when individuals perceive that BYOD will enhance their job performance, they are more likely to adopt it. It is therefore being hypothesized that:

*There is a significant relationship between Performance Expectancy and Adoption of BYOD*

### Effort Expectancy and Adoption of BYOD

Effort Expectancy refers to the degree to which an individual believes that using a technology will be easy to use. According to the UTAUT2, Effort Expectancy is a key determinant of technology adoption. Research has shown that Effort Expectancy has a significant positive effect on the adoption of BYOD (Venkatesh et al., 2016). This is because when individuals perceive that using BYOD will be easy, they are more likely to adopt it. It is therefore being hypothesized that:

*There is a significant relationship between Effort Expectancy and Adoption of BYOD*

### Facilitating conditions and Adoption of BYOD

Facilitating Conditions refer to the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of a technology. The UTAUT2 posits that Facilitating Conditions are a key determinant of technology adoption. Venkatesh et al. (2016) found that Facilitating Conditions have a significant positive effect on the adoption of BYOD. This is because when individuals perceive that there is adequate support for the use of BYOD within their organization, they are more likely to adopt it. It is therefore being hypothesized that:

*There is a significant relationship between Facilitating conditions and Adoption of BYOD*

### Hedonic motivation and Adoption of BYOD

Hedonic Motivation refers to the degree to which an individual perceives using a technology as enjoyable and fun. According to the UTAUT2, Hedonic Motivation is a key determinant of technology adoption. Research has shown that Hedonic Motivation has a significant positive effect on the adoption of BYOD (Venkatesh et al., 2016). This is because when individuals perceive that using BYOD is enjoyable, they are more likely to adopt it. It is therefore being hypothesized that:

*There is a significant relationship between Hedonic motivation and Adoption of BYOD*

### Price value and Adoption of BYOD

Price Value refers to the extent to which an individual justifies the cost of a technology. The UTAUT2 postulates that Price Value is a crucial factor in determining technology adoption. Price Value has a considerable positive effect on the adoption of BYOD, according to Venkatesh et al. This is because individuals are more likely to employ BYOD when they believe its costs are justified. It is therefore being hypothesized that:

*There is a significant relationship between Price value and Adoption of BYOD*

### Social Influence and Adoption of BYOD

Social Influence refers to the extent to which a person perceives that influential others believe they should utilise a technology. Social Influence is a key determinant of technology adoption, according to the UTAUT2 model. Social Influence has a significant positive influence on the adoption of BYOD, according to research (Venkatesh et al., 2016). This is because individuals are more likely to adopt BYOD when they perceive that essential others, such as supervisors or coworkers, believe they should. It is therefore being hypothesized that:

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*There is a significant relationship between Social Influence and Adoption of BYOD*

### **Habit and Adoption of BYOD**

Habit refers to the extent to which a person has established automatic and routine patterns of technology usage. The UTAUT2 postulates that habit is a crucial factor in determining technology adoption. Venkatesh et al. (2016) discovered that Habit has a significant positive impact on BYOD adoption. This is because individuals are more likely to continue using BYOD when they have established BYOD usage habits. It is therefore being hypothesized that:

*There is a significant relationship between Habit and Adoption of BYOD*

### **Behavioral Intentions and Adoption of BYOD**

The degree to which an individual intends to use a technology in the future is referred to as behavioural intentions. Employees with a strong intent to use their personal devices for work-related duties are more likely to adopt BYOD. Venkatesh et al. (2012) discovered that behavioural intentions significantly influence technology adoption. It is therefore being hypothesized that:

*There is a significant relationship between Behavioral Intentions and Adoption of BYOD*

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## **5. Empirical Review**

The decision to adopt BYOD has a favourable impact on the financial costs of large organisations, and it is advised that financial costs have a direct impact on adoption decisions. It reduces capital expenditures by allowing employees to utilise their own devices for the efficient operation of the business. Similar research by Brodin and Rose (2019) reveals that 96% of IT businesses allowed their employees to use their own devices, with 36% of employees supporting all personal devices and 49% supporting certain selected devices. According to a number of studies, BYOD also has a number of favourable effects on employee attitudes about productivity, mobility, efficiency, and overall job happiness. It also decreases operating expenses (Walumbwa, 2020). According to a poll conducted by Gartner Research, 39% of employees rely on their personal devices at work. Only 10% of employees in this poll supported working on organization-owned devices. This demonstrates that employees are less inclined to utilise corporate devices over personal devices for work, saving the firm a substantial amount of money (Umar, 2018). Tech Pro Research also conducted a poll of 206 IT experts to determine the global impact of BYOD on their organisations. Their studies found that 57% of employees are interested, and that their organisation also supports the use of personal devices for work. Similar research by Capgemini (2020) reveals that 19% of firms acknowledge that BYOD plays a significant role in fostering employee satisfaction, while 17% believe that it helps to increase workplace productivity. Literature on BYOD indicates that employees prefer to use their own devices for official purposes and that they like this strategy (Wilmot, 2019). Organizations have developed formal BYOD policies. Intel began their BYOD journey in 2010 with 19,000 employees, as an example. Despite its many advantages, BYOD policy still has certain gaps that must be addressed. What is more lacking in the field of literature is the role hedonic factors play in the factors influencing the degree to which employees adopt BOYD. This study tends to fill this gap.

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## **6. Methodology**

The purpose of this study was to assess the factors influencing employees' intentions to enroll on a Bring Your Own Device (BYOD) program in Ghana and to determine the extent to which hedonic motivation mediates this relationship. To achieve this purpose, a quantitative research methodology was employed. The relevant data was collected using a survey questionnaire containing closed ended questions. According to Cresswell (2018), the choice of a research approach should be based on the research objectives, in view of this, for a study of this nature sought to establish relationship between key variables, the quantitative approach was deemed fit. The research design was chosen as it provided the most effective means of assessing the factors influencing employees' intentions to enroll on a BYOD program in Ghana and to determine the extent to which hedonic motivation mediates this relationship. The population of this study was employees working at five large public and private organizations in Ghana. The sample size was determined using the Slovin's formula which yielded a sample size of 250. The sample was selected using a convenience sampling approach to ensure that employees from all the five organizations were adequately represented in the sample.

The data was collected using a survey questionnaire which was distributed to the participants. The survey questionnaire consisted of two sections. The first section included questions related to the demographic profile of the participants. The second section included questions related to the factors influencing employees' intentions to enroll on a BYOD program in Ghana and to determine the extent to which hedonic motivation mediates this relationship. The survey questionnaire was administered to the participants through an online survey platform. The survey platform was designed to ensure that the responses collected were accurate and reliable. The survey was administered to the participants through the online survey platform. The data collected was analyzed using a regression technique in STATA, more specifically the structural equation model. This analytical technique was employed to assess the factors influencing employees' intentions to enroll on a BYOD program in Ghana and to determine the extent to which hedonic motivation mediates this relationship. The hierarchical regression technique was used as it is an effective method of analyzing the data in a quantitative

research study. The data was analyzed using the SPSS software version 25.0 for Windows. The results of the hierarchical regression analysis were presented in the form of tables and figures.

## 7. Findings

### Demographic Features of Respondents

Table 1 demonstrates that participants represent a wide variety of industries with the majority representing the education sector (7.8%), Financial Services (7.8%), Real Estate (7.8%), and Research and Development (7.8%). Most of them are male (62.7%) and are in the age group of 35 – 45 (34.7%, followed by 27.8% in the age group of 25 – 34. The great majority of respondents (13.1%) have over 20+ years of mobile phone ownership. A number of respondents have years of privately-owned device at work, such as < 1 (15.7%), 1-3 (12.3%), 4-7 (7.1%), 8-10 (5.7%), and 11-15 (4.3%). However, most of them (18.8%) do not use my privately-owned devices at work.

**Table 1: Descriptive Statistics**

Measure	Group	Frequency	Percent
Gender	Male	190	37.3
	Female	320	62.7
Age	15-24	27	5.3
	25-34	126	24.7
	35-44	176	34.5
	45-54	142	27.8
	55-64	39	7.6
Education Level	Not Applicable	64	12.5
	Less than High School Diploma	48	9.4
	High School Diploma	59	11.6
	Some College, No Degree	63	12.4
	Associate Degree	50	9.8
	Bachelor's Degree	60	11.8
	Master's Degree	62	12.2
	Professional Qualification	51	10.0
Mobile Phone Ownership Duration	Doctoral Degree	53	10.4
	Not Applicable	52	10.2
	I Don't Have One	59	11.6
	<1	56	11.0
	1-3	52	10.2
	3-7	60	11.8
	8-10	46	9.0
	10-15	55	10.8
	15-20	63	12.4
	20+	67	13.1
Use Of Private Mobile Phone	Not Applicable	162	31.8
	I do not use my privately-owned device at work	96	18.8
	<1	77	15.1
	1-3	62	12.2
	3-7	36	7.1
	8-10	29	5.7
	10-15	22	4.3
	15-20	14	2.7
	20+	12	2.4

Economic Sector of Organization	Communication	38	7.5
	Construction	31	6.1
	Education	40	7.8
	Extraction of Raw Materials	27	5.3
	Farming/Fishing	32	6.3
	Financial Services	40	7.8
	Hospitality and Leisure	32	6.3
	Information Technology	36	7.1
	Manufacturing	25	4.9
	Public Sector	35	6.9
	Real Estate	40	7.8
	Research & Development	40	7.8
	Retail	30	5.9
	Utilities-Electricity, Gas, Water	36	7.1
Other	28	5.5	

Source: Survey Data (2023)

#### The measurement Model

The results obtained as shown in table 2 indicate that the following latent variables, PE, EE, FC, HM, HT and BI are adequately measured and meet the acceptance thresholds for carrying out further analysis. According to Hair, et al. (2010) Bartlett's test of sphericity score of the constructs must be less than 0.05. The required threshold for KMO score is 0.5 serving as an indicator for the suitability of the sample for factor analysis (Hair, et al., 2010). Accordingly, results from this study shows that Bartlett's test of sphericity score for all constructs such as PV (0.000), EE (0.000), FC (0.000), HT (0.000) and bi (0.000) are smaller than 0.05 making them suitable to be included in the structural model. However, Bartlett's test of sphericity score for SI and PV could not meet the stated threshold. In addition, the measurement model recorded a weighted average score of KMO of 0.694 with the component matrix has all factor loading above the threshold except for SI and PV. The analysis confirmed twenty-four factors with a cumulative variance explained value of 77.79%, suggesting that a larger proportion of the variance is explained by the components

**Table 2: The Measurement Model**

Construct	Number of Items	KMO	Total Variance Explained	Average Variance Extracted	Composite Reliability	Cronbach's Alpha	Factor Loadings	Bartlett's Test of Sphericity
PE	4	0.839	78.708	0.747	0.838	0.909	0.747	0.000
EE	4	0.858	86.099	0.771	0.855	0.946	0.771	0.000
<b>SI</b>	<b>2</b>	<b>0.500</b>	<b>51.213</b>	<b>0.416</b>	<b>0.386</b>	<b>-0.050</b>	<b>0.416</b>	<b>0.585</b>
FC	3	0.765	88.233	0.796	0.839	0.933	0.634	0.000
HM	2	0.500	92.872	0.749	0.719	0.923	0.561	0.000
<b>PV</b>	<b>2</b>	<b>0.500</b>	<b>52.981</b>	<b>0.593</b>	<b>0.581</b>	<b>0.112</b>	<b>0.593</b>	<b>0.179</b>
HT	4	0.815	81.259	0.769	0.853	0.923	0.769	0.000
BI	3	0.774	90.966	0.668	0.708	0.950	0.668	0.000
<i>Weighted Averages</i>		0.694	77.7915	0.689	0.722	0.706		

Source: Survey Data (2023)

In ensuring convergent and discriminant validity, internal consistency as well as convergence validity of study variables, Average Variance Extracted (AVE), Cronbach's alpha and Composite Reliability statistics were assessed. Table 2: the measurement model shows that a weighted average of Average Variance Extracted (AVE) score of 0.689 was accounted for which is larger than 0.5 threshold (Fornell, 2016) this value demonstrates the presence of convergence validity. Again, the weighted average for Composite Reliability (CR) score of 0.722 indicated the internal consistency of the 24 items on the study questionnaire. This is in line with to Fornell (2016) which argue that a CR score of greater than 0.70 demonstrates the existence of convergence

validity. Further, the measurement model shows factor loading values of most construct are larger than 0.50 with SI being as exception with a factor loading of 0.416.

**Overall Goodness of fit test**

Results from the structural equation modelling path analysis reveals that all goodness of fit statistics satisfy their respective criterion. The statistic for Root Mean Square Error of Approximation (RMSEA) yielded a probability value of 0.000 which is within the acceptable range of fitness. The Comparative Fit Index (CFI) of 0.859 and Tucker–Lewis Index (TLI) of 0.834 both meets the acceptable level of fitness. The goodness of fir test shows there is no existence of violations with regards to rules governing thresholds or criteria of the various fit statistics, hence the data adequately fit the model (See table 3)

**Table 3: Goodness of fit test**

Fit statistic	Value	Threshold
Root mean squared error of approximation	0.132	
Probability RMSEA	0.000	<0.05 (Hair,et al., 2010)
Comparative fit index	0.859	>0.95 (Kline, 2011)
Tucker–Lewis index	0.834	>0.8 (McDonald et al., 2002)

Source: Survey Data (2023)

**The structural Model**

Results from figure 1 represents the final Structural Equation Model showing the outer loadings, the standardized path coefficients. Table 4: equation level goodness of fit test also shows the R<sup>2</sup> values for HM and BI. This measure is pivotal in assessing quality of the model. Thus, according to the structural model, about 60% of the variations in HM is being accounted for by PE, EE, FC and HT while about 53% of the variability of BI explained by HM as a mediator construct. These values depict a very large effects in the structural model as per Cohen’s (1988) interpretation.

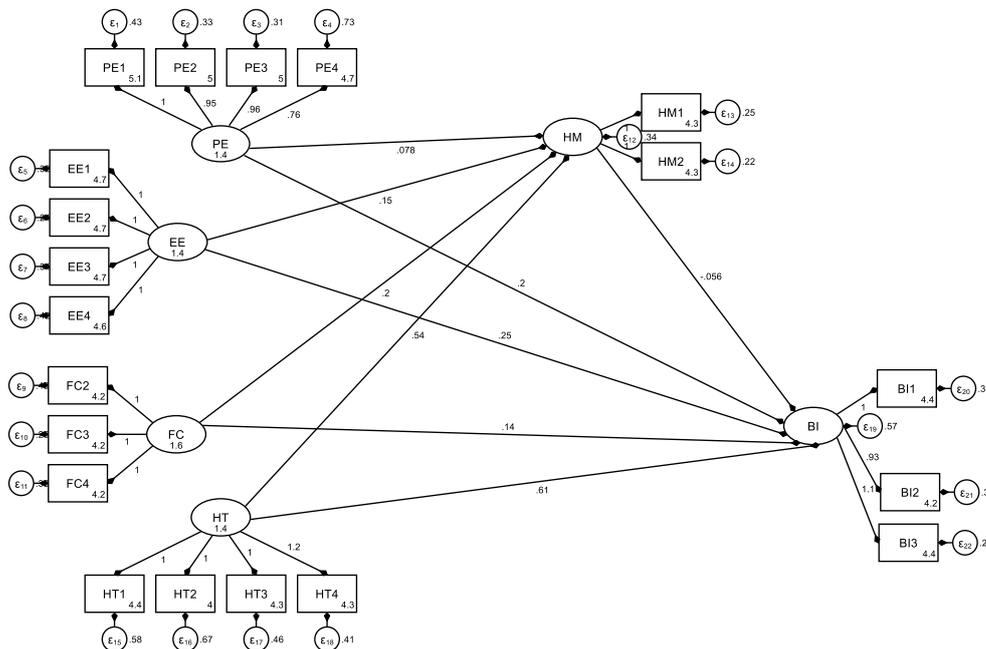


Figure 1: The Structural Model

Source: Survey Data (2023)

**Table 4: Equation Level Goodness of Fit**

Construct	Fitted	Predicted	Residual	R-squared
HM	0.870	0.526	0.344	0.604
BI	1.215	0.646	0.569	0.532
Overall				0.99

Source: Survey Data (2023)

### Hypotheses Testing

According to hypothesis test results for the structural equation model, there are enough to conclude that the hypothesized constructs, namely EE ( $\beta = 0.152, p < 0.001$ ), FC ( $\beta = 0.199, p < 0.000$ ) and HT ( $\beta = 0.545, p < 0.000$ ) have a significant positive influence on the Hedonic Motivation (HM). However, the results found no enough evidence against the claim of significance influence of PE on HM ( $\beta = 0.07, p < 0.071$ ), and also the influence of HM on BI ( $\beta = -0.056, p < 0.470$ ) proved negative and insignificant. The results shows PE, EE, FC and HT have a significant positive influence on BI with a unit change in Habit accounting for 0.613 change in behavioral intentions of employees to enroll on BYOD programs in Ghana.

**Table 5: Hypotheses Test Results**

Hypothesis		Coef. ( $\beta$ )	Std. Error.	z	P> z	[95% conf. interval]	Decision
PE	HM	0.078331	0.04335	1.81	0.071	-.0066333 .1632958	Fail to Reject H <sub>0</sub>
EE	HM	0.152578	0.046223	3.3	0.001	.061983 .2431726	Reject H <sub>0</sub>
FC	HM	0.199009	0.037054	5.37	0.000	.1263842 .2716346	Reject H <sub>0</sub>
HT	HM	0.544688	0.047491	11.47	0.000	.4516075 .6377683	Reject H <sub>0</sub>
HM	BI	-0.05647	0.078227	-0.72	0.470	-.2097929 .0968497	Fail to Reject H <sub>0</sub>
PE	BI	0.203005	0.052579	3.86	0.000	.0999529 .3060574	Reject H <sub>0</sub>
EE	BI	0.25096	0.056875	4.41	0.000	.1394866 .3624333	Reject H <sub>0</sub>
FC	BI	0.139427	0.046838	2.98	0.003	.0476267 .2312273	Reject H <sub>0</sub>
HT	BI	0.613724	0.07552	8.13	0.000	.4657077 .7617399	Reject H <sub>0</sub>

Source: Survey Data (2023)

### Mediation Analysis

Mediation analysis was run to ascertain the mediating role of Hedonic Motivation (HM) on the path linking PE, EE, FC and HT to the Behavioral Intentions (BI). This was achieved by analyzing the significance of indirect effects of PE, EE, FC and HT on BI passing through HM. According to Barron and Kenny ( ), If the indirect effect is significant, there is mediation; otherwise, there is not. It can be observed from table 6 that, there are existence of insignificant indirect effect of the variables (PE, EE, FC and HT) on BI when passing through the mediating variable (HM). However, the direct effect of the variables (PE, EE, FC and HT) on BI without recourse to the mediating variable yielded statistically significant values. Meanwhile, the total effects show a significant effect with values approximate to that of direct effect. Hence, there is a clear manifestation of no mediation of HM in explaining the influence of PE, EE, FC and HT on BI. It stands to mean that, the factors such as performance expectancy, effort expectancy, facilitating conditions and habits influences behavioral intention of employees to enroll on BYOD program directly without any mediation role played by the hedonic motivation.

**Table 6: Direct, Indirect and Total Effects**

		Direct		Indirect		Total	
		Coef. ( $\beta$ )	P> z	Coef. ( $\beta$ )	P> z	Coef. ( $\beta$ )	P> z
PE	BI	0.203	0.000	-0.004	0.502	0.199	0.000
EE	BI	0.251	0.000	-0.009	0.478	0.242	0.000
FC	BI	0.139	0.003	-0.011	0.472	0.128	0.004
HT	BI	0.614	0.000	-0.031	0.474	0.583	0.000
HM	BI	-0.056	0.470	0 (no path)		-0.056	0.470

**Table 7: Hypothesis Testing of Mediation based on Indirect Effect**

Hypothesis	Coef. ( $\beta$ )	Std. Error.	z	P> z	Decision
HM mediates the relationship between PE and BI	-0.004	0.006595	-0.67	0.502	Fail to Reject H <sub>0</sub>
HM mediates the relationship between EE and BI.	-0.009	0.012142	-0.71	0.478	Fail to Reject H <sub>0</sub>
HM mediates the relationship between FC and BI	-0.011	0.015623	-0.72	0.472	Fail to Reject H <sub>0</sub>
HM mediates the relationship between HT and BI	-0.031	0.042914	-0.72	0.474	Fail to Reject H <sub>0</sub>

Table 7 shows that, the indirect effect of performance expectancy on Behavioral intentions by mediating the role of hedonic motivation is insignificant and negative ( $\beta = -0.004$ ,  $p < 0.502$ ). Indirect effect of effort expectancy on behavioral intention by mediating role of hedonic motivation is negative and insignificant ( $\beta = -0.009$ ,  $p < 0.478$ ). Hedonic motivation does not play any significant mediating role between facilitating conditions and behavioral intention ( $\beta = -0.011$ ,  $p < 0.472$ ) and between Habit and behavioral intentions ( $\beta = 0-0.043$   $p < 0.474$ ). We therefore fail to reject the hypothesis of this study which state that there are no significance mediating role of HM influencing the impact of PE, EE, FC and HT on BI. This analysis was performed with 95% confidence level.

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## 8. Discussions

The findings of the study revealed a significant positive effect of performance expectancy on employee attitude towards BYOD. It is believed that performance expectancy is a key factor in the adoption of BYOD by employees (Moore, 2018). Studies have found that employees are more likely to adopt a BYOD policy if they perceive it as providing greater convenience, improved flexibility, and increased productivity (Fulton, 2017; Tu, Adkins & Zhao, 2019; Lee Jr, Warkentin, Crossler & Otondo, 2017). Additionally, employees may be more likely to adopt BYOD if they believe that using their own device will improve their ability to do their job (Gefen et al., 2018). On the other hand, efforts expectancy was significant to employee adoption of BYOD. Studies have found that efforts expectancy plays a significant role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if they perceive it as requiring a relatively small amount of effort, such as setting up their device and learning how to use the necessary applications (Chin et al., 2015). On the other hand, if employees perceive the effort required to be too great, they may be less likely to adopt BYOD (Gefen et al., 2018). Besides, Studies have found that facilitating conditions play an important role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if there are adequate resources, support, and infrastructure in place to ensure a seamless transition to the new technology (Chin et al., 2015). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is committed to providing a secure and reliable environment for them to use their device (Brodin & Rose, 2019).

Again, studies have found that social influence plays an important role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if they perceive that their peers, family, and colleagues are also using the technology (Brodin & Rose, 2019). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is encouraging them to do so (Gefen et al., 2018). Studies have found that price value plays an important role in the adoption of BYOD by employees (Crossler & Otondo, 2017). Employees may be more likely to adopt BYOD if they perceive it as providing a good value for the cost (Chin et al., 2015). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is providing a fair reimbursement for the use of their device (Crossler & Otondo, 2017).

Studies have found that habit plays an important role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if they are already accustomed to using their own device for work-related tasks (Chin et al., 2015). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is providing adequate training and support to help them transition to the new technology (Gefen et al., 2018). Studies have found that hedonic motivation plays an important role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if they perceive it as providing an enjoyable and rewarding experience (Blay, 2022). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is providing incentives and rewards for the use of their device (Gefen et al., 2018). Studies have found that behavioral intentions play an important role in the adoption of BYOD by employees (Gefen et al., 2018). Employees may be more likely to adopt BYOD if they have a strong intention to do so (Chin et al., 2015). Additionally, employees may be more likely to adopt BYOD if they feel that their organization is providing clear guidelines and expectations for the use of their device (Blay, 2022).

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## 9. Conclusions and Recommendations

This study has explored the factors influencing employees' intentions to enroll on a BYOD program in selected organizations in Ghana. Using a quantitative survey, the study identified the level of perceived usefulness, perceived ease of use, and perceived security of BYOD to be the most important factors influencing employee intentions to enroll on a BYOD program. The results also showed that employees had relatively high intention to enroll on a BYOD program in their organizations. Furthermore, the study revealed that there were significant differences in the perceived usefulness, perceived ease of use, and perceived security of BYOD among employees in different organizations. Overall, this study provides useful insights into the factors influencing employees' intentions to enroll on a BYOD program in selected organizations in Ghana. The results indicate that organizations in Ghana should prioritize improving the perceived usefulness, perceived ease of use, and perceived security of BYOD in order to encourage employees to enroll on the program. Based on the findings of this study, it is recommended that organizations in Ghana take the following steps to improve their BYOD program and increase employee enrollment:

1. Invest in training and support for employees: Organizations should invest in training and support for employees to ensure that they understand how to use the BYOD program and can take full advantage of its features.
2. Improve the perceived usefulness, ease of use, and security of BYOD: Organizations should ensure that their BYOD program is secure, easy to use, and provides employees with useful features and tools. This will help to improve the perceived usefulness, ease of use, and security of BYOD, which will in turn increase employee enrollment in the program.
3. Develop clear policies and procedures: Organizations should develop clear policies and procedures for BYOD usage. This will help to ensure that the program is used in the intended manner and can help to protect the organization from potential risks associated with BYOD.

4. Provide incentives to encourage employee enrollment: Organizations should consider providing incentives, such as discounts or bonuses, to encourage employees to enroll on the BYOD program. This will help to increase employee engagement with the program and improve overall enrollment.

These recommendations, if implemented correctly, will help to improve employee enrollment in the BYOD program in selected organizations in Ghana.

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## 10. Implication to theory and practice

This research contributes to the existing body of knowledge on the factors influencing employees' intentions to enroll in a BYOD program in selected organizations in Ghana. The findings suggest that there are a range of factors that shape employees' intentions to participate in a BYOD program, including perceived risk and cost, perceived device flexibility and usability, and individual attitudes towards technology. These findings extend existing theoretical frameworks such as the Technology Acceptance Model (TAM) and the Theory of Reasoned Action (TRA). For example, the TAM suggests that device flexibility and usability are important determinants of user acceptance, while the TRA suggests that attitude towards technology is a key factor. This research provides further evidence to support these theories.

This research has implications for organizations in Ghana that are considering implementing a BYOD program. It suggests that organizations should take into account the various factors that influence employees' intentions to participate in a BYOD program. This includes understanding the perceived risks and costs associated with the program, the perceived device flexibility and usability, and individual attitudes towards technology. Organizations can use these findings to develop effective strategies to encourage and motivate employees to participate in the BYOD program. For example, organizations can provide incentives such as discounts on devices or flexible working arrangements. Additionally, organizations can provide training and support to help employees understand and overcome any perceived risks or costs associated with the program.

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## 11. Limitation of the Study

The present study has some limitations. Firstly, it was conducted in five selected organizations in Ghana, which limited the generalizability of the results to a larger population. Secondly, the study was cross-sectional in nature, thus precluding any causal inferences. Thirdly, this study was based on self-reported data, which could have been subject to response bias. Finally, the data were collected through a survey instrument, which may have restricted the scope of the research.

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