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THE IMPLICATION OF EXTRINSIC MOTIVATION TOWARDS THE LIBRARIAN INTENTION TO ACCEPT RESOURCES DESCRIPTION AND ACCESS (RDA) IN MALAYSIA

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Abstract:

The evolution of the information environment towards the digital environment has changed the cataloging standards towards Resource Description and Access (RDA) standards. Hence, this study aims to investigate Malaysian Librarian's intention to accept RDA based on extrinsic motivation factors. Questionnaires were used to gather data from respondents who are the librarians from National Library of Malaysia. The data were analyzed using SPSS and SmartPLS and the results show that only TFC influenced the librarian's intention to accept RDA rather than PE, EE, and RE. The result of the findings was discussed and some recommendations were proposed.

Keywords:

Resource Description and Access (RDA); Motivation; Extrinsic Motivation; Intention to Accept, New Cataloguing Standard

Introduction

The evolution of the information environment towards the digital environment changed the cataloging standards from Anglo-American Cataloguing Rules 2 AACR2 into Resources Description and Access (RDA) in 2009. However the implementation of RDA in Malaysia is still at the beginning stage where National Library of Malaysia (NLM), which is the leading agency in the implementation of RDA in Malaysia sent two NLM librarians to the National Library of Australia to study the implementation of the RDA standards in 2013, published a Guidebook on RDA implementation in Malaysia on 3rd April 2014 and conducted Training of Trainers Workshop to share the knowledge and expertise on RDA (Jyoon & Zakaria, 2015).

Malaysia is the 8th country that implemented RDA after the Library of Congress, National Agricultural Library, National Library of Medicine, Amerika Syarikat; British Library; Library and Archives of Canada; National Library Board of Singapore; and National Library of Australia (Bernama, 2014). An earlier phone survey was run in late 2014 to gather information regarding RDA implementation within libraries in Malaysia. However, there was no implementation of the same in any library except for the NLM. As of December 2011, there are 12,351 libraries in Malaysia which are: 1 NLM, 320 state /public /municipal libraries, 1,089 rural libraries, 505 government special libraries, 137 private special libraries, 20 government university libraries, 358 private universities /colleges and 9,922 school libraries (Abu Bakar et al.,2014).

It was thus necessary to study the library staff's intention to accept RDA in Malaysia. An understanding of the factors that influence their acceptance should be conducted especially from the aspects of extrinsic motivation. This is because extrinsic motivation is an important tool that can be used by the organization to motivate the members of the organizations to accomplish tasks. However in its context, this study aims to reveal what might be the extrinsic motivation that will help the librarian in the acceptance of the new cataloging standard models.

Literature Review

This research integrates insights into the intention to adopt and utilize the new standard system and technology, focusing on motivational factors. The study employed the UTAUT model and motivation theory, incorporating some modifications. Venkatesh et al. (2003) realized the disparate nature of multiple theories being applied to understanding how users accept technology and establishing UTAUT from the eight theories 1)Theory of Reasoned Action (TRA) 2) Model of PC Utilization (MPCU) 3) Motivation Model (MM) 4) Combined TAM and TPB (C-TAM-TPB) 5) Technology Acceptance Model (TAM2) 6) Theory of Planned Behavior (TPB) 7) Innovation Diffusion Theory (IDT) 8) Social Cognitive Theory (SCT). There are four constructs directly affecting the intention or use models-performance expectancy, effort expectancy, social influence, and facilitating conditions- all exert direct influences as determiners of user acceptance and use, which are categorized as extrinsic motivation. Extrinsic motivation can be defined as the psychological energy for an activity that is based upon the contingency of an external reward which is inherently separate from the activity itself (Deci &Ryan, 1985; Lee et al., 2005) refer to extrinsic motivation to behaviors that are engaged in response to something apart from its own sake, such as reward or recognition or the dictates of other people.
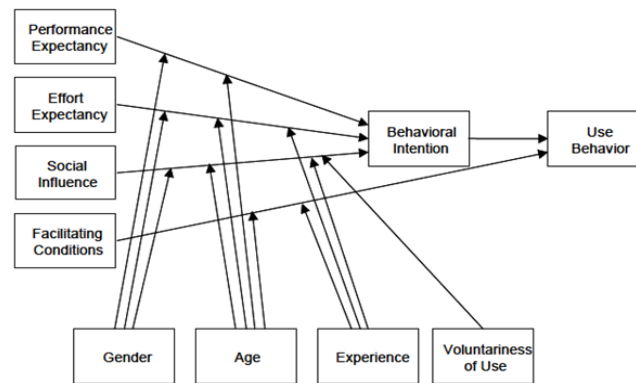
Figure 1: Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003)

Performance Expectancy (PE) is one of the extrinsic motivation variables as suggested by Venkatesh et al., (2012). Venkatesh et al. (2003) and Hsu and Lin (2008) define it as the degree to which an individual believes that using the system or new things will help him or her to enhance their job performance. Perceived expectancy is a key driver of the intention to accept and usage behavior usage behavior (Lee, Chueng, and Chen, 2005). Thus, the following hypothesis has been developed:

H1: PE has positive influences toward the intention to accept RDA among the Malaysian Librarian.

Another extrinsic motivation factor considered in this study is Effort Expectancy (EE). Venkatesh et al. (2012) define effort expectancy as the degree of ease associated with the use of the system that is adapted from the ease of use and complexity variables. In this study, effort expectancy is identified as another factor that influences the intention to accept and adopt the new cataloging standard. Therefore,

H2: EE has positive influences on the intention to accept RDA among Malaysian Librarians.

Research on self-determination theory by Ryan and Deci (2023) as well as in Deci (1971) recognized Rewards (RE) as extrinsic motivation and can be considered as a tool used to control human behavior as stated by (Frey and Jegen, 2001). Rewards also play an important role in librarians' lives (Akpom and Ibegbulam, 2023). In the context of this study, rewards may serve as incentives for librarians or their organizations when they accept and implement the new cataloging standard in the future. Hence the hypothesis was created:

H3: RE has positive influences on the intention to accept RDA among the Malaysian Librarians

Facilitating condition can be defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system (Venkatesh et al. 2003, Venkatesh et al. 2012, Venkatesh et al. 2013, García de Blanes Sebastián, 2022). They also examined the relationship between facilitating conditions and intention. However, in this study, the focus is primarily on Training Facilitating Conditions (TFC), as implementing

the new cataloging standard requires numerous seminars, training sessions, and significant library financial resources. Therefore, the following hypothesis has been proposed:

H4: TFC has positive influences on the intention to accept RDA among the Malaysian Librarians.
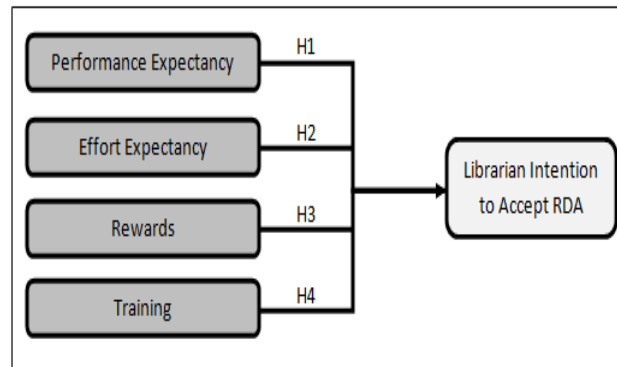

Figure 1: Proposed Theoretical Framework Based on the Previous Study

Methodology

The study was an explorative one, survey method was used for collecting data. A questionnaire was designed to collect data from librarians. Each construct was assessed using a seven-point Likert scale, with responses ranging from "Strongly disagree (1)" to "Strongly agree (7)." The majority of the items were adapted from existing literature, with slight modifications in wording to align with the new cataloging system being targeted. PE and EE questions are adapted and modified to make them suitable for the new cataloging standard context from Venkatesh, et al. (2003), RE questions from Mikander (2010) and TFC contains three questions that are adapted and modified from Ursula et al. (2011). Librarians in the National Library of Malaysia (NLM) were chosen as respondents for the survey keeping in mind the fact that they contribute to the major percentage of RDA implementation in Malaysia. Table 1 presents the demographic profile of 24 respondents from NLM. The profile includes information on the respondents' gender, age, race, highest education level, monthly salary, monthly mobile subscription, and their most recent subscription.

Data Analysis

Partial Least Squares (PLS) is used as the approach for data analysis and SmartPLS 2.0 is the tool utilized by Ringle & Will (2005) because of its ability to model latent constructs under the condition of non-normality and small sample sizes (Chin, 1998). PLS is a second-generation regression method that combines confirmatory factor analysis with linear regression and makes it possible to run the measurement and structural models simultaneously. However, the measurement model was assessed first before proceeding to the structural model as shown in Figure 3 below. The four criteria in the measurement model were satisfied before proceeding to the structural model. The evaluated criteria were reliability and validity criteria by evaluating the internal consistency reliability (CR), indicator reliability (loadings), convergent validity (AVE), and discriminant validity (Fornell-Lacker's criteria).

Table 1: Respondents Characteristics

Variables	Categories	Frequency	Percentage
Gender	Male	4	16.7
	Female	20	83.3
Age	26-30 years	5	20.8
	31-35 years	8	33.3
	36-40 years	7	29.2
	41-45 years	1	4.2
	46-50 years	2	8.3
	>51 years	1	4.2
Race	Malay	22	91.7
	Chinese	1	4.2
	Others	1	4.2
Education	Diploma	2	8.3
	Degree	18	75.0
	Masters	4	16.7
Current position	Assistant Director	3	12.5
* One missing value	Librarian	17	70.8
	Assistant Librarian	3	12.5
Cataloging standard experience	0-5 Years	11	45.8
	6-10 Years	8	33.3
	11-15 Years	4	16.7
	>16 Year	1	4.2

Table 2 presents the item loadings, Composite Reliability (CR), Average Variance Extracted (AVE), and R^2 values for each construct within the model. All items have significant path loadings greater than the recommended threshold 0.7 values (Fornel & Larker, 1981) all the constructs have CR values that exceed the threshold values 0.7 (Nunally, 1978) and convergent validity was considered satisfactory when the AVE for all construct was large than 0.5 (Fornel & Larker, 1981).

Table 3: Fornell-Lacker's Criteria Results For The Discriminant Validity

	EE	Intention to Accept RDA	PE	RE	TFC
EE	**0.913**				
Intention to Accept RDA	0.792	**0.983**			
PE	0.874	0.872	**0.956**		
RE	0.432	0.559	0.509	**0.891**	
TFC	0.682	0.856	0.775	0.586	**0.918**

To assess discriminant validity, it is essential to determine whether the items accurately measure the intended construct rather than other related constructs. This study utilized Fornell-Larcker's criterion to evaluate discriminant validity, as illustrated in Table 3 above, where the square root of the average variance extracted (AVE) along the diagonal exceeds the values of all other latent variables.

Table 2: Loadings, AVE and CR Value for Each Item and Construct in This Study

Variables	Items	Loadings	AVE	CR
Intention to Accept RDA	IN1	0.969	0.966	0.996
	IN2	0.990		
	IN3	0.989		
	IN4	0.991		
	IN5	0.988		
	IN6	0.988		
	IN7	0.970		
	IN8	0.982		
	IN9	0.978		
Effort Expectancy	EM_EE2	0.870	0.833	0.937
	EM_EE3	0.972		
	EM_EE4	0.893		
Performance Expectancy	EM_PE1	0.982	0.914	0.969
	EM_PE2	0.944		
	EM_PE3	0.941		
Rewards	EM_RE1	0.847	0.794	0.951
	EM_RE2	0.894		
	EM_RE3	0.910		
	EM_RE4	0.898		
	EM_RE5	0.907		
Training	EM_TFC1	0.826	0.842	0.955
	EM_TFC2	0.936		
	EM_TFC3	0.958		
	EM_TFC4	0.946		
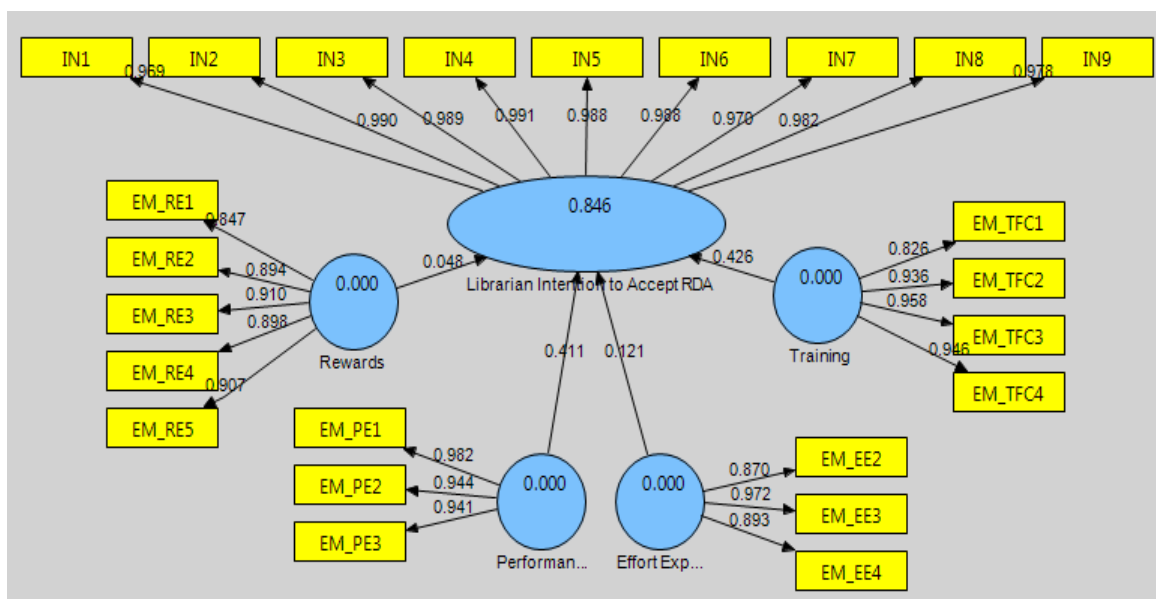
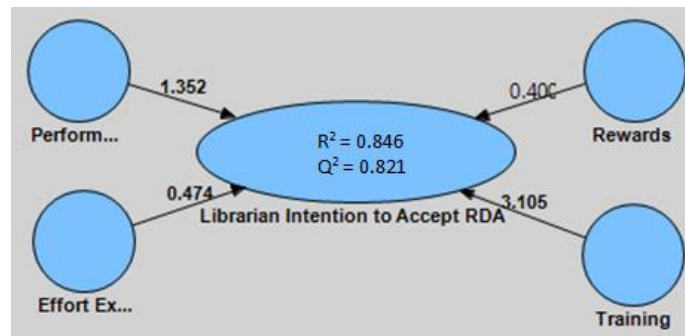**Figure 2: Measurement Model That Had Been Conducted In The SMARTPL**

Figure 4: The Structural Model Results From the SmartPLS

The evaluation of the structural model involves estimating path coefficients, which reflect the strength of the relationships between dependent and independent variables, as well as R^2 values, which indicate the variance explained by the independent variables. The results of the hypothesized structural model test are illustrated in Figure 4. Out of the four predictors, only one is supported: Training Facilitating Conditions (TFC) significantly influences librarians' intention to adopt RDA. In contrast, Performance Expectancy (PE), Effort Expectancy (EE), and Rewards (RE) do not significantly affect this intention. Collectively, these predictors account for 84.6% of the total variance in the intention to accept RDA.

Findings and Discussions

The study intended to explore the Extrinsic Motivation (EM) factors that influence the intention to accept the new cataloging standard model, RDA. PE, EE, and RE show an insignificant effect on librarians intention to accept RDA. The major use of RDA by the librarians is to make the library's collection discoverable and retrievable by their users. PE has an insignificant relationship with the librarian's intention to accept RDA, hence H1 was rejected. It was consistent with Wu et al. (2012) study and inconsistent with Yeoh & Benjamin (2011), Yahya et al. (2011), Bayaga and Adu Plessis (2023), and Adu and Van Biljon (2023) study that PE significantly influenced behavioral intention. This is because RDA is a new standard that is not compulsory in libraries implementation. Perhaps this new RDA standard in Malaysia is still in the new stage and does not influence the libraries' and librarians performance. H2 is also not supported because EE found to have an insignificant relationship with librarians intention to accept RDA in Malaysia. It was parallel with Cheng et al. (2011), Yu (2012), and Bayaga & Adu Plessis (2023) study that found insignificant EE towards a new system and new services. However, the finding was not parallel with Wong & Dioko (2013), Yamin & Lee (2010), and Moghawemi et al. (2012) study that found a significant relationship between EE on behavioral intention.

RE is also one of the extrinsic motivations that may influence the librarian's intention to accept RDA as hypothesized in H3. However, H3 in this study was not supported and show that RE does not influence the librarian intention to accept RDA. It was inconsistent with Abd et al.(2013), Fareed et al. (2013) and Dinc (2015) where rewards influence the behavioral intention of human. This is because librarian who work in the Malaysian public libraries especially in the government sector, are not promised with the rewards system and make it insignificant in their intention to accept the RDA.

Facilitating condition in terms of training was found to have a significant relationship with the Malaysian librarian's intention to accept RDA, where it was consistent with the other study by Venkatesh et al. (2003), Yahya et al. (2011), Alrawashde (2012) and Bayaga & Adu Plessis (2023). Hence, H4 in this study was supported when t-value for the one-tailed test exceeded the 2.33 values at 0.01 significant levels.

Table 1: The Key Results of the Study.

Hypothesis	Relationship	Std. Beta	Std. Error	t-value	Decision
H1	Performance Expectancy -> Librarian Intention to Accept RDA	0.411	0.304	1.352	Not Supported
H2	Effort Expectancy -> Librarian Intention to Accept RDA	0.121	0.255	0.474	Not Supported
H3	Rewards -> Librarian Intention to Accept RDA	0.048	0.120	0.400	Not Supported
H4	Training -> Librarian Intention to Accept RDA	0.426	0.137	3.105**	Supported

Conclusion

The objective of this study was to find the effect of Extrinsic Motivation on the librarian's intention to accept RDA in Malaysia. Out of four hypotheses tested, only one hypothesis is supported. Only TFC was found to influence the librarian's intention to accept RDA rather than PE, EE, and RE. RDA is a new cataloging standard model that needed training and workshops to become an expert and implemented in the 12,351 Malaysian Libraries. Hence, this research has contributed to the knowledge to use of RDA was necessary, the experts and trainers were needed, the central support was available and the workshops, training, and seminars were compulsory to make sure the librarians in Malaysia accept the changes in the cataloging standard. This acceptance may trigger the success of the RDA implementation in Malaysia. This research has shown that training is the most important factor that contributes to the librarians' intention to accept the RDA. Among the limitations of this research is its only focus on extrinsic motivation. Future research should focus on whole motivation aspects including extrinsic and intrinsic motivation.
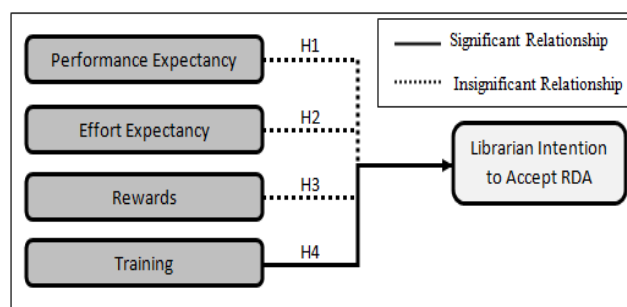

Figure 3: The Final Model of the Extrinsic Motivation towards Librarian Intention to Accept RDA's Theoretical Framework

Acknowledgment

References

Abd, R., Aziz, E., Wahba, L. and El Sagheer, N.(2013) "How to Promote Knowledge Sharing within Oganisations : The CIB Bank," vol. 3, no. 1, pp. 1355–1363

Abu Bakar, Raslin, and C. L. Jyoon. (2014) "Malaysia Country Report," Australia

Adu, A.S.Y., Van Biljon, J. (2023). Perceived Usability in Learning Management Systems' Adoption: A Study of Higher Education Institutions in Ghana. In: Ndayizigamiye, P., Twinomurinzi, H., Kalema, B., Bwalya, K., Bembe, M. (eds) Digital-for-Development: Enabling Transformation, Inclusion and Sustainability Through ICTs. IDIA 2022. Communications in Computer and Information Science, vol 1774. Springer, Cham. https://doi.org/10.1007/978-3-031-28472-4_16

Akpom, C.C., Ibegbulam, I.(2023) Relationship between rewards system and employee intention to leave, Preliminary surveys of librarians in federal university libraries in Nigeria, The Journal of Academic Librarianship, 49 (3), https://doi.org/10.1016/j.acalib.2023.102712.

Alrawashdeh, T., Muhairat,M.I., and Alqatawnah,S.M.(2012) Factors affecting acceptance of web-based training system: using extended UTAUT and structural equation modeling., J. Comput.

Bayaga, A., du Plessis, A. (2023) Ramifications of the Unified Theory of Acceptance and Use of Technology (UTAUT) among developing countries' higher education staffs. Educ Inf Technol. https://doi.org/10.1007/s10639-023-12194-6

BERNAMA, "Malaysia negara ke-8 laksana sistem RDA," Sinar Harian, 2014. [Online]. Available: http://www.sinarharian.com.my/nasional/malaysia-negara-ke-8-laksana-sistem-rda-1.266789. [Accessed: 10-Jun-2015].

Chin, W.W. (1998) "The partial least squares approach for structural equation modeling," G.A.Marcoulides (Ed.), Mod. methods Bus. Res., vol. 295, no. 2, pp. 295–336

Cheng, Y.F., Yu. T.F, Huang, C.F., Yu, C. and Yu, C.C.(2011), "The Comparison of Three Major IBusiness, Occupations for User Acceptance of Information Technology: Applying the UTAUT Model," vol. 3, no. 2, pp. 147–158

Deci, E.L. (1971) "Effects of externally mediated rewards on intrinsic motivation.," J. Pers. Soc. Psychol., vol. 18, no. 1, pp. 105–115

Deci, E.L. and Ryan. R.M. (1985), "The general causality orientations scale: Self-determination in personality," J. Res. Pers., vol. 19, no. 2, pp. 109–134

Dinç, E.(2015) "Perceived Organizational Support as a Mediator of the Relationship between Effort-Reward Fairness, Affective Commitment, and Intention to Leave," Int. Bus. Res., vol. 8, no. 4, pp. 259–269

Fareed, Z., Abidan, Z.U., Shahzad, F., Umm-e-Amen, and Lodhi,L.R.,(2013) "The Impact of Rewards on Employee ' s Job Performance and Job Satisfaction," Manag. Adm. Sci. Rev., vol. 2, no. 5, pp. 431–442

Fornell, C. and Larcker, D.F.(1981) "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," J. Mark. Res., vol. 18, no. 1, pp. 39–50

Frey, B.S. and Jegen, R., (2001) "Motivation Crowding Theory : A Survey of Empirical Evidence," J. Econ. Surv., vol. 15, no. 49, pp. 589–611, 2001

García de Blanes Sebastián M, Sarmiento Guede JR and Antonovica A (2022) Application and extension of the UTAUT2 model for determining behavioral intention factors in use of the artificial intelligence virtual assistants. Front. Psychol. 13:993935. doi: 10.3389/fpsyg.2022.993935

Hsu, C.L. and Lin, J.C.C., (2008), "Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation," Inf. Manag., vol. 45, no. 1, pp. 65–74

Jyoon, C.L. and Zakaria, K. (2015) "Resource Sharing Among ASEAN Libraries: Bridging the information divide," in The 16th ongress of Southeast Asian Libraries: ONSAL XVI, pp. 1–11.

Lee. M.K.O., Cheung, C.M.K and Chen. Z. (2005), "Acceptance of Internet-based learning medium: the role of extrinsic and intrinsic motivation," Inf. Manag., vol. 42, no. 8, pp. 1095–1104

Mikander, C.,(2010) "The impact of a reward sytem on employee motivation in Motonet-Espoo

Moghawemi, S., Mohd Salleh, N.A., Zhao,W., and Mattila,M.(2012) "The entrepreneur's perception on information technology innovation adoption: An empirical analysis of the role of precipitating events on usage behavior," Innov. Manag. Policy Pract., vol. 14, no. 2, pp. 231–246

Nunnally,J. (1978) Psychometric Theory. New York: McGraw-Hill,

Ringle, C.M., Wende, S., and Will,A.,(2005) SmartPLS 2.0 (beta): www. smartpls. de. University of Hamburg

Ryan, R. M., & Deci, E. L. (2023). Acting as one: Self-determination theory's scientific and existential import. In R. M. Ryan (Ed.), The Oxford handbook of self-determination theory (pp. 1173–1176). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780197600047.013.59

Ursula, P.T.M., Gohar,F.K., Junghoon, M. and Jae, J.R.,(2011) "E-learning motivation and educational portal acceptance in developing countries," Online Inf. Rev., vol. 35, no. 1, pp. 66–85, Feb. 2011.

Venkatesh, M. G. Morris, Davis.G. B., and Davis F.D.,(2003) "User Acceptance of Information Technology: Toward A Unified View," MIS Q., vol. 27, no. 3, pp. 425–478

Venkatesh, V., Thong, J. Y., and Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Q. 36, 157–178. doi: 10.2307/41410412

Venkatesh, V., Thong, J. Y., and Xu, X. (2016). Unified theory of acceptance and use of technology: a synthesis and the road ahead. J. Assoc. Inform. Syst. 17, 328–376. doi: 10.17705/1jais.00428

Wong, L.A. and Dioko, D.A.,(2013) "Understanding the mediated moderating role of customer expectations in the customer satisfaction model: The case of casinos," Tour. Manag., vol. 36, pp. 188–199

Wu, M. Y., Yu,P.Y. and Weng,Y.C.(2012) "A study on user behavior for i pass by UTAUT: Using taiwan's MRT as an example," Asia Pacific Manag. Rev., vol. 17, no. 1, pp. 91–111

Yeoh, S. H. and Benjamin, C. Y. F.,(2011) "Internet Banking Adoption in Kuala Lumpur: An Application of UTAUT Model," Int. J. Bus. Manag., vol. 6, no. 4, pp. 161–167

Yamin, M. and Lee, Y.,(2010) "Level of acceptance and factors influencing students' intention to use UCSI University's e-mail system." User Science and Engineering (i-USEr)," in International Conference on. IEEE, pp. 26–31.

Yahya, M., Nadzar,F., Masrek, N., and Rahman, B. A,(2011) "Determinants of UTAUT in measuring user acceptance of E-Syariah portal in Syariah courts in Malaysia," in The 2 nd International Research Symposium in Service Management

Yu, C.F. (2012) "Factors Affecting Individuals to Adopt Mobile Banking: Empirical Evidence from the UTAUT Model," J. Electron. Commer. Res., vol. 13, no. 2, pp. 104–121