Digital Leadership and Teacher Commitment

Fatimatuzzahrah binti Roslan, Dr. Wan Hanim Nadhrah binti Wan Muda

Tun Hussein Onn University of Malaysia

DOI: https://dx.doi.org/10.47772/IJRISS.2025.91100321

Received: 27 November 2025; Accepted: 08 December 2025; Published: 09 December 2025

ABSTRACT

Drastic changes in education show management changes in terms of leadership in parallel with PPM 2013-2025 which has now entered the third wave of PPM (2021-2025). The study respondents consisted of 400 administrators working in 100 randomly selected schools. The findings of the study show that the level of commitment for the respondents is high. In this study, the instrument used is a questionnaire and uses the Statistical Packages For Social Sciences (SPSS) software to obtain more clear and easy-to-understand data. The findings of the study also show that the respondents' level of knowledge in digital leadership is at a moderate level. While from the aspect of teacher commitment, the respondent's level is moderate. From the findings of the study, there is a correlation between the respondents' commitment and digital leadership in day schools. The data obtained were analyzed using descriptive statistics, paired t-test, One-way and Two-way ANOVA, and Pearson's Correlation. The findings of the study also show that there is no significant difference in the level of digital leadership in making decisions based on the location and grade of the school. In conclusion, this study found that organizational support moderated the relationship between digital leadership and teacher commitment.

Keywords: Digital Leader, Teacher Commitment, Transformation, PPPM 2013-2025

INTRODUCTION

The Malaysian Education Development Plan (PPPM) gazetted by the Malaysian Ministry of Education has now entered its third wave (2021-2025). So as a school leader there needs to be a competitive attitude by improving skills, knowledge and mastery especially in information and communication technology skills. A great leader is a leader who dares to bring change to his organization by diversifying the use of technology and creating a conducive digital environment for the use of teachers and students at school. In this era of digitization, leaders must rise to the challenge by mastering digital technology in organizations to create a culture that is relevant, meaningful, transparent, engaging and inspiring. Leaders must also fight fear to face the digital world that is increasingly challenging and dominates the world.

Digital leadership does not mean that leaders need to focus on the use of modern and sophisticated technological tools, but refers to leadership that emphasizes the strategic thinking of leaders in leveraging available resources to improve what they do while making the necessary changes to foster a culture-focused organization. to outstanding involvement and achievement. It is a new leadership construct that grows out of the leader's symbiotic relationship with technology. The end result is sustainable change in programs, instruction, behavior and leadership practices with technology as a key element.

Administrators need to be digital leaders, that is, sensitive in planning and providing themselves and teachers with ICT or ICT competence to be the basis for the application of technology in the management process in schools and PdPc (Abdul Hamid et al., 2021). The impact of the explosion of technological development has also brought a large dimension of change in the leadership of school leaders. There are various terms used in digital leadership such as e-leadership, remote leadership, digital leadership, and virtual leadership (Mohd Yusri, Che Hasniza & Siti Zaimah, 2013, Neufeld, Wan, & Fang, 2010; Sheninger, 2014).

Teacher commitment refers to the continuation of association teacher with the school based on the existing emotional bond, observation of values and goals school as well as the readiness to realize the school's vision, mission and goals (Meyer and Allan, 1997). According to Mohamad et al. (2017), Teacher commitment in a

school is important and needs to be emphasized because of achievement Student academics and school performance can be improved with commitment teacher. An in-depth study of digital leadership style also allows for a more detailed and clear understanding of the implementation of this leadership. The relationship between digital leadership and teacher commitment needs to be studied because the teacher's commitment can determine the success of a school. According to Norhayati & Aida Hanim (2018) stated that this study should be carried out considering that there is still a lack of studies related to it.

School management in Malaysia is becoming more complex, the challenges that need to be faced are also increasing. Leaders need to ensure that their management is efficient in managing human resources, accurate in performance evaluation and effective in making decisions. However, administration that still operates manually will certainly face various problems. According to Cheever et al. al. (2014) have listed seven management problems if implemented manually:

i. Insufficient and inaccurate information.

ii. Information is not uniform.

iii. Problems retrieving stored information.

iv. It takes a long time to collect and process data.

v. Not enough time to analyze data and make plans.

vi. It is difficult to make inferences and integration between information.

vii. Unable to disseminate information within the specified time and in the correct format.

Through the use of the digitization system, there are actually many benefits that can be obtained from it. If stakeholders such as administrators or school leaders need data urgently, just "click" on the data storage either through the school dashboard developed using data studio. Existing data does not need to be stored in hard or large files, which can only be kept for five years and need to be disposed of. However, if it is digital, it can be kept for as long as possible as long as it gets a backup copy so that it is not easily lost or deleted accidentally. Indeed, those who are less skilled will take a little time to make it. But if it is made consistently and is easy to learn, it will be easy and it can be used to the best advantage.

PROBLEM STATEMENT

If seen at this time, many Headmasters have followed the National Professional Qualification for Educational Leaders (NPQEL) and most of them are generation X (1966-1980) and generation Y (1980-1995). It has been applied a variety of leadership skills that are geared towards future leadership. The problem occurs when what has been given to them, most of them do not apply what they receive. As a leader should emphasize digital leadership. Various applications that can be used to facilitate all parties. Indirectly it can learn new knowledge. Another problem that occurs in schools is because the school administration does not want to make changes because it is more about waiting for instructions from the superiors. According to Nor Hisham Hashim (2012), school academic achievement is the main indicator of the effectiveness of school administration.

The use of digitization systems has been incorporated into digital leadership to provide facilities to administrators and teachers more widely. In fact, teachers can learn new knowledge from the program. However, what can be seen is when the administrator himself does not give that exposure to the teachers on the grounds of wasting time and teaching and learning cannot be carried out. In fact, there are also teachers who are very skilled in using various applications that can have a great impact on all parties. It can be seen when there are online teaching and learning sessions during the Covid-19 Pandemic that hit the world in March 2020. The use of digitization systems that have been created can actually produce people who are more capable, skilled, highly confident, easy to learn new knowledge that can be applied in life a whole day.

A large gap can be seen where the world of education in Malaysia responds to the call and challenge from the

Malaysian Ministry of Education (KPM) between urban, urban, rural and rural areas. Digitization systems are difficult to access in rural and remote areas where most administrators are aged 37 to 50 years. This is because the facility to access does not cover the entire area, especially the inland area. So it can be seen that Malaysia's position is quite backward in the digitization system compared to other countries such as Singapore. According to the Senior Lecturer at the Center for the Study of Diversity in Education, Faculty of Education, Universiti Kebangsaan Malaysia (UKM), Dr Anuar Ahmad in an interview with a Berita Harian reporter, said the MoE also needs to ensure that a new learning culture is introduced among teachers and students, along with the digitization initiative that hot topic at the moment.

In terms of commitment, the study of Abdul Said and Katriani (2014) has raised the problem of heavy teacher workload. The burden is a repulsor to teacher commitment. When a teacher is burdened with a lot of work, the teacher that tries to reduce the burden from other aspects, for example integration technology in education. Awang's (2014) study related to commitment teachers also give an overview of the level of commitment of teachers in Malaysia only at a moderate level. This phenomenon is actually very worrying for everyone side since teachers can be said to be a pillar in education. Without teachers as implementers of education policy, our new generation will face big problem.

Most of the systems in the Malaysian Ministry of Education (KPM) are more about digitization where we can see some applications that are used as a platform to get information and data as quickly as possible. For example, Student Database Application (APDM), School-Based Assessment (PBS), Malaysian Education Quality Standard (SKPM), Student Identity System (SSDM), Psychometric Assessment (PPsi), Sports and Co-curricular Physical Activity Assessment (PAJSK), System Education Information (EMIS) and so on. However, every digitization that is displayed sometimes faces internet problems and causes it to be interrupted. That's why administrators especially need and must know the use of all digitization systems and not leave one hundred percent to the teachers to make them.

Objectives

The objective of this study is to:

i. Identifying the level of digital leadership of administrators towards teachers in primary schools.

ii. Identifying the level of commitment of teachers in primary schools.

iii. Identifying the relationship between administrators' digital leadership and teacher commitment in primary schools.

iv. Identifying the dimensions of digital leadership of administrators that contribute to the commitment of primary school teachers.

Questions

The research questions are as follows:

i. What is the level of digital leadership of administrators towards teachers in primary schools?

ii. What is the level of commitment of teachers in primary schools?

iii. What is the relationship between administrator's digital leadership and teacher's commitment in primary schools?

iv. What are the dimensions of the administrator's digital leadership that contribute to the commitment of primary school teachers?

LITERATURE REVIEW

Digital Leadership

Highly effective leadership gives satisfaction to followers and these conditions will result in excellent work performance. Employees will work hard so that the organization's objectives are achieved. All pressures and penalties can only increase productivity in the short term but in the long run will cause dissatisfaction and opposition. A head teacher needs to hold discussions and open opportunities for teachers to present new ideas to the plans made as a step to increase job satisfaction.

Digital leadership was first explored in the 1990s in the United States and has shown importance in the field of education (Thamarai et al., 2021). Technological leadership emphasizes the leader's ability to develop, manage, monitor and apply IT knowledge in improving performance institutions (Chin, 2010). In other words, digital leadership refers to the implementation and use of a leadership style that is parallel to the digital era, that is the integration of modern technology as a platform is preferred.

Various studies and efforts have been carried out in the country, especially by the Ministry of Education and Culture to study the leadership style that needs to be led by an administrator i.e. head teacher, which is compatible with the development of organizations in administration in Malaysia. Highly effective leadership gives satisfaction to followers and these conditions will result in excellent work performance. Employees will work hard so that the organization's objectives are achieved. All pressures and penalties can only increase productivity in the short term but in the long run will cause dissatisfaction and opposition. A Head Teacher needs to hold discussions and open opportunities for teachers to present new ideas to the plans made as a step to increase job satisfaction.

Apart from providing yourself with basic knowledge and skills in in the field of technology, technology leadership also shows its effectiveness with taking into account the preparation and maintenance of ICT equipment by the administrator in an effort to improve the integration of technology in schools (Faridah & Azlin, 2020). Ugur and Koc (2019) who argue that sophisticated ICT facilities should be provided for teachers in schools. To provide teachers in using more sophisticated technology in management and teaching, programs professional development and training in related services should be carried out regularly from time to time. Directly, the learning of the century 21 can be created.

Model NETS – A

According to Metcalf and Benn (2013), NETS-A is an educational technology standard specifically for giving disclosure to school leaders about their role in shaping technology environment at school. NETS-A (National Educational Technology Standard Administrator) is a framework technology leadership model issued by an organization called ISTE, its full name International Society of Technology in Education (ISTE, 2009). ISTE has made modifications and improvements to on NETS-A in 2009 (ISTE, 2009). Figure 1 shows the five dimensions already introduced in the NETS-A Model.

Figure 1: NETS-A model

Source: ISTE (2009)

The contribution of administrators' digital leadership to primary school teachers' commitment can be understood through the five core dimensions outlined in the NETS-A (ISTE) framework: visionary leadership, digital age learning culture, excellence in professional practice, systemic improvement, and digital citizenship. Each dimension influences teachers' affective, continuance, and normative commitment in distinct but interconnected ways.

Firstly, visionary leadership strengthens teachers' affective commitment by providing clear direction and shared goals for digital transformation within the school. When administrators articulate a compelling vision for digital integration and actively involve teachers in decision-making, teachers feel valued and emotionally connected to the school's mission. This sense of belonging enhances their willingness to contribute to school improvement efforts.

Secondly, the digital age learning culture dimension fosters supportive environments where teachers are encouraged to explore, experiment, and collaborate using digital tools. Administrators who cultivate a positive digital learning culture—by ensuring access to resources, modelling technology use, and promoting innovation—motivate teachers to remain engaged and committed. Such an environment enhances teachers' normative commitment, as they feel responsible for upholding shared professional expectations in a technology-enabled school ecosystem.

Another significant dimension is excellence in professional practice, which relates to administrators' efforts to provide continuous professional learning opportunities. When school leaders organise relevant training, mentorship, and capacity-building sessions, teachers develop greater confidence in using digital tools. This increase in competence reduces resistance to change and builds stronger continuance commitment, as teachers perceive the benefits of staying in an environment that supports their professional growth.

The fourth dimension, systemic improvement, contributes by ensuring that digital initiatives are implemented strategically and sustainably. Administrators who use data-driven decision-making, monitor progress, and continuously refine school systems help create stable, well-organised work environments. Such systemic support reduces teachers' workload challenges and fosters a sense of organisational reliability, which indirectly enhances teacher commitment across all three components.

Lastly, digital citizenship plays a role in shaping teachers' ethical and responsible technology use within the school community. When leaders emphasise online safety, digital ethics, and responsible communication, they create a trustworthy and professional digital ecosystem. Teachers who perceive their leaders as competent and ethical are more likely to remain committed to the organisation and uphold its values.

In summary, the five dimensions of digital leadership collectively strengthen teacher commitment by shaping teachers' emotions, professional responsibilities, and perceptions of organisational support. Visionary leadership and digital learning culture primarily boost affective and normative commitment, while professional practice and systemic improvement enhance continuance commitment. Digital citizenship, on the other hand, reinforces trust and shared values. Together, these dimensions highlight the pivotal role of digital leadership in sustaining a committed and future-ready teaching workforce in primary schools.

Teacher Commitment

In the field of Education, teacher commitment is a very important issue and is often heated on social media. According to Robby & Amrina (2019), some schools make teacher commitment one of the conditions in the initial appointment process of a teacher. Komitmne means an agreement or agreement to do something, responsibility and obligation (Maria & Ioannou, 2016). A teacher who has a high level of commitment, then with all his efforts the individual will improve his work performance and be loyal to his job. Through Nussa & Gabriel (2017), with high commitment, the teacher will work hard to achieve the school's goals and his emotions will be tied to their work.

Meyer and Allen's Commitment Theory (1997)

Meyer and Allen's (1997) Theory of Commitment has many used as a theory that underlies the study of staff commitment in a organizations, especially in the field of Malaysian education. According to Meyer and Allen (1991), the concept of commitment can be divided into three dimensions:

Affective Commitment: Affective commitment refers to the teacher's willingness and desire to form an alliance with the school (Meyer & Allen, 1997). When a person is concerned about the goals and tasks of the school and is interested in remaining in the school, then this affective commitment exists.

i. Continuous Commitment: Continuous commitment is the second dimension. From this dimension, teachers are believed to be committed to their responsibilities and the organization because of the high cost or great loss that must be incurred if one of the team members leaves the organization. Therefore, the relationship between peers should be maintained when exercising trust in school so that losses can be avoided (Meyer & Allen 1997). In the end, the individual will have the desire to stay working with the organization because the profits are more (Becker, 1960).

ii. Normative Commitment: The dimension of normative commitment is the last dimension. Normative commitment prioritizes feelings and responsibility towards work at school and also self-confidence. Teachers should be aware that it is the responsibility of a teacher to be highly committed to the task and organization. Normative commitment will usually be under the influence of the individual's previous experience, which is elements such as family and cultural practices that are brought into the organization (Wiener, 1982).

Conceptual Framework

The dependent variable refers to teacher commitment, while the technology leadership of the head teacher is a non-variable lean back the conceptual framework formed is based on standards technology leadership that has been set by the International Society for Technology in Education (ISTE). This standard is specifically for technology leadership of school leaders. As for the dependent variable, teacher commitment was studied based on Meyer and Allen's Commitment Model (1997). Figure 2 shows the framework conceptual used for this study.

Figure 2: Conceptual Framework of the Study

The conceptual framework underpinning this study delineates the theoretical linkage between administrators' digital leadership and teachers' commitment in primary schools. Anchored in the NETS-A framework established by the International Society for Technology in Education (ISTE), digital leadership is conceptualised

through five interrelated dimensions: Visionary Leadership, Digital Era Learning Culture, Excellence in Professional Practice, Systematic Improvement, and Digital Citizenship. These dimensions collectively represent the competencies required of contemporary school leaders to navigate and drive digital transformation within educational settings.

Visionary Leadership reflects the administrator's capacity to articulate, communicate, and operationalise a coherent digital vision that aligns with institutional goals. When leaders effectively communicate future-oriented technological aspirations, they cultivate a sense of shared purpose that strengthens teachers' affective commitment, fostering emotional attachment and identification with school objectives.

The dimension of Digital Era Learning Culture emphasises the cultivation of an organisational environment that supports continuous innovation, collaboration, and pedagogical experimentation through digital tools. A strong learning culture not only facilitates teacher engagement but also enhances normative commitment, as teachers perceive a moral and professional obligation to contribute to the school's digital advancement.

Excellence in Professional Practice highlights the crucial role of leadership in providing sustained and relevant professional learning opportunities. Administrators who prioritise ongoing capacity building empower teachers to develop technological competence and instructional confidence. This contributes to continuance commitment, whereby teachers recognise the value of remaining within an organisation that invests meaningfully in their professional growth.

Systematic Improvement involves the utilisation of data-driven decision-making, strategic planning, and iterative refinement of school processes. Effective systemic management reduces operational inefficiencies and supports a stable organisational climate. Such conditions reinforce teachers' overall commitment by minimising role stress and enhancing perceptions of organisational support.

The final dimension, Digital Citizenship, captures administrators' efforts to promote ethical, responsible and safe technology use within the school ecosystem. Leaders who model strong digital citizenship behaviours establish trust, credibility, and professional integrity, which in turn strengthen both affective and normative commitment among teachers.

The dependent variable, Teacher Commitment, is operationalised based on Meyer and Allen's Three-Component Model (1997), comprising Affective Commitment, Continuance Commitment, and Normative Commitment. The framework posits a unidirectional influence, whereby the five dimensions of digital leadership serve as potential predictors of teachers' commitment levels. The directional arrow in the conceptual model signifies this hypothesised causal relationship, suggesting that effective digital leadership practices cultivate a committed, motivated, and professionally aligned teaching workforce.

Overall, this framework offers a theoretically coherent foundation for examining how digital leadership behaviours shape teachers' psychological attachment, retention decisions, and sense of professional responsibility. By integrating the NETS-A leadership standards with the commitment theory of Meyer and Allen, the model advances a structured understanding of leadership–commitment dynamics within digitally evolving primary school contexts.

RESEARCH METHODOLOGY

Study Design

This study has been carried out by a quantitative researcher, which is to identify the level of digital leadership of the administrator and the teacher's commitment in carrying out the task. This study is a survey where information is obtained from a questionnaire that has been constructed. In this study, the researcher selected some samples from the population as respondents to answer the research questions and then analyze the results of the study.

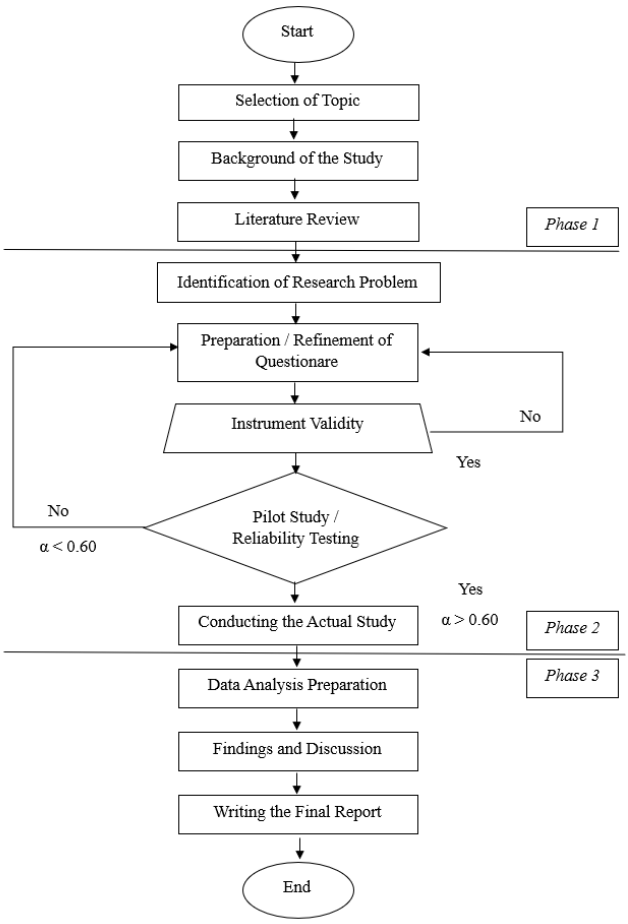

Figure 3: Operating framework flow chart

Sampling

The researcher has conducted a survey and only involved 400 head teachers and senior assistants from 100 schools in the State of Johor who were randomly selected to be used as survey respondents.

Study Instruments

The quantitative instrument used is divided into 3 parts, namely Part A which involves items related to demographic information of the respondents. Part B, on the other hand, involves the items of digital leadership in the use of digitization systems while Part C, involves the items of commitment of primary school teachers. The questions that are constructed are closed questions that only require the respondent to choose the appropriate answer provided according to the Likert Scale. Questionnaire forms that have been completed by respondents will be analyzed using Statistical Package for Social Sciences (SPSS) 26.0.

RESEARCH PROCEDURE

The data collection procedure will be carried out in accordance with research procedures and ethics where the researcher will obtain permission from the Johor State Education Department (JPN Johor). It is very important to ensure that the research conducted is transparent and gets the approval of the school on the topic of the study, which is digital leadership and the commitment of primary school administrators. In addition, this step is also evidence to convince the Johor NRD Director that this study is part of the study requirements. After that, the researcher will make an appointment first with the head teacher to request their cooperation in the process of distributing the questionnaire to the teachers. Since this study is in the form of a survey, the findings obtained are not intended to evaluate the performance of the schools involved.

After that the researcher will submit the analysis of this study to the Johor State Education Department to obtain permission to conduct the study in schools under the ministry. In addition, permission from the Director of the

Malaysian Ministry of Education will be given since the respondents involved are teachers who serve in Johor. The study will be conducted at the national school after all permission has been obtained from the parties involved. In addition, the scope of the study will also be informed to avoid misunderstandings that may occur later.

RESEARCH FINDINGS

The researcher has used the mean score average table of the five-level agreement scale issued by the Education Policy Planning and Research Division, Ministry of Education Malaysia to identify the mean level on each dimension. The specifications of the scale are as in Table 1.

Table 1: Min Ranking Level

No	Mean Score	Level
1	1.00 - 2.33	Low
2	2.34 - 3.67	Simple
3	3.68 - 5.00	High

Source: Mohd Majid, 2005

Mean and Standard Deviation Analysis of Respondent Demographics.

Table 2 below shows the statistical analysis of the t-test "Independent-Sample t-test" about the demographic differences of the respondents.

Table 2: Demographic Differences of Respondents

Gender	N	Min	Standard Deviation	df	t	Sig
Men	243	3.82	.412	155	.622	.155
Female	157	3.77	.489			

Significance Level p> -05

Based on Table 2, t-test analysis "Independent-Sample t-test" to distinguish the demographic mean score of the respondents. The test results show a value of t (155) =.622, p=.155. This shows that this level of significance is more significant than .05 (p>-05). Therefore, there is no significant difference in the demographic dimensions of the respondents. This means that these dimensions are equal and at a high level.

Mean and Standard Deviation Analysis of Digital Leadership Dimensions

Table 3 below shows the statistical analysis of the "Independent-Sample t-test" about digital leadership and teacher commitment.

Table 3: Differences in Digital Leadership

Gender	N	Min	Standard Deviation	df	t	Sig
Men	243	3.77	.576	165	.944	.255
Female	157	3.95	.597			

Significance Level p> -05

Based on Table 3, t-test analysis was used to distinguish the mean score of digital leadership in the use of digitization systems. The test results showed a value of t(165)=.944, p=.255. This shows that this level of significance is more significant than .05 (p> .05). Therefore, there is no significant difference in the dimensions of digital leadership between the two genders studied. The mean score and standard deviation for male teachers is (M=3.77, SP=.576) and the mean score for female teachers is (M=3.95, SP=.597). This means that the dimensions of digital leadership are the same and at a high level.

Mean and Standard Deviation Analysis of Primary School Teacher Commitment Dimensions

Table 4 below shows the statistical analysis of the t-test about the difference in the dimensions of teacher commitment between male and female administrators.

Table 4: Differences in Teacher Commitment

Gender	N	Min	Standard Deviation	df	t	Sig
Men	243	3.82	.553	165	.954	.832
Female	157	4.00	.561			

Significance Level p> -05

Based on Table 4, an "Independent-Sample t-test" t-test analysis was used to distinguish the mean score of the dimension of teacher commitment in digital leadership. The test results show a value of t(165)=.954, p=.832. This shows that this level of significance is more significant than .05 (p>.05). Therefore, there is no significant difference in the dimensions of teacher commitment in digital leadership between male and female administrators. The mean score and standard deviation for male administrators is (M=3.82, SP=.553) and the mean score and standard deviation for female administrators is (M=4.00, SP=.561). This means that the dimension of teacher commitment in digital leadership is at a high level.

DISCUSSION

The analysis of this study has shown that the level of digital leadership for male and female administrators is high with a mean score of 3.66 for male administrators and 3.86 for female administrators for the level of teacher commitment, which proves that digital leadership and primary school teacher commitment coincide with Stoner's Theory (1995). Stoner's theory is a systematic management process in carrying out an activity because it involves interrelated activities in order to achieve the desired goal.

An analysis of the challenge of digital leadership and the commitment of primary school teachers shows that they are interconnected and have a great impact. According to Nor Suhara Haji Fadzil & Jamil Ahmad (2010) stated that the involvement of the use and application of the digitization system promotes the overall development of individual teachers and students. The commitment of teachers through digital leadership has an impact on the school in achieving excellence in administrative management that is easy to use even if you are anywhere and anytime.

Based on this study, the first and second null hypothesis failed to be rejected because there is no significant difference between digital leadership and teacher commitment.

CONCLUSION

The conclusion that can be made from this study is that the commitment of teachers is very great in ensuring that digital leadership can be minimized so that it does not have a negative effect and has a good impact on the excellence of administrative management whether in the field of academics, personality and co-curriculum in schools. In addition, it can help teachers and students to obtain the necessary data more efficiently and accurately with a minimal amount of time in line with the call from the Malaysian Ministry of Education (KPM). The

importance of digitization in the field of management in schools is to facilitate all stakeholders and reduce the use of paper that will eventually be discarded and disposed of as well as the occurrence of waste compared to digitization that can be stored as long as needed without waste.

Digital leadership can be maximized in the way it is managed by determining the direction of the school that coincides with the direction of the Ministry of Education Malaysia (KPM) by ensuring that all areas, especially in rural and remote areas, get comprehensive digital coverage and can be used by all parties well and smoothly. So with that, the main objective of the Ministry of Education Malaysia (KPM) can be achieved with excellence. Administrators especially head teachers or principals need to show excellent work results before delegating authority to senior assistants and teachers to generate a digitalization system in their respective schools as a filing platform that is more conducive and relevant to the current of modernization and weathering VUCA changes in education.

The virtual applications that are used in this era can be continued and enriched with the knowledge of use so that all generations can apply in the best way and make it easier for all parties without finding fault with each other. Conducive and effective time management also plays a very important role by ensuring that this digitization system is well managed even during or when teaching and learning are carried out. Headmasters or principals should be able to manage time well by setting appropriate times. Every system that is developed needs to be made one so that it is user-friendly and does not trouble any party so that the level of management is at the highest level.

In addition, improve the use of digitization systems in rural and rural areas so that digital leadership can be carried out simultaneously by following the direction set by the school manager, i.e. the head teacher or the principal himself based on the problems found in a school because it is not the same between each other. Therefore, the Malaysian Ministry of Education (KPM) can delve into the problems that occur in schools in all areas so that they can be overcome as best as possible.

In the 12th Malaysia Plan (2022) presented by YAB the 9th Prime Minister, Dato' Sri Ismail Sabri bin Yaakob, is a continuation of the Eleventh Malaysia Plan (11th Plan) which was drafted based on the 'Vision of Shared Prosperity 2030' and became the line guide to long-term development. YAB Prime Minister's expectation in 2025 is that all civil servants, especially educators, are one hundred percent digitally literate and eighty percent of government services in education can be achieved in the best possible way. Futuristic leadership can also be coordinated with the National Digital Network (JENDELA) among other school administrators either in the country or abroad so that KPIs can be achieved.

With the existence of a continuous and effective digitization system, smart schools are born that use one hundred percent of the use of digitization that covers all fields and units that can facilitate all parties. A drastic improvement in digital leadership can indirectly make Malaysia a world-class institution that is in line with developed countries such as Canada, America, Korea and France. Education governance can also be translated in digitalization according to the current of change in education management.

REFERENCE

1. Abdul Hamid, S., Ismail, A., & Zaharudin, R. (2021). Head Teacher Technology Leadership Day Primary School: A Pilot Study In Kedah. JuPiDi: Journal of Leadership Education, 8 (3), 38-54.
2. Abdul Said Ambotang & Katriani Maijohn. (2014). A Study of Teachers' Perceptions of Task Distribution and Job Satisfaction. Journal of Educational Thinkers, 5, 19-33
3. Awang, MR (2014). The Influence of Senior Administrative Assistant Leadership Practices and a Healthy School Climate on Teacher Commitment in
Excellent Cluster National High Schools : Journal of Education Science , 1 (01), 133-145.
4. Becker, HS (1960). Notes on the Concept of Commitment. American Journal of Sociology, 66 (1), 32-40.
5. Cheever N. A., Rosen L. D., Carrier L. M., Chavez A. (2014). Out Of Sight Is Not Out Of Mind: The Impact Of Restricting Wireless Mobile Device Use On Anxiety Levels Among Low, Moderate And High Users. Comput. Hum. Behav. 37 290–297. 10.1016/j.chb.2014.05.002

6. Chin, J. M. (2010). Theory And Application Of Educational Leadership. Taipei, TW: Wunan
7. Daerah Tawau. ICOFFEA 2020 Conference Proceedings.
8. Faridah A. K. & Azlin N. M. (2020). Amalan Kepimpinan Teknologi Pengetua Sekolah Menengah
9. ISTE. (2009). NETS.A. International Society for Technology in Education, 2. ISTE. http://www.iste.org/standards/iste-standards/standards-for-administrators
10. Maria Eliophotou-Menon, & Ioannou, A. (2016). The Link Between Transformational Leadership And Teachers' Job Satisfaction, Commitment, Motivation To Learn, And Trust In The Leader. Academy of Educational Leadership Journal, 20(3), 1.
11. Metcalf, L., & Benn, S. (2013). Leadership For Sustainability: An Evolution Of Leadership Ability. Journal of business ethics, 112(3), 369-384.
12. Meyer, J. P. & Allen, N. J. (1997). Commitment In The Workplace: Theory, Research, And Application Sage, Thousand Oaks, Ca
13. Mohamad, R., Kasim, AL, Zakaria, S., & Nasir, FM (2017). Teacher Commitment and Teacher Job Satisfaction in High Achieving Daily Middle Schools and Underachieving in Kota Bharu District, Kelantan. Proceedings of the ICECRS, 1 (1)
14. Mohd Yusri, I., Che Hasniza, C. N., & Siti Zaimah, I. (2013). Model of e-Leadership, intra-team communication and job satisfaction among school leaders in Malaysia. In InternationalConference on Education & Educational Psychology 2013 (ICEEPSY 2013).
15. Neufeld, D. J., Wan, Z., & Fang, Y. (2010). Remote leadership, communication effectiveness and leader performance. Group Decis Negot, 227–246. doi:10.1007/s10726-008-9142-x
16. Norhayati MD & Aida Hanim A. Hamid. (2018). Technology Leadership of Principals and the Relationship to ICT Competence of Teachers of National Secondary Schools in Seremban and Kuala Pilah Districts. Proceedings of the National Seminar of the Council of Deans of Public University Education 2018 . http://www.unisza.edu.my/medc2018
17. Robby, Z., & Amrina, Z. (2019). the Enhancement of Interest and Learning Outcomes of 4rd Grade Students in Science Learning Using Problem Based Learning (PBL) Models at SDN 17 Sapan, BatangKapasDistrict, Pesisir Selatan Regency. Journal of the Faculty of Teaching and Education, 9 (2).
18. Thamarai T., Muhammad Faizal AG & Norfariza MR (2021). Technology Leadership , Director and Management of the Central Zone Vocational College, Malaysia. Asia Pacific Journal of Curriculum & Teaching, 9 (3), 34-49.
19. Ugur, N.G., & Koc, T. (2019). Leading and teaching with technology: School principals' perspective. International Journal of Educational Leadership and Management, 7 (1), 42. https://doi.org/10.17583/ijelm.2019.3758
20. Wiener, Y. (1982). Commitment In Organizations: A Normative View. Academy of management review, 7(3), 418-428.