

The Significance Of A Predictor Of Awareness Of Podcast Software In Nigeria Higher Education

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Abstract: This research investigated issues regarding the significance of a predictor of awareness of podcast software in Nigeria higher education. The study introduced a cross sectional quantitative method of survey type, which involved a total of two hundred and seven (207) respondent. Also, this study adopted and adapted questionnaire research instrument from existing literature. The instrument went through experts' validation to establish the face and content validity. The research instrument pilot test gave a reliability coefficient of .948, which revealed that the instrument was valid and reliable for this study. The study hypothesis was tested at a .05 level of significance. This research findings showed that podcast software advertising significantly predicted podcast software awareness. Based on these findings relevant suggestions and conclusion were made in this research.

Index Terms: Predictor, Awareness, Podcast, Software.

1 INTRODUCTION

In view of the proliferation of podcast technologies adoption in Nigeria higher education. This research investigated the significance of the predictor of podcast software awareness in Nigeria higher education. The predictor in this study was podcast software advertising, which is the independent variable. The dependent variable was podcast software awareness. Available research noted that despite the proliferation of technologies in Nigeria higher education the knowledge of the predicting factors of technologies awareness is limited (Baro, Idiodi and Zacccheaus, 2013). Hence, the authors prescribed for further research to investigate more issues regarding technologies and awareness in Nigeria higher education (Baro et al. 2013). Previous studies had investigated factors predicting technologies adoption in homes (Eutsler and Antonenko, 2018). Also, previous literature revealed that podcast was useful for research activities on awareness (Moale, Rajasekhara, Ueng & Mhaskar, 2019). However, there are limited studies addressing issues regarding the significant predictor of podcast software awareness in Nigeria higher education environment. This research is significant to future researchers who desire to work on awareness of technologies within the higher education setting. Also, this research is significant in creating clarity on problems attached to the awareness of podcast in Nigeria higher education. In addition, this research is significant to lecturers, students and higher education leaders.

2 Literature Review

2.1 Podcast Software

Podcast is an online technology that consist of both acoustic and motion picture contents. Podcast is a form of learning resources for teaching. Podcast is a musical material for entertainment. Podcast is a technology for journalism purposes when utilised for news production. Podcast is useful for business activities. Podcast is useful for advertisement. Podcast is useful for distant instruction. Podcast is useful for animation production in art. Podcast is useful for live broadcast of sport activities. Podcast serves as an online data for researchers. Podcast is a value laden media due to its various functions (Adu, 2017). A software is an application which allows any digital equipment to perform a specific task. Some of those tasks are related to podcasting activities. Any software that is related to podcasting activity must perform audio, video and audio-visual endeavours. A podcast software

is an online application that allows media producers to develop audio, video and audio-visual resources. Podcast software allow users to download media resources. Podcast software permits users to independently distribute media resources. For example, Spotify is a podcast software that host both audio and audio-visual media. Also, YouTube is an online podcast software that affords similar forms of media resources. Facebook is another kind of podcast software. The Facebook allows livestreaming of either audio, video or audio-visual podcasts. WhatsApp is likewise an online podcast software. The WhatsApp produces both audio and audio-visual podcasts. Audacity is audio podcast software. The Spotify software is just like the iTunes U that specialise on musical podcasts. Software is not a physical component. Thus, software "are not constrained by the properties of material" (Sommerville, 2011, p. 4). The GarageBand is a podcast software with a piano keyboard interface. The GarageBand has functions just like a real piano. GarageBand can record live performance of sounds produced on the application. GarageBand podcast software media are sharable online. Clips are another form of podcast software. Clips are suitable for audio-visual media podcasts production. The camera application does similarly record sounds and visuals like Clips. Voice memos is another example of podcast software. However, it is mainly for audio sound recording. Voice memo is useful for editing recorded sound. This editing feature of voice memos is like Audacity podcast software. Audacity podcast software produces audio podcast. GarageBand software helps with the recording, mixing, composition and editing of musical sound (Rachel, 2004). The podcast software is a product of digitally compiled instructions. These instructions are written by experts in computer syntax. Just as there are numerous podcast software with different purposes. Also, there are varieties of digital syntax for diverse podcast software production. This syntax is tailored for specific podcasting software. A syntax is referred to as a kind of language. However, this kind of language is only interpreted by the computer. The syntax originator must likewise have adequate knowledge on the compilation. This syntax controls the way, which a podcast software must display its media content. The syntax controls how often a podcast software must be updated. The syntax is planned in such a way that it influences the capacity of any media to be uploaded onto a podcast software. Computer syntax is referred to as programming concept. For instance, Robert (2006) in Abe and Adu (2013) study referred to software as the output of digital

programming. Podcast software provides opportunities for users to give feedback. This feedback is in different forms. For example, clicking on the like button of YouTube media is regarded as a kind of feedback. The comment box in the YouTube provides users with the opportunity of written feedback. Also, YouTube media is programmed with the ability to automatically count the number of viewers. This is useful sometimes in knowing the popularity of the podcast media. The YouTube like button similarly keeps record of the number of click. The YouTube like button shows the level of relevance of a media. However, there is also a YouTube dislike button option. This YouTube dislike button option allows podcast software users to show discontentment with any podcast software media resources. A YouTube podcast software media displays the date when a media is published. Moraru, Stoica and Popescu (2011) described software as useful substance for education. Podcast software functions like a digital hardware equipment. Podcast software is observable display on a digital hardware screen component. The observed phenomenon in a podcast software consist of sequenced activities. Podcast software must not be the concrete aspect of a digital device. Podcast software is the soft aspect of a digital equipment. The reason being that software is not concrete in nature. Podcast software must be informative. Podcast software must provide precise services to users at any given period. Podcast software must contain organised contents. Podcast software must be easy to use material. Hence, podcast software media must have unambiguous functionality. Podcast software must be self instructional. Podcast software must have direct instructions. Podcast software must have optical value. Yu, Wu and Wang (2018) study revealed that there are differences between software and hardware components. Podcast software have different logo design. For instance, GarageBand logo was designed with a guitar image. The YouTube podcast software logo is red in colour. Facebook podcast software logo is blue in colour. WhatsApp is a podcast software with colour green logo. Podcast software logo are for numerous functions. For example, logo represents a company identity. The podcast software logo is also for aesthetic purposes. Podcast software logo adds beauty to the digital application. Podcast software logo must allow users to distinguish between one application to another. Podcast software logo must reduce misconceptions. The location of podcast software in a hardware device is easy with the identification of its logo. For instance, after installing a podcast software the logo must appear on the screen of any digital hardware equipment. Thus, whenever this logo is clicked this must serve as easy link to the podcast software. Wang (2008) referred to software as a logical creation. Podcast software is a concept that is linked with the digital cloud network. The cloud must be a computing system that allows the processing of media resources online. The cloud must permit varieties of task regarding podcast software on the internet. Podcast software is a set of organised information that must be easily accessed online. Podcast software must be a modern way of presenting audio and video media resources for online use. An example of audio and video form of podcast software is the iTunes Store. The iTunes Store podcast software has music and movie contents. However, these iTunes Store media contents are for sale. This implies that iTunes Store podcast software is classified as a commercialised kind of resources. The cloud is

digital system that allows real life activities to occur on the internet (Malik & Yvon, 2011).

2.2 Higher Education

Higher education is a concept that connote advanced level of teaching and learning. Higher education takes place in different organisations. Higher education occurs in the college, polytechnic or university organisations. Higher education is like a countries treasure. Higher education is a knowledge concept. Higher education promotes a countries development. Higher education must be agencies for technology adoption. Higher education must represent a body for modernisation of teaching activities. Higher education must encourage standard instruction. Literature evidence revealed that higher education must consist of various ideologies. Some of these ideologies must be related to medicine, engineering, philosophy to mention few. For instance, Marginson and Rhoades (2002) described higher education as an idea that is enclosed in a countries fundamental ideology. These authors added that higher education must have international impact (Marginson & Rhoades, 2002). Higher education must be a service provider. Some of the services that are provided by higher education must include technological training. Also, higher education provides intellectual services. Higher education must be a continually emerging concept. Higher education must connote innovation. Higher education must represent positive transformation. Higher education must be synonymous to national growth. Higher education must have values which are inculcated into the students. Nowadays, higher education services are presented in different forms. Higher education services are sometimes delivered online in this modern era. This is possible when there is introduction of internet infrastructure. Tomlinson (2018) described higher education as a constantly changing organisation. In addition, higher education must help with services that can propagate the norms of a society to future generations. Higher education must be a unique abode for moulding the character of young people in a country. Higher education must not make learners look like knowledge consumers alone. Higher education must make learners knowledge producers. Higher education must make student independent learners. Higher education must provide incentives to support rich instruction delivery. Higher education must be a citadel for solving the problems in any society. Higher education must provide ways for solving difficulties that are prevalent in a country. Higher education must be a provider of intellectual competencies, which are required for instructional activities (Tomlinson, 2018). Lecturers and learners are active actors in higher education. The lecturers must support the learners to learn effectively. The lecturers and students must interact positively in a higher education environment. The lecturers must use modern instructional approaches in higher education. There must be adequate discussion between the lecturers and students in a higher education domain. The higher education must provide equal opportunities for students to learn. The learners must be active participants in a higher education context. Lecturers must encourage learners' contribution towards learning in a higher education setting. Jabbar, Analoui, Kong and Mirza (2018 p. 89) asserted that "higher education requires the active efforts of both educator and student".

2.3 Podcast Software in Nigeria Higher Education Context

Podcast software is a form of instructional technology infrastructure in Nigeria higher education. The lecturers awareness of podcast software for quality higher education in Nigeria is a difficult task. Asiyai (2013) added that standard higher education had been acclaimed to be synonymous to reliable instructional technologies. Several recommendations suggested for quality higher education in Nigeria through the provision of technology infrastructure. For instance, Ahioma, Uzuegbu and Uzochukwu (2013) study recommended for functioning internet in Nigeria higher education. Likewise, Akande (2011) enquiry recommended for cheaper internet in Nigeria higher education system. Also, Okiki (2012) suggested for the provision of stronger internet in Nigeria higher education to support technology infrastructure adoption.

In this study the podcast software advertising is a synthesis of advertising dimension and podcast software. However, podcast software awareness is a synthesis of brand awareness with brand association dimension and podcast software. This study conceptual framework was adopted and adapted from Shariq, Khan and Rizvi (2014) theoretical framework of creating brand equity. The other Shariq et al, (2014) dimensions for creating brand equity framework like price, non-price promotions, price promotions, distribution, brand image and brand equity/strength were not considered in this research conceptual framework. Notwithstanding, the podcast software advertising and podcast software awareness are new dimensions, which emerged from Shariq et al, (2014) advertising and brand awareness with brand association (BABA) dimensions of the theoretical framework. These new factors of the conceptual framework are briefly explained as follows. Podcast Software Advertising. Podcast software advertising factor address issues pertaining to podcast software publicity. The podcast software advertising factor is an independent variable. Hence, the podcast software advertising factor is a predictor of podcast software awareness. Podcast Software Awareness. Podcast software awareness factor address issues pertaining to podcast software acquaintance. The podcast software awareness factor is treated as a dependent variable in this conceptual framework. The reason being that podcast software awareness factor depends on podcast software advertising. Research Objective. This research objective is as follows.

1. To investigate whether podcast software advertising is a significant predictor of podcast software awareness.

Research Questions.

1. Is podcast software advertising a significant predictor of podcast software awareness?

Research Hypothesis.HO₁: Podcast software advertising do not predict podcast software awareness.

2.4 Methodology

This study utilised quantitative methods of survey type. This research involved two-hundred and seven (207) lecturers, which were randomly selected for this research in Afe Babalola University Ado-Ekiti in Nigeria. These lecturers were randomly selected from different subject areas such as arts, science, social sciences, humanities, health science and engineering. The research instrument consists of four-point Likert rating scale, which was adopted and adapted from Hernandez (2012) and Shariq, Khan and Rizvi, (2014) literature. The research instrument was given to experts in the area of educational technology to establish both face and content validity. Also, experts in test measurement and evaluation were given the research instrument to establish the face and content validity. The pilot study to establish the reliability of the research instrument was conducted within three weeks by involving thirty (30) lecturers' from Ekiti State university in Nigeria. The result of the pilot study revealed a reliability coefficient of .948, which showed that the instrument was valid and reliable for this study. The result of the pilot study is illustrated in table 1.0 that follows.

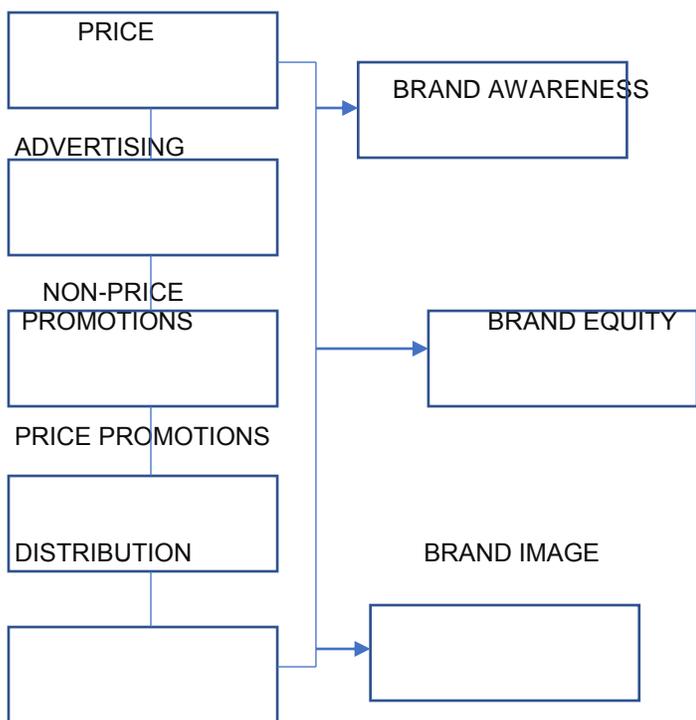


Figure 1.1 Creating brand equity theoretical framework.

This study adopted and adapted a theoretical framework of creating brand equity. The framework emanated from Shariq, Khan and Rizvi, (2014). The factors of this framework are briefly explained as follows. Price. Price is synonymous to cost. Advertisement. Advertisement is synonymous to publicity. Non-Price Promotions. Non-price promotions are free publicity Price Promotions. Price promotions are synonymous to cost publicity. Distribution. Distribution is synonymous to delivery. Brand Awareness with Brand Association. The brand awareness with brand association (BABA) is synonymous to brand acquaintance. Brand Image. Brand image is synonymous to brand appearance. Brand Equity/Strength. Brand equity/strength is synonymous to brand integrity.

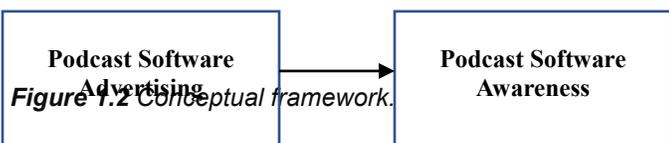


Figure 1.2 Conceptual framework.

Table 1.0

SUMMARY OF RELIABILITY COEFFICIENT OF RESEARCH INSTRUMENT

Cronbach's Alpha	Number of Items
948	10

The main data were gathered within three months. The data screening activities showed that there were no issues of multicollinearity as the bivariate correlation analyses was positive with a value of .439 (see table 2.0). Also, the skewness and kurtosis values range between -.49 and 1.90, which revealed abnormality in the data (see table 3.0). The data abnormality is not a problem due to the large number of respondents involved in this study. There were no outliers in this research as the minimum and maximum Cook's distance values were .0000 and .7261 respectively (see table 4.0). The factor analyses (see table 5.0) showed a significant result with KMO of .83 and Bartlett's test of sphericity ($X^2= 1732.40$, $df= 45$, $p=.00$). There are no outliers when the calculated Cook's distance is not equal to the value of one (Pallant, 2010). Available literature showed that the abnormality of data is not

problematic if the researcher involved respondents, which are more than thirty (30) in number (Pallant, 2013).

Table 2.0
INTERCORRELATION OF FACTORS

		Podcast Software Advertising	Podcast Software Awareness
Podcast Advertising	Software Advertising	1	
Podcast Advertising	Software Awareness	.439**	1

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

Table 3.0
NORMALITY TEST

Factors	Mean	SD	Skewness	Kurtosis
<i>Podcast Advertising</i>				
PSAD1	1.50	.92	1.74	1.90
PSAD2	1.60	.93	1.50	1.20
PSAD3	1.71	.10	1.18	.18
PSAD4	1.67	.96	1.21	.22
PSAD5	1.90	1.10	.93	-.49
<i>Podcast Awareness</i>				
PSAW1	2.00	1.00	.74	-.52
PSAW2	2.00	1.03	.58	-.92
PSAW3	2.07	1.03	.64	-.73
PSAW4	2.10	1.08	.55	-.99
PSAW5	1.97	1.05	.80	-.60

Table 4.0
CALCULATED COOK'S DISTANCE VALUES

	Frequency	Percent	Valid	Cumulative %
Valid	.00000	6	2.9	2.9
	.00000	3	1.4	4.3
	.00001	1	.5	4.8
	.00002	11	5.3	10.1
	.00007	2	1.0	11.1
	.00008	17	8.2	19.3
	.00011	3	1.4	20.8
	.00013	1	.5	21.3
	.00018	7	3.4	24.6
	.00027	2	1.0	25.6
	.00033	6	2.9	28.5
	.00045	1	.5	29.0
	.00046	3	1.4	30.4
	.00048	1	.5	30.9
	.00050	3	1.4	32.4
	.00054	4	1.9	34.3
	.00056	11	5.3	39.6
	.00059	5	2.4	42.0
	.00079	3	1.4	43.5
	.00082	7	3.4	46.9
	.00098	7	3.4	50.2
	.00136	2	1.0	51.2
	.00146	12	5.8	57.0
	.00154	8	3.9	60.9
	.00218	5	2.4	63.3
	.00246	1	.5	63.8
	.00270	3	1.4	65.2
	.00276	3	1.4	66.7
	.00294	1	.5	67.1
	.00298	7	3.4	70.5
	.00324	1	.5	71.0
	.00454	3	1.4	72.5
	.00509	3	1.4	73.9
	.00537	1	.5	74.4
	.00565	2	1.0	75.4
	.00606	1	.5	75.8
	.00697	4	1.9	77.8
	.00891	1	.5	78.3
	.00957	2	1.0	79.2
	.01257	4	1.9	81.2
	.01303	2	1.0	82.1
	.01382	1	.5	82.6
	.01452	2	1.0	83.6
	.01507	1	.5	84.1
	.01577	2	1.0	85.0
	.02022	1	.5	85.5
	.02050	7	3.4	88.9
	.02234	11	5.3	94.2
	.02251	1	.5	94.7
	.02813	1	.5	95.2
	.02930	1	.5	95.7
	.03344	1	.5	96.1
	.04062	2	1.0	97.1
	.05490	3	1.4	98.6
	.06060	1	.5	99.0
	.07261	2	1.0	100.0
	Total	207	100.0	100.0

Table 5.0
THE STRUCTURAL FACTOR AND LOADING FACTOR OF VARIMAX ORTHOGONAL PODCAST SOFTWARE ADVERTISING AND PODCAST SOFTWARE AWARENESS

Items	Statements	Factors	
		1	2
Podcast Software Awareness	PSAW3	My educational institution management always create opportunities for podcast software awareness	.90
	PSAW5	I find the creation of podcast software awareness as very convenient	.80

	PSAW4	I usually talk of podcast software awareness in my lectures	.90
	PSAW2	I am aware of several benefits of podcast software in my lecture activities	.90
	PSAW1	I am aware of podcast software	.81
			<i>Eigenvalue</i>
			5.54
			<i>Variance%</i>
			55.4
<i>Podcast Software Advertising</i>	PSAD3	The adverts on podcast software are seen frequently in my higher institution	.87
	PSAD2	I like the advertisements of podcast software in my higher institution	.90
	PSAD4	The adverts on podcast software are of consistent quality in my higher institution	.84
	PSAD1	The podcast software is advertised a lot in my higher institution	.84
	PSAD5	The adverts on podcast software are easy to recognize in my higher institution	.77
			<i>Eigenvalue</i>
			2.20
			<i>Variance%</i>
			21.50
			<i>KMO</i>
			.83
			<i>Bartlett's Test of Sphericity</i>
			1732.40
			<i>df</i>
			45
			<i>Significance</i>
			.00

2.5 Ethical Issues

The researcher observed ethical issues during the data gathering activities. Hence, no respondent was forced to participate in this study. Respondents were allowed to voluntarily withdraw from the research if there was any feeling of danger. The researcher also ensured that the gathered data were protected from unnecessary leakage. The researchers applied for ethical approval prior to data gathering activities from host university for this study and permission was granted to conduct this enquiry as part of an ongoing PhD research. Ethical issues address issues regarding participant protection (Cohen, Manion & Morrison, 2011).

Variables	Podcast Software Awareness
<i>Independent Variable</i>	
Podcast Software Advertising	.44**
<i>R</i>	
.44	
<i>R²</i>	
.19	
<i>Adjusted R²</i>	
.20	
<i>F</i>	<i>Value</i>
48.90	

**=Significant factor. Significance level= $p < .05$. Hypothesis one (H_{01}) was rejected.

3 DATA ANALYSIS AND RESULT

The questionnaire data gathered were analysed by using regression analysis. The regression analysis revealed the significance level of the predictor of podcast software awareness in Nigeria higher education. The result indicated that podcast software advertising ($\beta = .44$, $p = .00$) is a significant predictor of podcast software awareness. The regression model showed that $R^2 = .19$. This revealed that podcast software advertising predicted 19% of podcast software awareness. The remaining 81% in the regression model were predicted by factors, which is unknown in this research. The regression outcome is summarised in table 6.0 that follows. Hypothesis One (H_{01})

Table 6.0

THE RESULT OF LECTURERS PODCAST SOFTWARE ADVERTISING AS SIGNIFICANT PREDICTOR OF

LECTURERS PODCAST SOFTWARE AWARENESS

4 DISCUSSION

The purpose of this study was to investigate the significant predictor of podcast software awareness in Nigeria higher education. Hence, the researcher conceptualise podcast software factor within the theoretical framework of creating brand equity by Shariq, Khan and Rizvi (2014). The researcher viewed the creating brand equity framework in the context of podcast software advertising and podcast software awareness to empirically test if podcast software advertising dimension was either significant or insignificant predictor of podcast software awareness. The result showed that podcast software advertising is significantly predicting podcast software awareness in Nigeria higher education. These findings revealed that podcast software advertising is relevant for podcast software awareness in Nigeria higher education.

5 LIMITATION AND SUGGESTION FOR FUTURE RESEARCH

This research was quantitative methods of survey type. Also, the respondents were only lecturers. In addition, there were only two universities in Nigeria that was involved in this study, which were Ekiti State University for piloting and Afe Babalola University for main data gathering. The researcher considered only two factors in this study conceptual framework, which were podcast software advertising and podcast software awareness. Since the podcast software advertising factor predicted only nineteen percent (19%) of the dependent variable, which is podcast software awareness. The future research must investigate the remaining unknown factors, which constituted eighty-one percent (81%) in this research. It is suggested that future research must consider qualitative methods for data gathering. Future research must consider the use of more than two universities in Nigeria.

6 CONCLUSION

This research conceptualised the concept of podcast software advertising and podcast software awareness within a theoretical framework with a commercially related dimension. Some of the commercial aspect of the creating brand equity framework by Shariq, Khan and Rizvi (2014 p. 14) such as "price and non-price promotions" to mention few were not considered. Notwithstanding, this research contextualise the framework to fit into Nigeria higher education, podcast software advertising and podcast software awareness concepts. The findings helped in providing empirical support for the understanding of the significance of podcast software advertising on podcast software awareness in Nigeria higher education setting.

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