Vol 12, Issue 11, (2022) E-ISSN: 2222-6990

The Usability, Acceptance and Changes Management of SPS on its Effectiveness in Secondary Schools in Peninsular Malaysia

Wan Marfazila binti Wan Mahmud
Universiti Sultan Zainal Abidin

Habibah binti Ab. Jalil
Universiti Putra Malaysia

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i11/15742 DOI:10.6007/IJARBSS/ v12-i11/15742

Published Date: 12 November 2022

Abstract

Nowadays, information management system plays a vital role in organizations. Schools are among the organizations which utilizes information management system in their operation. The purpose of this research is to identify the level of usability SPS's, acceptance and change management towards school effectiveness. This research was done for four districts which had been chosen according to states and zones in peninsular Malaysia which had been randomly selected which includes Central Zone (Petaling Perdana district, Selangor), North Zone (North East district, Pulau Pinang), East Zone (Kota Bahru district, Kelantan) and South district (Johor Bahru district, Johor). Descriptive research design and correlation through survey were used in this research. Survey questionnaires were distributed to 385 teachers, whom were the samples of this research. Samples are chosen by stratified random sampling technique and random sampling. Five constructs involved in SPS usability includes SPS quality, SPS information quality, SPS quality service, SPS satisfaction and SPS usage. For SPS acceptance, there are four constructs involved in SPS acceptance, which include performance expectation, effort expectation, social influence and condition of facility. For SPS change management, there are five constructs involved which include awareness, eagerness, knowledge, ability and reinforcement. Statistical descriptive analysis shows school effectiveness are at a low level. Overall, the mean value for SPS usability, SPS acceptance and SPS change management are low. The result is, suggestion towards SPS change management should be encouraged to help teachers prepare and understand the implementation of SPS to increase school effectiveness and school management. This is important to ensure teachers can accept effectively any change taking place in any new change of policy. For SPS usability aspect, researchers suggest the system applied at school to be given high priority and consideration by the policy makers to ensure the system's application in school is effective and beneficial towards the schools. This is to ensure the school's effectiveness in a more systematic manner in the effort of improving school management system (SPS).

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Introduction

The world of education in schools is not only specific to teaching and learning but also involves other things, particularly the management of organizations in schools (Faridatul et al., 2018). Without efficient and effective management, operational processes in an organization cannot run smoothly (Wei and Jamilah, 2017). Over the past few years, there have been changes after changes in the Malaysian education system to enhance the development of education in Malaysia. The changes comprised of teaching and learning alongside the school administration system (Baharom et al., 2013). Thus, in today's information technology era, usability, the acceptance, and the management of information technology-based change in schools are crucial in improving school effectiveness. Therefore, the ministry has implemented the transformation by providing a school management system (SPS) to be used in school organizations (Malaysia Education Development Plan 2013-2025, (MOE, 2012)).

Background Research

The management and administration of an organization nowadays use a lot of management information systems to improve the efficiency of their organization. Management information systems are one of the component initiatives in data integration education to improve school effectiveness. A data integration system allows many users to access and share information simultaneously (Nizam et al., 2010). With the latest technological advances, management information systems play an important role in ensuring that an organization can develop effectively and be more competitive (Yaser et al., 2014). According to Abdelrahim (2016) also argues that information systems computer-based is crucial and rapidly evolving in technological innovation in this century for the administration of an organization.

There is a lot of school change management on going in the era of digitization, where data is one of the most vital resources for an organization. It is said so since the previous management manually collected, processed, and stored the information. Nowadays, most organizations, including schools, store too much information causing this manual system to feel no longer practical to implement. Therefore, the technological revolution and information systems have become very important in all fields, especially in management (Yaser et al., 2015).

School Management System (SPS)

This system was implemented in all schools from 1 January 2015 through a Circular Letter by the Ministry of Education Malaysia (Malaysia Education Development Plan, 2013-2025, 2015). The objective of SPS is to create key information data in schools. The School Management System (SPS) application provides single data for schools, teachers, and students nationwide. The main objective of the SPS implementation is to provide a master / single database, which is the main data in the school and aims to ensure that all users, especially MOE, only need to integrate with this database to obtain information.

Usability of School Management System

Usability refers to a functional product produced to facilitate and benefit the consumer (DeLone and McLean, 2003). According to Farid (2016), the usability seen in an information management system includes speed, clarity, intuitive navigation, ease of use, readability, and personality. He said that the importance of system usability is not only for software developers but also for organizational heads and staff. Thus, it is necessary to measure the

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

ability of the system to accomplish a given task. Hence, the purpose of SPS is to provide upto-date services and information for users, including teachers and administrators.

According to Alemayehu and Paul (2001), system usability provides many benefits to organizations, which effectively convey information about their products and services, operations, history, vision, structure, policies, and employment opportunities to the citizens of the organization. The usage of management systems is essential to revolutionizing the ways organizations provide such information (Alemayehu and Paul, 2001). Based on the usability of the efficient system, it can determine what information is needed and used according to the task performed. A management information system is crucial administration work that aims to provide reliable, accurate, relevant, and complete information towards improving performance in an organization (Yaser et al., 2014).

Acceptance of School Management System

Acceptance of an information system is the willingness of the user to use a newly introduced system or technology. In addition, according to Ausserer and Risser (2005), acceptance is a condition that describes the extent to which a potential user is willing to use a new system. According to Regan and O'Connor (2001), acceptability is crucial for all users to ensure that the system can be used and implemented effectively. The technology or system adoption plays a significant role in ensuring that it can be used properly and effectively. According to Teo and Timothy (2011), the acceptance of technology is the willingness of users to use and accept technology in performing a given task.

Lack of user acceptance is a significant barrier to the success of a newly used information system (Teo and Timothy, 2011). This statement is supported by Sebayang (2009), where different user perceptions in the acceptance of a system become a yardstick in assessing the success of the system, whether accepted or vice versa.

School Management System Change Management

Change management is considered a structured approach to ensure the implementation are smooth and sustainable so that the benefits of change are achieved (Hiatt, 2006; Prosci, 2017). Organizations nowadays implement changes on a day-to-day basis. Change management is defined as the change of activities in the organization (Marylu et al., 2002). According to Charu (2018), change management is an ongoing activity that has created a need for organizations to develop effective change management strategies. Since strategy formation alone is not enough of producing better results, the implementation technique also plays a crucial role(Charu, 2018).

According to Yaser et al (2014), today's change management in school is greatly influenced by the management of information systems. It is one of the most crucial tools in any organization that aims to provide reliable, complete accessibility, meet the users' needs and improve school efficiency. The purpose of the changes made in schools in using computer-based management information systems is to help increase the level of effectiveness of school management (Razana and Ibrahim, 2016).

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Statement of Problem

In 2014, the Ministry of Education Malaysia (MOE) implemented innovations in data management and fulfilled by teachers in schools where the MOE instructs to fill in all student-related data into the SPS online. However, some problems arose as the implementation happened, namely the teacher's acceptance. Not all teachers can accept the SPS since they are comfortable with the old system, especially teachers with more experience (Nuin and Ambotang, 2019). Therefore, the effectiveness of the school is the main thing that seems to ensure the implementation of this SPS has an effective impact or vice versa.

School effectiveness relates to any changes that take place in the school. In supported by Mohd Nuin and Ambotang (2019), the management of system change that occurs raises many questions in terms of teacher acceptance. According to him, the implementation of changes in data management involves changes in practice, especially to school effectiveness. In addition, school effectiveness also becomes ineffective if the management journey in the usability of the school management system has problems. On top of that, a study conducted by Yaser et al (2015) said that there are several problems in the development of management information systems in an organization, such as lack of budget in ICT needs. According to him, findings showed that the main problems hindering the effective use of information management systems and organization are system quality, information quality, service quality, top management support, user training and user experience.

Research Objective

Overall, the specific objectives of this study are to

- i. Determining the level of school effectiveness.
- ii. Determine the level of usability of SPS, acceptance of SPS and management of SPS change among teachers.

Literature Review

The study conducted by Madiha (2014) found out the impact of management information systems (MIS) in administrative schools. The study investigated the usage of information technology in educational management, which has now increased rapidly due to its efficiency and effectiveness. The primary objective was to know that Management Information System - (MIS) can improve the efficiency of school administration activities. The latter study evaluated school management system applications in Madiha primary schools from a Malaysian perspective (Anuar and Hew, 2014). It is related to the usability of the system in schools to change the management of schools in Malaysia which is called e-School. The Electronic Management School, also known as e-Sekolah, aspires to make changes in the management of Malaysian schools. Subsequent studies conducted by Nwangwu et al (2013) are related to information management systems used in Secondary School Administration in Nigeria. This study was conducted to look at the effectiveness of the school management information system as a tool used in school administration in the South Eastern educational zone of Saudi Arabia. It is a descriptive study to determine which secondary school administrators use management information systems in school administration.

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Timothy (2014) compared the pre-service and service teacher acceptance in technology services: mean invariant and latent assessment differences. It examined the factors that influence technology acceptance among pre-service and in-service teachers. Norahsikin (2014) look at the perceptions and attitudes towards the teacher's acceptance of school management system (SPS) technology. Hence, the objective was to obtain perceptions and attitudes towards the School Management System (SPS) technology among teachers. The study of Oye and Ab. Rahim (2012) was about the acceptance and use of ICT by university academics using UTAUT. Ahmad et al (2012), study the factor of acceptance of mobile government services (M-Government). Research also investigated the factors that influenced the desire to use m-government services among Malaysians.

The study conducted by Mehdi and Jafar (2013) is related to management information systems, challenges and solutions in organizations. The study emphasized the problem of the process of design, establishment, operation and development of management information systems in Iran which is very important in the decision-making of public and private sector organizations. The study conducted by Ivaylo (2013) was on information technology and managing organizational change. The study investigated the extent of organizational changes in the application of information technology still important for staff to manage the organization rationally. Despite that, a study conducted by Ermie and Aslina (2013) was on the use of online management information systems in Malaysian schools. Instilling the MIS help schools access information more efficient and faster. It also helps the management make efficient and effective decisions. A study conducted by Idros et al (2017) was related to the influence of communication technology on organizational change. This study is to identify the development of communication technology in human relations and bring about change in the organization.

A study conducted by Sara and Brown (2010) was to look at the implications for developing the use of ICT education in East Africa. Significant progress to incorporate ICT into attended school in five countries in the East African Community; Burundi, Kenya, Rwanda, Tanzania and Uganda was made. Recently, they have formulated clear policies and strategies to promote the usage in schools, with Burundi as an exception. This study showed the growing awareness about the lack of sufficient equipment to encourage change in the educational information system. In addition, the findings also showed that web changes -based data management systems allowed users to upload data directly to the central / parent database and allow users to obtain accurate data analysis and can be accessed when needed. Besides, a study conducted in Uganda and Botswana on the use of information technology in education management found that although the use of information systems is still in its infancy, positive effects were reported in the use of technology in teacher staff records management. In Botswana, it minimized the missing file cases (Kereteletse et al., 2008). A similar study conducted in Union City School District, a poor district in the United States, showed that school-community relationships became more effective when computers were installed in schools and homes. The purpose of an ICT education pilot project is to deliver information more effectively to stakeholders such as schools, parents, departments and ministries. Thus, encouraging more accountability and connectivity (Haddad and Jurich, 2002).

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Research Design

This study used a quantitative approach. This study was conducted by survey method through the distribution of questionnaires to obtain information and data needed to achieve all the objectives. The descriptive design aimed to provide an overview and description of the demographic characteristics of teachers as study respondents. In addition, the descriptive design also contributed information on the level of usability of SPS, acceptance of SPS and management of SPS changes in the use of SPS in schools. The study population was day secondary school teachers in Peninsular Malaysia. The sampling method used was stratified sampling. The states in the Peninsula divide into four Zones (North, South, Central and East). One state, per zone; one state education department (JPN) and one district education office (PPD). Lastly, for each PPD, five schools were chosen. All these were randomly selected. Next, sample size verification was carried out in two ways, namely using software Raosoft® and (Cochran's formula, 1977). The result of this calculation determined a total of 376 total sample sizes.

Research Instruments

The questionnaire of this study consisted of five parts, namely Part A (Demographics), Section B (SPS Usability), Part C (Receipt of SPS), Part D (SPS change management) and Part E (School Effectiveness). Part A contained demographic questions. Sections B, C, D and E, use the Five-Point Likert Scale ranking. Each question item had five answer choices ranging from; one for strongly disagree, two for disagree, three for neutral, four for agree and five for strongly agree. Table 1.0 shows the measurements for the items in the questionnaire.

Table 1.0
Study instruments based on questionnaire set

Respondents	Instrument (Part)
Teacher	Part A: Demographics
	Part B: Usability of SPS
	Part C: Acceptance of SPS
	Part D: Change management
	Part E: School Effectiveness

This questionnaire involved an intensity scale using a five-point Likert scale since the Likert type questions are well-known because they are easy to administer. The scale of the research questionnaire instrument was based on the intensity level as in Table 1.1:

Table 1.1

Level -Based Study Questionnaire Instrument Scale

Level	Abbreviation	Scale
Strongly disagree	SD	1
Do not agree	DNA	2
Neutral	N	3
Agree	Α	4
Strongly Agree	SA	5

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Research Analysis

i. Gender of Respondent

Table 1.2 below shows the number of female teachers (n = 280; 72.7%) more than male teachers (n = 105; 27.3%).

Table 1.2 Distribution of teacher respondents by gender

Gender	Frequency	Percent (%)	
Women	280	72.7	
Man	105	27.3	
Total	385	100	

ii. Age of Respondent

Table 1.3 shows the age of respondents (teachers) in the study conducted between 20 years to 51 years and above. Respondents (teachers) aged 41-50 years which is 126 people (32.7%). Respondents (teachers) aged 20-30 years were 95 people (24.7%); those aged 31-40 years were 104 people (27.0); and those aged 51 years and above, 60 people (15.6%).

Table 1.3

Distribution of teacher respondents by age

Age (Years)	Frequency	Percent (%)	
20-30	95	24.7	
31-40	104	27.0	
41-50	126	32.7	
51 and above	60	15.6	
Total	385	100	

iii. Teaching Experience

Overall, (n = 100, 26.0%) were teachers with 21 years of teaching experience and above. This was followed by having 1-5 years of teaching experience (n = 102, 26.5%); who have 6-10 years teaching experience (n = 53, 13.8%); who have teaching experience of 11-15 years (n = 58, 15.1%); and who had 16-20 years of teaching experience (n = 72, 18.7%).

Table 1.4

Distribution of teacher respondents according to teaching experience

Teaching Experience (Years)	Frequency	Percent (%)
1-5	102	26.5
6-10	53	13.8
11-15	58	15.1
16-20	72	18.7
21 and above	100	26.0
Total	385	100

iv. Educational Status of Respondents

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Table 1.5 shows the number of teachers with educational status. The bachelor's degree level is the highest (n = 362, 94.0%); followed by those with a Diploma in Education (n = 19, 5.0%), teacher training college (n = 2, 0.5%) and a master's degree (n = 2, 0.5%).

Table 1.5
Distribution of teacher respondents by educational level

Educational status	Frequency	Percent (%)
Colleges	2	0.5
Diploma	19	5.0
Degree	362	94.0
Bachelor	2	0.5
Total	385	100

v. School Effectiveness Levels

This section describes the findings obtained to achieve the objectives of the first study, which is related to the level of school effectiveness. The data analysis to measure the level of school effectiveness in the use of SPS is shown in Table 1.6. The results showed that only one item (question number six), "School Management System (SPS) provides "security information and privacy of transaction data", scored at a moderate level (mean = 2.39; sd = 0.95), while 17 other items scored at a low level. Overall, the data analysis found that the level of school effectiveness of the use of SPS is low (min 2.23 sd = 0.712). The overall findings indicate that the use of SPS on school effectiveness is low. This finding means that respondents viewed school effectiveness as low. The table of school effectiveness levels is as below:

Construct	Mean	SD	Level
Effectiveness of SPS	2.23	0.712	Low

Table 1.6 Level of school effectiveness in the use of SPS in schools among teachers

Item	Mean	SD	Percent (%)			ent (%)	
School Effectiveness			SD	DNA	N	Α	SA
1. I have learned a lot of new things in management with the existence of SPS in schools.	2.32	0.884	17.9	42.1	29.9	10.1	0
2. The School Management System (SPS) has increased my sensitivity as well as helped me	2.26	0.994	24.7	38.7	24.2	11.2	1.3
3. The School Management System (SPS) improves my efficiency while performing assignments in school.	2.28	0.963	21.3	42.1	25.5	9.4	1.8

	Item	Mean	SD				Pero	ent (%)
Sc	hool Effectiveness			SD	DNA	N	Α	SA
	The School Management System (SPS) has succeeded in increasing the overall productivity of	2.26	0.918	21.6	41.3	27.8	8.6	0.8
5.	teachers in schools. The School Management System (SPS) provides more systematic services to school management.	2.22	0.914	23.9	39.7	27.5	8.6	0.3
6.	The School Management System (SPS) provides security of transaction data and privacy information.	2.39	0.948	17.4	40.8	28.8	11.7	1.3
7.	Many organizational activities become more organized through the help of the School Management System (SPS)	2.23	0.939	24.4	38.2	27.8	9.1	0.5
8.	SPS can make the coordination of governance tasks more systematic in the organization.	2.19	0.916	24.2	41.6	25.5	8.3	0.5
9.	The development of the School Management System (SPS) in schools has been beneficial in expanding knowledge in performing tasks in schools.	2.26	0.953	22.9	39.7	26.8	9.6	1.0
10	. The School Management System (SPS) used in the organization can help and improve the performance and efficiency of	2.18	0.971	26.8	40.8	21.6	9.9	1.0

Item	Mean	SD				Pero	ent (%)
School Effectiveness			SD	DNA	N	Α	SA
management in							
schools.							
11. The School	2.15	0.937	27.3	40.5	22.1	10.1	0
Management System							
(SPS) assists in a							
variety of innovations							
to improve the quality							
of work performance.							
12. Sophistication in the	2.17	0.967	28.3	26.4	25.7	8.8	0.8
use of School							
Management System							
(SPS) gives employees							
an advantage to							
improve skills and job							
performance							
compared to manual							
use							
13. The use of School							
Management System	2.15	0.938	28.8	35.3	27.8	7.8	0.3
(SPS) can influence a							
better relationship							
between school staff							
and administrators in							
performing tasks in							
school.							
14. The School	2.26	0.943	22.9	40.0	26.2	10.4	0.5
Management System							
(SPS) is effective in							
terms of energy which							
can reduce the time of							
teachers in doing							
clerical matters.							
15. School Management							
System (SPS)	2.23	0.919	23.4	39.7	27.5	9.1	0.3
successfully reduces							
costs (such as							
inventory handling							
costs, administrative							
expenses, etc.)							
16. SPS managed to							
increase its capacity to	2.21	0.899	23.6	39.5	29.1	7.5	0.3
handle the increasing							
rate of activity (such as							
transactions,							

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

Item	Mean	SD				Perc	ent (%)
School Effectiveness			SD	DNA	N	Α	SA
population growth,							
etc.).							
17. The School							
Management System	2.22	0.934	24.7	38.7	27.8	8.1	0.8
(SPS) successfully							
improves the							
processes in the							
school organization.							
18. The School							
Management System							
(SPS) has successfully	2.17	0.980	29.6	33.8	27.5	8.1	1.0
improved school							
achievement.							
Overall Mean	2.23	0.712					
	(Low)						

vi. Level of SPS Usability (SPS system quality, SPS information quality, service quality, SPS usability and SPS satisfaction) among teachers

This section describes the findings obtained to achieve the second objective of the study, which relates to the level of usability of SPS among teachers. The measurement includes five constructs; SPS system quality, SPS information quality, service quality, SPS usability and SPS satisfaction. Overall, based on the findings from Table 1.7 below, it is found that the level of SPS Usability among teachers is at a low level of mean 2.19 (sp = 0.602). Thus, the respondents view the usability of SPS among teachers as at a lower level.

Table 1.7
Level of SPS Usability (SPS system quality, SPS information quality, service quality, SPS usage and SPS satisfaction) among teachers

Construct	Mean	SD	Level
SPS quality	2.19	0.788	Low
Information Quality	2.20	0.822	Low
Service quality	2.20	0.795	Low
SPS Satisfaction	2.19	0.818	Low
Uses of SPS	2.19	0.803	Low
Overall	2.20	0.602	Low

vii. Level of Acceptance of SPS (teacher performance expectations, teacher effort expectations, teacher social influence, and facility conditions) among teachers

This section describes the findings obtained to achieve the third objective of the study, which relates to the level of SPS acceptance among teachers. The measured SPS acceptance is based on four constructs; performance expectations, effort expectations, social influence and facility conditions. Overall, based on the findings from Table 1.8 below, it is found that the level of SPS acceptance among teachers is at a low level of mean 2.19 (sp = 0.602). This finding

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

means that respondents viewed the acceptance of SPS among teachers as at a low level. The following table is a conducted descriptive statistical analysis.

Table 1.8

Level of acceptance of SPS (teacher performance expectations, teacher effort expectations, teacher social influence, and facility conditions) among teachers

Construct	Mean	SD	Level
Performance Expectations	2.14	0.827	Low
Effort Expectations	2.25	0.803	Low
Social Influence	2.17	0.798	Low
Facility Conditions	2.21	0.816	Low
Overall	2.19	0.631	Low

The results in Table 1.8 show that four items measure the expected level of performance. These items is at a low level, between the means of = 2.10 - 2.18; sp = 0.892 - 0.963. The analysis shows that the level of performance expectations is still low. This finding means that respondents viewed that performance expectations are at a low level.

viii. Level of SPS Change Management (awareness, desire, knowledge, ability and reinforcement) among teachers

This section describes the findings obtained to achieve the fourth objective of the study, which relates to the level of SPS change management among teachers. The measured SPS change management stands on five constructs; awareness, desire, knowledge, capability and reinforcement. Overall, based on the findings from Table 1.9 below, it is found that the level of SPS change management among teachers is at a low level of mean 2.19 (sp = 0.631). This finding means that respondents viewed the SPS change management among teachers as low.

Table 1.9
Level of SPS change management (awareness, desire, knowledge, ability and reinforcement)
among teachers

Construct	Mean	SD	Level
Awareness	2.19	0.812	Low
Desire	2.14	0.836	Low
Knowledge	2.29	0.841	Low
Capabilities	2.20	0.778	Low
Consolidation	2.23	0.780	Low
Overall	2.21	0.631	Low

Discussion

a) Effectiveness of SPS

Based on the findings obtained for the level of school effectiveness, it is found that the available system in schools is not fully effective in terms of increasing teacher productivity, smoothing the work, making work more systematic and reducing management costs. However, teachers feel that with the use of SPS, school data and information are safer and more private than manual reports. Based on the study's findings, the item is moderate. Data and information in the form of reports may result in being dropped or misplaced, which makes them accessible to outsiders. Besides, overall findings indicate that teachers feel the use of

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

SPS is underused in management because their main task is to teach in the classroom. Hence, teachers think that the SPS does not help their daily assignments. Since the SPS is more helpful in school management, their existence might slightly help the school but not fully needed to improve school effectiveness.

Next, the findings on the statement about how the SPS successfully reduces costs shows that it is low. In the teacher's opinion, data and information required in the SPS still requisite the evidence in the form of a "hardcopy" paper (such as student achievement book, student attendance records as a whole), for the school records and as a reference to parents and guardians. In addition, there will be maintenance required for computers either repaired or replaced, hence amplifying the costs. Therefore, teachers argue that the above statement is not accurate since computers require frequent maintenance by technicians.

b) Usability of School Management System

Next, on the usability of SPS, it was found that the level of SPS system quality, SPS information quality, service quality, SPS usability and SPS satisfaction were also low. In general, researchers believe that the usability of the introduced SPS has not yet reached a low level in its use in schools. On top of that, the study shows that teachers disregard the usefulness of SPS while doing schools assignments. Unfortunately, it might be due to the significant problems that cause teacher assignments to become increasingly slow and problematic such as difficult access and repetitive data entry.

Besides, Wen and Chia (2008) discover that users have a negative perception, such as a newly introduced system having many gaps and not being strong enough to use. Based on these findings, users usually have a mindset that innovations in a system often need a lot of improvement to ensure that it can be operated consistently and effectively (Wen et al., 2008). Consistent with the findings of this study, most teachers also gave low perceptions of the applicability of SPS in schools. Thus, teachers viewing the usability of the SPS is still at a low level and needs more observation from superiors to enable the SPS to operate more effectively. According to Madiha (2014), there are also findings of researchers where there are some problems in the use of information management systems, such as lack of time, lack of confidence or skills, lack of training, lack of support from superiors and lack of technical support.

c) Acceptance of School Management System

Based on the findings on the acceptance of SPS among these teachers, the teachers' acceptance is still not good. In conclusion, the SPS available in schools is still not wholly accepted by the teachers, probably since they feel that SPS makes school assignments slower to complete. After all, they are not agile in typing or using laptops/computers compared to the manual (writing). In sum, the findings obtained low results related to using the school management system (SPS), allowing teachers to complete tasks more quickly.

In addition, their acceptance of the SPS usage is due to the lack of good exposure and support from the school administrators themselves. The lower result was obtained while experimenting on school administrators, who actively use the SPS and should provide better guidance in SPS to the teachers. Therefore, the administrators should set an example of using the SPS since they are the head of the school.

Vol. 12, No. 11, 2022, E-ISSN: 2222-6990 © 2022

d) School Management System Change Management

Since the results showed that the level of change management of SPS in schools is low, it defines that teachers still do not understand and know in detail about the need to change the use of SPS in schools. It might likely be because teachers are not given prior exposure to the use of SPS in schools. This is in agreement with the finding regarding teachers being aware and understanding the goals and objectives of the implementation of SPS in school management is to assist school staff in performing tasks more quickly.

Therefore, the suggestion to the ministry, they should do a clear and detailed explanation, especially to schools in rural areas, about the implementation of a new system. It will enable the teachers to get an early picture and prepare for the changes that are taking place in the school. It is also beneficial as the teachers can clearly understand the benefits of using SPS in school in their assignments. Moreover, with this early exposure, teachers were able to read and find out more information about the use of the system. Although SPS can overcome the problem of teacher work, such as the scope of clerical work, the management changes were found to be at a low level due to the possibility that teachers feel they need to do more work with SPS. There is also a suggestion for the ministry and administration to give teachers sufficient time in performing their duties since teachers do more tasks other than their essential task of teaching. Therefore, they feel that the use of SPS requires them to do a lot of tasks that need to be completed quickly according to the set time. In addition, the ministry needs to reduce the duties of teachers in the form of clerical such as filling in students' personal information in detail.

Conclusion

The applicability of SPS, acceptance of SPS and changes in SPS are still at a low level among teachers in schools, indicated by the mean values for these three aspects. Based on the findings for these three variables, the quality of SPS implemented in schools is still at an unsatisfactory level according to teachers' perceptions. This is based on the measured item for SPS has all the features and functions that are effective always works competently when used regardless of the time. Usually, it is easier to use at night, and some problems might arise at certain times. Therefore, among the suggestions given to the ministry, one of them suggests continuous monitoring to provide improvements from time to time in providing a more effective and quality system to teachers. Since it is crucial to ensure the developed system can be used effectively without any obstacles. Apart from the system's quality, acceptance by teachers play a significant role in the development of SPS in schools since they are the main users. Therefore, their perceptions of SPS acceptance are crucial to be measured.

References

Farid, A. (2016). Improve the usability of student information system at Aden University. *International Journal of Contemporary Computer Research (IJCCR),* Vol.1 Issue.1 (April, 2016).

Abdelrahim, M. Z. (2016). Adoption of Information Systems (IS): The Factors That Influencing IS Usage and Its Effect on Employee in Jordan Telecom Sector (JTS): A Conceptual Integrated Model. *International Journal of Business and Management*, 11(3), 25.

- Ahmad, A., Azan, N. M. Z., & Noraidah, S. (2012). Pemodelan faktor penerimaan perkhidmatan kerajaan mudah alih (m-kerajaan). (2012). *Asia-Pacific Journal of Information Technology and Multimedia*, 1(1), 21–37.
- Molla, A., & Licker, P. S. (2001). E-Commerce Systems Success: An Attempt to Extend and Respecify the Delone and Maclean Model of is Success. *Journal of Electronic Commerce Research*, Vol. 2, No. 4, 2001. Page 131.
- Yusof, A. M., & Hin, H. S. (2014). eSekolah: The Usability of School Management Application in Primary Schools from Malaysia's Perspective. https://www.researchgate.net/242353868
- Ausserer, K., & Risser, R. (2005) Intelligent Transport systems and services chances and risks.

 Proceedings of 18th ICTCT-workshop Helsinki
- Goyal, C., & Patwardhan, M. (2018). Role of Change Management Using ADKAR Model: A Study of the Gender Perspective in A Leading Bank Organisation of India. *Int. J. Human Resources Development and Management, Vol. 18, Nos. 3/4, 2018* 297.
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems* (Vol. 19, pp. 9–30). M.E. Sharpe Inc. https://doi.org/10.1080/07421222.2003.11045748
- Haddad, W., & Jurich, S. (2000). ICT for Education: Potential and Potency. In Haddad, W & Drexeter, A. (Eds.). Technology for Education: Potentials, Parameters and Prospects (pp. 28-40). Washington, DC: UNESCO.
- Hiatt, J. M. (2006). *ADKAR: A model for change in business, government and our community*. Loveland, Colorado: Prosci Learning Centre Publications.
- Kementerian Pendidikan Malaysia (2012). *Pelan Pembangunan Pendidikan Malaysia 2013-2025*.
- Kereteletse, B., Selwood, I., & Visscher, A. (2008). The Use of Information Technology for Educational Management in Uganda and Botswana. *International Journal of Educational Development*, 28 (1), 656-668.
- Shah, M. (2014). *Impact of management information systems (MIS) on school administration.*Science Direct 5th World Conference on Educational Sciences-WCES.
- Menchaca, M., Bischoff, M., & Dara-Abrams, B. (2002). A Model for Systemic Change Management in Education. *Jurnal Systemics, Cybernetics and Informatics*, 2(1).
- Babaei, M., & Beikzad, J. (2013). Management information system, challenges and solutions. *European Online Journal of Natural and Social Sciences 2013; ISSN 1805-3602*, pp. 374-381.
- Nuin, M. N. F., & Ambotang, A. S. (2019). Penerimaan Guru Dengan Pelaksanaan Sistem Maklumat Murid Dan Aplikasi Pangkalan Data Murid Dalam Pengurusan Data Murid. *International Journal of Education, Psychology and Counseling*, *4*(32), 180-196. doi:10.35631//jjepc.4320018
- Harun, N., & Abd Rahman, M. J. (2014). Kajian Rintis: Persepsi Dan Sikap Terhadap Penerimaan Teknologi Sistem Pengurusan.
- Radzali, N. F. J., Kenayathulla, H. B., & Ghani, M. F. A. (2018). Analisis Implimentasi Undang-Undang Siber Di Beberapa Buah Sekolah Menengah Kerian. *Jurnal Kepimpinan Pendidikan*, 5(1).
- Oye, N. D. A., Iahad, N., & Ab. Rahim, N. (2012). Acceptance and Usage of ICT by University Academicians Using UTAUT Model: A Case Study of University of Port Harcourt, Nigeria. *Journal of Emerging Trends in Computing and Information Sciences*, 3(1), 81–89.

- Prosci.com. (2017). Prosci Change Management | People. Change. Results. [Online] Available at: https://www.prosci.com/change-management
- Baharudin, R., & Ibrahim, M. (2016). Model Kejayaan Sistem Maklumat dalam Pengurusan Organisasi. *Journal of ICT in Education (JICTIE)*, 3, 1-12). ISSN 2289-7844
- Regan, E. A., & O'Connor, B. N. (2001). *End-user Information Systems: Implementing Individual and Group Work Technology.* (Second Edition). New York: Prentice Hall.
- Teo & Timothy. (2011). Technology Acceptance in Education: Research and Issues. Netherlands: Sense Publishers.