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INTENTION TO ADOPT E-LEARNING: FAMILIARITY AND INFORMATION QUALITY

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Abstract—This paper sought to assess the Influence of Familiarity and Information Quality on Intention to Adopt E-Learning. The researcher utilized a quantitative methodology based on survey questionnaire. Primary data was collected using online questionnaire, only 123 responses were valid for analysis. The measurement items for the variables were adopted from validated instruments and published articles and books used as a secondary source for getting data for this study. An appropriate statistical analysis tests were used to check the instrument reliability (Cronbach's alpha) and testing research hypotheses (multiple linear regression test). To get this statistical test done the SPSS software was used. The findings show that Familiarity has a positive effect on the students to adopt E-Learning, whereas, Information Quality does not affect the intention to adopt e-learning. It is necessary that Universities should encourage students to adopt the electronic learning, e-learning system should be qualified and easy for use by students.

Keywords— Familiarity, Information Quality, Intention to Adopt E-Learning.

I. INTRODUCTION

The increasing demand for higher education and the widespread of communications and information technology are ones of the important variables affecting the current era [1], whose positive and negative effects have been reflected on society institutions in general and the educational and educational institutions in particular, where it represent realistic examples of educational problems that require unconventional solutions [2].

These changes led to the inability of traditional educational institutions and their staffs in facing these problems, which constituted an increasing pressure on the current educational systems, which led them to adopt new patterns of education, the most prominent of which was electronic education. Despite the growing growth of e-learning, there are many challenges facing its implementation, as they mentioned that adopting e-learning in university education requires providing an electronic learning environment that has its human requirements, and this is represented in forming a diverse team of experiences who

cooperate with each other in performing specific and planned functions [3].

The success of e-learning depends on the university's readiness and acceptance of this adoption through a number of components, the most important of which is the readiness of its faculty members, and the extent to which they possess the values, intentions to use, and competencies necessary for this type of education [4]. The higher the level of this components adoption, the higher their level of readiness and claim for the success of e-learning.

The faculty, the student, and the quality of education are among the most important and influential pillars of the university education system [5]. This research work will seek to determine the Influence of Familiarity and Information Quality on Intention to Adopt E-Learning.

Whatever, electronic learning (e-learning) , like other e-commerce application, still not investigated sufficiently. In the context of the study the adoption of technology has been investigated by few research, work process digitalization[6], providing e-government services from citizens as well as employees perspectives [7]–[9], accepting E-Mail System University Students[10], Clients acceptance of Internet Banking[11], adopting ICT by SMEs employees [12], and customers attitudes to adopt e-shopping [13]. Moreover, from the teaching assessment perspective also few studies has been done in the context of the study[14].

Therefore, This research examines the influence few selected factors on adopting e-learning in the educational sector. The study is conducted to check whether the familiarity and information quality have any role in encouraging students to adopt e-learning.

II. LITERATURE REVIEW

According to the study of Al-Fraihat et al. (2020), each of Familiarity and Information Quality were studied as factors influencing the intention of the E-learning adoption[15]. This study revealed that both of Familiarity and Information Quality considered as main factors influencing the intention to use of the electronic and virtual learning. Alkhatabi et al. (2019) found that familiarity consists in the learner's knowledge of the concept of electronic learning and knowledge of its technical and scientific requirements[16].

Alkhalaf et al. (2018) defined Information Quality was defined as including the scientific and pedagogical content of the information to be taught or the scientific content in general. But the study of Vululleh, P. (2018) and the study of Rafique et al. (2020) concluded that student's behavioral intention to use e-learning was significantly influenced by the following factors; Quality of life, Perceived ease of use, Perceived usefulness, Social influence[5], [17].

The study of Vululleh, P. (2018) conducted the ETAM model by incorporating 2 motivation attributes; social influence and quality of life in Liberia on 269 students whereas the study of Rafique et al. (2020) conducted the Technology Acceptance Model (TAM) on a sample of 460 undergraduate students (Software Engineering and Bachelor of Computer Science). Both of these studies disclosed that learning intentions greatly impacted by the conducted factors. According to the study of Al-Fraihat, D., Joy, M., & Sinclair, J. (2020) which aimed to evaluate the E-learning systems success within UK universities. Through the adoption of the PLS-SEM model. This paper studied the following factors influencing the e-learning adoption; Perceived usefulness, Information quality, Technical system quality, Learner quality, Service quality, Instructor quality and the Support system quality. This paper concluded that the above constructs played a key factor in the perceived satisfaction, and adoption of the e-learning for the UK students.

Based on the study of Kisanjara (2020) and the study of Alkhalaf et al. (2013), the common goal was to examine the social attributes, user characteristics, technological characteristics, pedagogical characteristics and environmental characteristics factors affecting electronic learning adoption in Tanzanian universities[18], [19]. It is inferred from the obtained results that these factors positively impacted electronic learning adoption level.. Based on above reviewed literature the following hypotheses are suggested which are represented in figure 1 the suggested research model:

- H1: Familiarity has an effect on the intention to adopt e-learning.
 H2: Information Quality has an effect on the intention to adopt e-learning.



Figure 1: Study Model

III. RESEARCH METHODS

This study will be done in the academic frame. The study is aimed to determine the effect of familiarity and information quality on intention to adopt e-learning.

Primary data was collected using online questionnaire, only 123 responses were valid for analysis. The measurement items for the variables were adopted from validated instruments[20], [21] and published articles and books used as a secondary source for getting data for this study.

An appropriate statistical analysis tests were used to check the instrument reliability (Cronbach's alpha) [22]–[24] and testing research hypotheses (multiple linear regression test)[25], [26]. To get this statistical test done the SPSS software was used.

IV. ANALYSIS

Table 1 reliability test

Variable	Cronbach's Alpha
Familiarity	0.643
Information Quality	0.828
e-learning adoption	0.730

Multiple regression analysis used for hypotheses testing. Its results presented in the following tables (2,3,4)

Table (2) Model Summary

Model	R	R Square	Adjusted R Square
1	.399 ^a	.159	.145

Table(3): ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	19.819	2	9.909	11.344	.000 ^b
Residual	104.828	120	.874		
Total	124.646	122			

a. Dependent Variable: e-learning adoption
 b. Predictors: (Constant), Familiarity, Information Quality

Table(4): Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.729	.551		3.138	.002
Familiarity	.480	.104	.389	4.635	.000
Information Quality	-.069	.095	-.061	-.728	.468

a. Dependent Variable: e-learning adoption

Familiarity and information quality has been checked to find out whether they have an effect on intention to adopt e-learning as shown in table (2) ($R^2 = 0.159$) have explained (15.9%) of the variance in intention to adopt e-learning. Table (3) shows F test ($F = 3.11$) is significant at ($P < 0.05$). The results of regression analysis shows that familiarity has a positive effect ($\beta = 0.389$, sig. = 0.00) on Intention to adopt e-learning see table (4). Whereas, information quality does not



affect ($\beta = -0.061$, sig. = 0.468) the intention to adopt e-learning.

V. DISCUSSION

The study found the Familiarity has a significant effect on the Intention to adopt e-learning. This result is in agree with results of (Alkhatabi et al., 2019) which explain that students in Dhofar University are familiar in the use of the e-learning system,

The study found the Information Quality has not an effect on the Intention to adopt e-learning. This result is in disagree with results of (Al-Fraihat et al., 2019) which explain that e-learning system in Dhofar University is not qualified and need to overall review.

It is necessary that Universities should encourage students to adopt the electronic learning, e-learning system should be qualified and easy for use by students.

This quantitative study sought to evaluate the Influence of Familiarity and Information Quality on Intention to Adopt E-Learning University students. The data gathered via the questionnaire and analyzed with the help of the SPSS program. This research concluded that both familiarity and partially information quality played a significant role on the intention to adopt E-learning.

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