

ONLINE PERFORMANCE DIALOGUE SYSTEM MODEL (e-DP): A REQUIREMENT ANALYSIS STUDY AT BATU PAHAT DISTRICT EDUCATION OFFICE

¹ASRAR NAJIB YUNOS, ²ABD SAMAD HASAN BASARI, ³AHMAD NAIM CHEE PEE, ⁴MD SAID MD DAIMON, ⁵ABD RAHIM ABDUL RAHMAN, ⁶LOKMAN TAHIR

^{1,2,3}Faculty of Information and Communication Technology, Universiti Teknikal Malaysia Melaka, Durian Tunggal 76100 Melaka, Malaysia

⁴Batu Pahat District Education Office
JKRBP 2350(P) Jalan Zaharah, 83000 Batu Pahat, Johor

^{5,6}Faculty of Education,
Universiti Teknologi Malaysia, 81310 Skudai, Johor Bahru, Johor

E-mail: ¹asrini76@gmail.com, ²abdsamad@utem.edu.my, ³naim@utem.edu.my, ⁴md.said@moe.gov.my, ⁵rahimsjq@gmail.com, ⁶p-lokman@utm.my

ABSTRACT

This study aims to identify the viewpoint of school leaders the need of developing Online Performance Dialogue (EDP). The model based on the method of inquiry for educational leaders and the School District. The theory is used as a model UTAUT basis for this study. Survey methods used between 222 schools investigate the needs of leaders to adopt Online Performance Dialog (eDP) The data obtained were analyzed through descriptive Statistics using statistical package for social science (SPSS) software. Interpretation of the data is based on the value of the mean and standard deviation. Overall findings indicate that school leaders need on-line performance dialogue (eDP) with an average mean 4.309. The findings of this study reveal that school leaders have access to the necessary technology to eDP. The results also showed the level of acceptance and the intention to use the eDP model among school leaders.

Keywords: *Model, Online Performance Dialogue, Need Analysis*

1 INTRODUCTION

Malaysia Education Blueprint (PPPM) 2013-2015 was created to ensure the efficiency and quality of the management and school leaders can be produced. Therefore, the management and school leaders are required to make changes and improvements in their instructional leadership practices. According to [1], the role of school leaders does not meet the educational goals to realize Vision 2020. The implementation of school administration is no longer suitable for educational goals to meet Vision 2020. The findings from [2] also summarize that the number of school leaders protecting teaching hour is at a modest level. This means that instructional leadership practiced by school leaders is not practiced entirely. In fact,

there are also a handful of school leaders who do not play the role of instructional leaders thoroughly. [3] [4] suggest that school leaders should act as effective instructional leaders because they have a positive relationship with the students' academic achievement. [5] Also agree that the achievement of students in school is influenced by the school leader entirely. The study of Leadership of Education by [4] also found that the leadership of instructional leaders in school was very necessary to determine the success of a school to influence the academic achievement of the students.

In reality, the study regarding the success of three decades of schooling found that the main factor of school success depends on the impact of school leadership [6] [7] [8] [9]. However, based on the analysis of the Sijil Pelajaran Malaysia (SPM) public examinations issued by the Examinations

Board, the MOE for three consecutive years (2012 to 2014) has shown that there is a group of states whose achievements are below the National Average Grade (GPN). Are the school leaders in the state group not implementing instructional leadership entirely as compared to the state which gets higher decisions than GPN?

According to [10] the role of school leaders generally focuses largely on administration, discipline, paperwork and communication via telephone or internet. The majority of school leaders are not able to carry out major tasks such as teaching and learning of teachers as they manage much in relation to school administration [11]. To help school management more efficiently, local education officials (PPDs) have been created. The State Education Department is incapable of being in contact with the Batu Pahat District Education Office with close contact, a location close to the school to manage, supervise and monitor any school session activity.

As such, the District Transformational Program aims to assist school leaders in addressing issues and challenges through detailed guidance and support. PPD is given the opportunity to plan, lead and implement any curriculum and co-curriculum activities aimed at advancing the learning process of improving school performance. For that, a program called performance dialogue has been created. The existence of this program can help school leaders to fully implement instructional leadership without any hindrance.

Based on the data and information of a forum implemented in the Performance Dialogue (DP) is to ensure that the targets of the Key Performance Indicator are achieved. These performance assessments consider the areas of curriculum, co-curriculum, student affairs and leadership qualities, decision formulation will be obtained after the forum is convened and follow-up action should be taken on the parties involved. As a result, school leaders are more focused and accountable to achieve excellence by practicing and implementing the DP. The DP's objective is to monitor school performance with set targets to see measurable performance as well as follow-up actions to take. The DP is also able to identify problems that occur in schools by addressing issues that prevent progress and analyze data to determine the cause of the problem.

2 PROBLEM STATEMENT

Although there are many benefits in implementing this DP, unfortunately some

weaknesses exist in PPD. Based on reports from DTP Coordinator of the Batu Pahat District Education Office, several weaknesses are identified. Among them, PPD faces difficulties in collecting information from the school. The school is also hard to submit a formatted DP note within the specified time frame. The data is obtained manually, has caused the regional coordinators to have difficulties in storing and subsequently disrupting the smoothness of the analysis process. As a result, PPD officers and supervisors face difficulty in implementing an effective performance dialogue guidance and have led to the inconsistency of reporting overall performance dialogue. The online management system is very significant and give more benefits nowadays [12]. Therefore, the development of an online performance-reporting model called eDP is recommended.

3 RESEARCH OBJECTIVE

This study aims to identify the need for the development of the online performance dialogue model (eDP) based on UTAUT's model for instructional leadership from the perceptions of school leaders.

4 RESEARCH QUESTION

This study will answer the following questions:

1. What are the perceptions of school leaders on the management of School Performance Dialogue that are implemented in schools?
2. Does the school have internet facilities and what is the level of internet access?
3. What is the level of acceptance of school leaders on the use of online performance dialogue model (eDP)

5 REQUIREMENT ANALYSIS

According to [13] requirement analysis is one of the methods to identify the differences that occur between the present situation and the achievement to be achieved. Whereas [14] requirement analysis is needed to appreciate the group that is facing the problem addressed through the process of judgment. Investigation of existing issues is required for the development of online performance dialogue system (eDP) model. The designs constructed as references as a practical guideline, the online performance dialogue system (eDP) model can help school leaders meet the needs of

instructional leadership to attract their interest in the district's transformation program through leadership through an online performance dialogue system (eDP). A detailed study is a component of a requirement analysis to build an online system of online performance dialogue (eDP) based on the views of school leaders. Feedback from participants was obtained from a questionnaire on the development of online performance dialogue system (eDP) model.

6 ACCEPTANCE AND UTILIZATION OF TECHNOLOGY THEORY (UTAUT)

According to [15] [16] the factors in implementing the acceptance and utilization of the technology model (UTAUT2) can support the new methods of assessing the acceptance of online performance dialogue systems and the picture as in Figure 1.

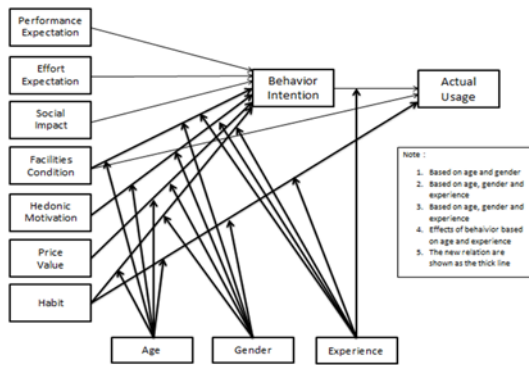


Figure 1: UTAUT Technology Acceptance and Utilization Model (Source : [15])

However, a questionnaire developed based on UTAUT. Questionnaire sets are distributed to School leaders to measure instructional leadership; the online acceptance stage of the online performance dialogue (eDP) rating system is used to view instructional leadership. The use of eDP makes instructional leadership competitive but if the leader is unable to execute and implement thus; the instructional leadership will not work. Constructions of questionnaire items are based on Theory of Acceptance and Use of Technology (UTAUT). Recommendations by [17] relate to the explanation regarding the user's intentions on the information system and human behavior. There are 4 constructs through this theory, Performance Expectation, Effort Expectation, Social Impact and the conditions of the Facility that determine the intent and behavior [16], as shown in Figure 2.

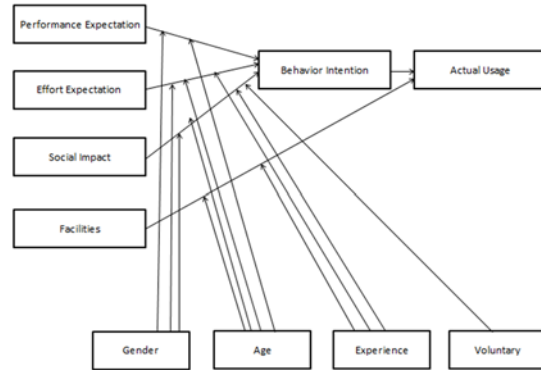


Figure 2: UTAT Technology Acceptance and Utilization Model (Source : [17])

According to UTAUT's constructs there are questionnaire items divided into four expectations:

- Performance expectation: a leader of school leaders' credibility mechanisms through an analysis of needs in anticipation of performance based on mobile device utilization can improve the performance of instructional leadership that will be practiced. In addition, school leaders review the reports that have been uploaded virtually. [17]
- Effort Expectations: Desire and urge to use the latest technology in management. Determined behavior based on Self-esteem to use the system [17].
- Social Impact: The influence of individuals who are interested in encouraging someone to use technology. The determination of behavioral intentions depends on social influence. Social influence translates into the leader's belief in an individual being motivated to use mobile devices in instructional leadership [17].

Facilities Condition: Perfect and good facilities that can support the use of eDP systems or environment. [17].

7 METHODOLOGY

Development of the eDP model requires an analysis of needs for the purpose of assessing its needs. According to [13], the method of viewing

the gap between current and target conditions by using analytical requirements. Whereas [14] the value of judgment faced by a group that needs to be solved in requirement analysis. This study aims to see how eDP is an aids to solve the problem of instructional leadership. Guided by the requirement analysis, issues relating to the implementation of eDP development in post mortem to assist eDP development in line with the current situation. The function of the developed eDP model is a practical guide to school leaders. Guided by the leaders of the school through a survey distributed survey set for feedback and further to identify the development needs of the eDP model.

The first phase of this study is to design the questionnaire. Based on the study [18] a sets of questionnaire surveys have been generated for data collection purposes. The questionnaire is based on the Likert Scale of five points which is 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = agree, and 5 = strongly agree. There are four parts of the questionnaire which are part A related to demographics and part B regarding the level of acceptance of online performance dialogue (Performance Expectations). Part C relates to the level of online performance dialogue (Effort Expectations). Part D is related to the level of online performance dialogue (Social Influence). While E section relates to the level of online performance dialogue (Facility Condition).

The second phase of the study was the data gathering process. Respondents of the study consisted of school leaders who served in Batu Pahat district schools. A total of 222 respondents were involved in a self-administered study by the researchers. According to the [19] Minimum survey of 30 people are based on normal distribution as the basis of the determination of the number of study samples.

The third phase was the data analysis part. The objective of this phase is to analyze the data gathered using statistical technique. The outcome of the analysis is the descriptive statistical analysis. The final phase is about the school leaders perceptions on the acceptance of online performance dialogues.

The research questions are answered using the descriptive statistical method that provides analysis of mean score, standard deviation, percentages and frequency obtained from the Statistical Packages for Social Science Program (SPSS) version 22.0. For the purpose of analyzing the school leaders' EDP), the level of measurement as in Table 1 has been used as a result of the modification of the view [20].

Table 1 : Interpretation Mean Score

Mean Score	Interpretation (Level)
0.00 to 1.66	Low and unsatisfying ni need
1.67 to 3.33	Medium and quite satisfying or quite necessary
3.33 to 5.00	High and very satisfying or very necessary

8 FINDINGS

Table 2 provides respondents data distribution information covering gender, teaching experience, ICT experience and ICT skills.

Table 2 : Respondents' demographics

A1.3 Gender

Valid	Frequency	Percent	Valid Percent	Cumulative percent
M	148	66.7	66.7	66.7
F	74	33.3	33.3	100
Total	222	100	100	

A1.9 Duration of service in education service

Valid	Frequency	Percent	Valid Percent	Cumulative percent
1 – 5 year	2	.9	.9	.9
11 – 15 year	7	3.2	3.2	4.1
16 – 20 year	24	10.8	10.8	14.9
6 – 10 year	7	3.2	3.2	18
More than 20 year	182	82.0	82.0	100
total	222	100	100	

A1.10 ICT Skill Level

Valid	Frequency	Percent	Valid Percent	Cumulative percent
Skillful	140	63.1	63.1	63.1
Very skillful	8	3.6	3.6	66.7
Moderately skillful	72	32.4	32.4	99.1
Unskilled	2	.9	.9	100
Total	222	100	100	

The distribution of school leaders by sex comprising 2/3 is male. The highest percentage of services in the education sector was in the group of more than 20 years (82%) followed by groups of 16

to 20 years (10.8) and groups of 15 and below 10%. The highest level of ICT skills with 63.1% achievement has ICT skills versus unskilled with only 0.9% gain.

School leaders' perception towards the management of the School Performance Dialog via online

The results of the descriptive analysis of School Leadership Perspectives on the management of Online School Performance Dialogue can be obtained in Table 3.

Table 3 : The perception of school leaders regarding the management of School Performance Dialogues via online

	N	Mean	Std. Deviation
A1.11 I can use the online application	222	4.36	.650
A1.12 I tend to choose management via online	222	4.29	.866
A1.13 I believe the use of printed material in performance reporting is the best.	222	1.54	.500
A1.14 I believe the use of information technology will improve the management of school performance dialogue	222	4.28	.688
Valid N (list wise)			

Data analysis findings show that school leaders have good and positive perceptions and high levels of agreement on the management of School Performance Dialogues using online with mean score of 4.36 and standard deviation of 0.650 for item A1.11 (I can use online application). This situation is supported by the expectation of school leaders to reject the use of printed material in reporting school performance dialogue with a mean score of 1.54 and a standard deviation of 0.500 for items A1.13 (I believe the use of printed materials in performance dialog reporting is the best)

Overall, the perception of school leaders on the management of Online School Performance Dialogues in Table 3 above shows high levels of items tested when mean score is at high level (mean > 3.34 and standard deviation < 0.90)

Table 4 shows the Online Performance Dialogue Acceptance Level (Convenience Condition).

Table 4 : Online Performance Dialogue Acceptance Level (Convenience Condition)

E1.1 Does your organization have internet access

Valid	Frequency	Percent	Valid Percent	Cumulative percent
No	1	.5	.5	.5
Yes	221	99.5	99.5	100
Total	222	100	100	

E1.2 Internet access level in your organization

Valid	Frequency	Percent	Valid Percent	Cumulative percent
Good	191	86.0	86.0	86.0
Very Good	18	8.1	8.1	94.1
Weak	12	5.4	5.4	99.5
Very Weak	1	0.5	0.5	100
Total	222	100	100	

Overall levels of acceptance of online performance dialog (convenience condition) at the 99.5% organization level has internet access and internet access 94.1%

Table 5 shows the acceptance level of the online performance dialogue (Performance expectancy).

Table 5 : Online Performance Dialogue Acceptance Level (Performance Achievement)

	N	Mean	Std. Deviation
B1.1. Dialog Prestasi Online dapat membantu saya mengamalkan Kepimpinan Instruksional dengan berkesan	222	4.37	.609
B1.2. Dialog Prestasi Online boleh dilakukan walau di mana sahaja	222	4.31	.823
B1.3 Dialog Prestasi Online boleh dilakukan pada bila-bila masa sahaja.	222	4.26	.903
B1.4 Dialog Prestasi Online membantu saya mengenal pasti masalah dalam Kepimpinan Instruksional	222	4.28	.688
B1.5 Dialog Prestasi Online membantu saya mengatasi masalah dalam Kepimpinan Instruksional	222	4.25	.677

The results of the data analysis found that school leaders had positive performance perceptions on the acceptance of online performance dialogues with the lowest mean score 4.25 (standard deviation 0.677) in the aspect of performance dialogue helped

to overcome the problems in instructional leadership and the aspect of online performance dialogue helped me practice instructional leadership effectively with mean 4.37 (standard deviation 0.609).

Overall Table 5 above shows the acceptance level of the online performance dialogue (Performance expectancy) min exceeding 3.34 with a min score at a high level and a small scatter pattern (standard deviation <0.90).

Table 6 discusses the level of acceptance of online performance dialogue (effort expectations).

Table 6 : Online Performance Dialogue Receipt Level (Effort Expectation)

	N	Mean	Std. Deviation
C1.1 Dialog Prestasi Online memudahkan proses dokumentasi	222	4.49	.600
C1.2 Dialog Prestasi Online memudahkan proses pelaporan kepada pihak atasan	222	4.58	.495
C1.3 Kemahiran dalam penggunaan Dialog Prestasi Online menjadikan saya cekap dalam amalan Kepimpinan Instruksional	222	4.09	.756

The result shows with a mean reading of 4.09 (standard deviation of 0.756) where the ability to use online performance dialogue makes me proficient in instructional leadership practices. But the online performance dialog simplifies the documentation process is the highest min with min 4.49 (standard deviation 0.600) Overall, the mean score of acceptance of online performance dialogue (effort expectation) at a high level with mean score exceeds 3.34.

Meanwhile, Table 7 illustrates the level of acceptance of online performance (social influence) at a high level with mean of 4.22 and 4.24.

Table 7 : Online Achievement Dialogue Stage (Social Influence)

	N	Mean	Std. Deviation
D1.1 Saya bercadang untuk menggunakan Dialog Prestasi Online dalam pengurusan Instruksional di sekolah.	222	4.22	.665
D1.2 Saya bercadang untuk menggunakan Dialog Prestasi Online untuk memastikan sasaran KPI dicapai	222	4.24	.752

9 DISCUSSION

The findings of the first question about leaders' perceptions of the belief of the use of technology can provide an improved quality of instructional leadership based on respondents of school leaders. Findings of respondents of school leaders' respondents to using technology can enhance instructional leadership.

The leaders' perception of overall instructional leadership is the practice of school leaders in reducing traditional practices to the usage of technology in management. There is still a leader who does not want to change the old method, but findings shows that school leaders encourage the use of technology to provide reports and information.

For the sake of the second question, for the school-like Batu Pahat district, the level of eDP receipts is very high where 99.5% have internet facilities, so the eDP can be implemented without any major problems. All school leaders agree to use eDP in the management of instructional leadership to achieve their KPIs. The good and excellent internet access level is also very high in Batu Pahat district which is almost 94%. While only 6% of schools deal with internet access but it is not a big problem as all the teachers at school have been supplied with 4G smartphones that can access the internet.

The finding of the third question further demonstrates that the level of acceptance of school leaders on the use of online performance dialogue model (eDP) is very good. eDP will help them implement the Instructional Leadership more effectively. Average school leaders agree that user-friendly eDPs can facilitate their work in school. So this shows that school leaders are aware of the need to change to 21st century management. This situation in the Malaysia Education Blueprint has been emphasized by school leaders in order that school leaders use technology equipment prudently and effectively to enable instructional leadership to carry out the mandate and task more efficiently.

10 PROPOSED IMPROVEMENTS

Due to the difficulties of collecting information from schools such as sending reports from time frames, hassled in data storage ever since is collected manually, the online management system is one of the best and most significant solutions nowadays. Recognizing this, the development of an online performance reporting model called eDP is highly recommended.

11 CONCLUSION

Based on the findings from this requirement analysis, it can be concluded that there exists an urgent requirement for producing online performance dialogue models as a leader-based choice of technology to work more efficiently. Leadership practices make technology a social life medium that needs to be exploited for use in the District Education Office of the Batu Pahat District Education Office to strive for the effectiveness of technology-based performance dialogue processes. Basically, the findings of this study illustrate that school leaders are given the opportunity to use the analysis and reporting methods in school performance dialogue. Therefore, based on the UTAUT model in the development of the eDP model should be implemented as one of the alternatives in the management of a technology-centered school. This eDP is expected to have an impact and effect on school leaders in improving the quality of instructional leadership and quality time management. Based on the findings of the acceptance and intentions to use the eDP method in this performance dialogue process, the overall findings from the main constructs (based on the UTAUT model) can be concluded that respondents of the school leaders responded to eDP as a means of support in the analysis and reporting in the performance dialogue need to be used to improve the analysis and reporting process more attractive and evolve as technology progresses.

The outcome of the discussion in the previous section shows that the role of institution intervention is very important in achieving high eDP levels among school leaders. In addition, when Internet speed is higher, and more time using computers and the Internet by school leaders, it will increase their e-DP receipts. And, based on research findings, Batu Pahat District Education Office should strive to improve their operations, build e-DP infrastructure, introduce high quality services, overcome school leaders' emergency rather than using computers and improve their self-efficacy in handling new technologies, and coordinating with other entities such as ministry of education, state education department, and office transfer software programs; according to the new strategy to be set up for this purpose. In addition, in relation to research findings, there is a conclusion that the Batu Pahat District Education Office should promote their role in achieving a high degree of e-DP use involving school leaders in the development process to resist resilience to changes when applying new technologies, using the facilities using apps and tools, demonstrates the use of eDP

and its positive results in ways that stimulate usability after exposing the success of the results.

12 RESEARCH LIMITATIONS

This study limited its scope to implement the online performance dialogue system (eDP) based on UTAT model. The study population was limited to the school leaders in Batu Pahat district.

13 ACKNOWLEDGEMENT

This paper is part of PhD research work in the Faculty of Information and Communication Technology, Universiti Teknikal Malaysia Melaka.

REFERENCES:

- [1] S. Marzuki, "Ciri-ciri kepemimpinan Pengetua/Guru besar Berkesan yang Dapat Menghadapi Cabaran dan Harapan pada Abad 21," *J. Pengur. dan Kep. Pendidik.*, vol. 10, pp. 1–17, 2000.
- [2] Andi Audryanah Md. Noor., *Kepemimpinan Pengajaran Dan Efikasi Kendiri Pengetua Sekolah Menengah Dan Hubungannya Dengan Pencapaian Akademik Sekolah*. 2009.
- [3] P. Hallinger, "Leadership for learning: lessons from 40 years of empirical research," *J. Educ. Adm.*, vol. 49, no. 2, pp. 125–142, 2011.
- [4] P. Hallinger and K. Snidvongs, "Educating Leaders Is There Anything to Learn from Business Management?," *Educ. Manag. Adm. Leadersh.*, vol. 36, no. 1, pp. 9–31, 2008.
- [5] A. M. Dom, *Ciri-Ciri Pengetua Yang Outstanding*. Widad Publications, 2010.
- [6] J. Glanz, "What every principal should know about instructional leadership.," *What every principal should know about instructional leadership*. 2006.
- [7] E. L. Horng, D. Klasik, and S. Loeb, "Principal's Time Use and School Effectiveness," *Am. J. Educ.*, vol. 116, no. 4, pp. 491–523, 2010.
- [8] W. K. Hoy, "School Mindfulness and Faculty Trust: Necessary Conditions for Each Other?," *Educ. Adm. Q.*, vol. 42, no. 2, pp. 236–255, 2006.

- [9] H. Abdul Rahman, A. K. Saipol Bari, M. D. Mohd Suhaimi, M. A. Berawi, and Y. X. Wen, "Does Professional Ethic Affects Construction Quality?," *Quant. Surv. Int. Conf. Kuala Lumpur, Malaysia*, no. April 2016, pp. 1–10, 2007.
- [10] M. Azlin Norhaini, *Amalan pengurusan pengetua sekolah menengah: Satu kajian kes*. Fakulti Pendidikan, Universiti Kebangsaan Malaysia, 2006.
- [11] Maimunah Muda, "Kepimpinan situasi di kalangan pengetua sekolah di Malaysia," 2005.
- [12] J. Cambern, "Online Benefits Management Systems: An HR Evolution.," *Compensation & Benefits Review*, vol. 38, no. 4, pp. 65–70, 2006.
- [13] B. . Witkin, "Needs assessment kits, models, and tools," *Educ. Technol.*, vol. 17, no. 11, pp. 5–18, 1997.
- [14] J. McKillip, "Need analysis: Tools for the human services and education," *Solutions*, 1987.
- [15] Alazzam et al., "Pilot study of EHRs acceptance in Jordan hospitals by UTAUT2," *J. Theor. Appl. Inf. Technol.*, vol. 85, no. 3, pp. 378–393, 2016.
- [16] M. B. Alazzam, A. S. H. Basari, A. S. Sibghatullah, Y. M. Ibrahim, M. R. Ramli, and M. H. Naim, "Trust in stored data in EHRs acceptance of medical staff: Using UTAUT2," *Int. J. Appl. Eng. Res.*, vol. 11, no. 4, pp. 2737–2748, 2016.
- [17] V. Venkatesh, M. Morris, G. Davis, and F. Davis, "User Acceptance of Information Technology: Toward a Unified View," *MIS Q.*, vol. 27, no. 3, pp. 425–478, 2003.
- [18] Mohd Paris Saleh & Saedah Siraj, "Analisis Keperluan Pembangunan Model Pengajaran M- Pembelajaran Mata Pelajaran Sejarah Sekolah Menengah," *J. Kurikulum Pengajaran Asia Pasifik*, vol. Bil. 4, no. 4, pp. 12–24, 2016.
- [19] R. L. Scheaffer, W. Mendenhall, R. L. Ott, and K. G. Gerow, *Elementary Survey Sampling*. Cengage Learning., 2011.
- [20] J. F. Pallant and A. Tennant, "An introduction to the Rasch measurement model: an example using the Hospital Anxiety and Depression Scale (HADS)," *Br J Clin Psychol*, vol. 46, no. Pt 1, pp. 1–18, 2007.