

The Impact of Digitalisation of Road Transport Department (RTD) Service to Organization Effectiveness

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Abstract

The Road Transport Department of Malaysia is a government land division department which is supervised by Ministry of Transport Malaysia. The department is responsible in enforcing the Road Transport Act 1987 to ensure the safety of road users. Issuing of car plate numbers, road tax and licensing of drivers are part of the responsibility of this department. The organization undertakes the responsibility of providing a high quality service and management of revenue collection through a highly transparent and efficient approach. Being one of the government agencies that provides various services to the public, digitalization process is a must and significant to provide high quality services to customer. In a busy organisation like the RTD, it is important that the management can file, find, and store documents in a quick and effective way. However, it should be noted that the success of implementation of digital transformation in RTD would influence the organization effectiveness. Thus, this research is focusing on investigating the factors that influences the successfulness of digitalization in RTD. In order to achieve the objective, this research utilizes Technology Acceptance Model (TAM) to study the user's behavior. Perceived usefulness, perceived ease of use, relative advantage, compatibility and trustworthiness was identified as the factors that influence behavior intention to use among the staff in RTD. This research managed to develop six hypotheses. A quantitative research design was chosen with a 5 point Likert scale survey questions as the primary research tool. 208 respondents were selected within the staff of RTD in Melaka. The results of analysis showed that relative advantage, compatibility and trustworthiness are positively significant to the behavior intention to use. In addition, behavior intention to use is positively significant to the organization effectiveness. As for perceived usefulness and perceived ease of use, the

analysis showed no significant impact. Hence, the management should always encourage the usage of digitalization throughout the RTD agency. Consistent training and continuous learning of digital system will help the staff to favor digital system and continue doing so.

Keywords: Digitalization, Road Transport Department, Quality Service.

Introduction

Using a manual system in an organisation might be a very inconvenient practice in this digital age. In a busy organisation like the RTD, it's critical for management to be able to file, find, and save papers quickly and efficiently. In today's ever-evolving technology world, there are more effective ways to keep RTD organised while increasing productivity. The major disadvantage of manual document filing is the amount of space it takes up, which can be significant and disrupts productivity (Salmane, 2015). Furthermore, the records can be damaged, lost, or misplaced in a variety of ways. The loss of all RTD clients' vital information might result from a fire or natural disaster.

Furthermore, information and communication technology (ICT) has played an important role the catalyst for the development and innovation of a human civilization (Zafar, 2019). ICT technology seems to work to make the country's management and administration activities more systematic and organized (Cascio, 2016). Work document management, applications, processing and so on are faster, efficient and efficient. This not only saves time, but also saves energy and money on behalf of the government and the people themselves (Sam et al., 2016).

Internet-based information to improve the quality of government services (Suleiman, 2018). From a country's perspective Malaysia, e-Government is defined as network-based paperless administrative management multimedia linking civil service agencies in Putrajaya with service centers other public throughout Malaysia to provide efficient services to the people and the people business other than to facilitate cooperation between relevant agencies (Ramli, 2013).

Digital technology and the digital environment provide new options for detecting demands and offering RTD quality to organisations (Caroline and Sandra (2019). As a result, they have the potential to revolutionise road and transportation services in ways that will help the system achieve its objectives. The nature and consequences of digital road and transportation services might vary significantly from one situation to the next, emphasising the difficulty of assessing their contribution (Kersten et al. (2017). End users of digital road and transportation services, creators of digital road and transportation services, producers of road and transportation services, and governments are all included. At all levels, the success of digital transformations necessitates a thorough understanding of the two essential interacting components, namely "the road and transportation service" and "the digital" (Kersten et al). (2017). In this context, the entire process of their creation, production, funding, implementation, and evaluation must be carefully considered.

Some digital road and transport services provide novel solutions that, if thoughtfully developed and deployed in a cost-effective manner, can improve road and transport results

and contribute to the long-term sustainability of road and transportation systems (Ogryzek, et. al. 2020). While digital road and transportation services can have this effect, they are not required to do so. If this is the case for specific digital road and transportation services, evaluations and monitoring should be conducted (Eboli, L. and Mazzulla, 2012). The scope of these reviews and monitoring must be correctly defined. This is evidenced by the fact that, like other technologies, digitalization in RTD quality organisation effectiveness affects certain aims or groups positively while negatively affecting others when measuring the impact of digital transformation of road and transportation services.

Importance of Digitalisation in Public Sector

Digital technologies have advanced more rapidly than any innovation in our history – reaching around 50% of the developing world's population in only two decades and transforming societies. By enhancing connectivity, financial inclusion, access to trade and public services, technology can be a great equalizer. Digital technologies are being adopted by public organisations all around the world to support the public encounter; the contact between citizens and public officials (Goodsell, 1981). Scholars and policymakers alike have examined new potential for digitalisation of public service provision related with data mining, machine learning, sensor technologies, and service automation with much curiosity and excitement (Matheus, Janssen, and Maheshwari, 2018). These new digital technologies have the potential to achieve the fundamental aims of digital government, such as enhancing efficiency and service quality by reducing service lead times, increasing transparency, and providing seamless service across enterprises (Layne and Lee, 2001). Rapid technology advancements and policymakers' push for automation and digital self-service make it critical for e-government researchers to understand how digitalization affects people' interactions with public authorities in the context of public service delivery. The digitization of public services has been investigated in areas such as design within e-government (Grimsley and Meehan, 2007).

Malaysia has come a long way in the years since the inception of e-Government in 1997. The implementation of e-Government creates the starting point of a journey for transforming the government services by upending the way it operates modernizes and enhances its service delivery. From 2000 onwards, there are a plethora of online services developed and offered by agencies across the Public Sector that fulfil citizens and business' needs. As of June 2017, the number of online services provided by government agencies for citizens and business community has reached about 88.5% (11,401) services. Apart from that, Malaysia has been ranked 31 from 139 nations for Network Readiness Index 2016. Under the Government Usage in the ICT aspect, the country was placed 6 out of 139 countries evaluated. The report, Global Information Technology Report 2016, also commented that the strong performance continues to be supported by a government that is fully committed to the digital agenda and is seen to be ahead of its peers in terms of adopting latest technologies. The careful planning and relentless pushing for proliferation and the use of the digital technology across all government ICT programmes have yielded profound results in elevating our public service delivery performance.

Digitalization is often used interchangeably with "Digitisation," but for the sake of clarity, only digitalisation will be utilised in this thesis. Digitalisation is also defined as the transformation

of analogue data into binary numbers of 0 or 1: digital digits (Collin, 2015). In other words, a process of information conversion from the physical to the digital plane. Digitalisation is described as a "global megatrend that is fundamentally changing existing value chains across industries and public sectors" (Collin, 2015, p. 29) in contemporary literature, with terms like "mobile Apps, Big Data, Machine-to-Machine, Internet of Things, Industrial Internet, and Industry 4.0" being used to describe it (Collin, 2015, p. 29). When examining the actual change-process (Collin et al., 2015), examples of digitalisation may be found in the media, banking, telecom, and insurance industries as pioneering sectors in the midst of large-scale digital transformation (Collin, 2015).

Technology Acceptance Model (TAM)

According to Jeyaraj et al (2006), adoption of innovation has been intensively investigated via researchers and practitioners of many disciplines in which the technology Acceptance Model (TAM) is one of the most broadly every day and utilized models. Technology acceptance mannequin was developed for investigating the have an effect on of science on users "behavior". The mannequin focuses on perceived usefulness and perceived ease of use of the science in which proposed of two key factors that affect the individual's attitude towards the use of technology.

In addition, these of two symptoms which perceived usefulness refers to the man or woman regarded about the potential them for a certain science to be beneficial in everyday life, while perceived ease of use is refers to the level of a character that assured about to use particular technology with facing any difficulties (Davis, 1989). Furthermore, TAM in research of their proposed to provide an explanation for the plausible user's behavioral intentions and give an explanation for the causal links with belief of the usefulness of machine and ease of use of a device where humans the use of a technological innovation in day by day life.

According to Lee et al (2011), proven that science acceptance mannequin has a pivotal position in IT usage through pupil in studies, and indicated that Perceived Ease of Use and Perceived Usefulness of technological know-how functions have an effect on efficacy and mind set of pupil in their studies. In addition, the essential factors of perceived ease of use and perceived usefulness that have an effect on whether the novices continue gaining knowledge of in the long term, Lee et al (2011). The have an effect on of these two indications are not only on attitude, behavior intention, proceed getting to know and IT usage, but additionally perceived satisfactions that cited by means of (Liaw, 2008). In summary, it is important on model in forecasting student IT utilization and delight of getting to know by means of technology acceptance model.

Next, theoretical mannequin which be the first in advocate human psychological elements for shooting individual mind-set as determinants of technological know-how acceptance acknowledged as TAM. Moreover, it is already created at the man or woman degree when it used to be in the beginning developed and research into the effect of subjective norms is viewed to be one the predominant instructions for enhancement of TAM. So, TAM is used as a model in researched to attracts and investigating consumer requirement and factors, importantly, in usefulness of e-Government for the workers.

Perceived Usefulness

The classic TAM combines two primary constructs: perceived ease-of-use (PE) of technology and perceived utility (PU) of technology. PU in this study denotes the level to which digitalization is anticipated to deliver RTD effectiveness such as fast service and document simplification when compared to alternative types of manual documents, similar to Davis (1989). All of this comfort could lead to a more positive attitude toward digitalization and a greater desire to use it to improve RTD effectiveness.

H1: Perceived usefulness is positively related to the intention to use RTD digitalisation

Perceived Ease-Of-Use.

The staff's assessment of the work and time required to utilise the digitalization service, as well as the degree to which the technology is understandable or not, is referred to as Perceived Ease (PE) (Saarikko et. al., 2020). Given the low level of technology knowledge and literacy, digitalization should be straightforward and easy to understand. PE has regularly been found to have a direct impact on the intention to use digitalization in previous investigations. According to a TAM study, there is a favorable correlation between PE and digitization. The simplicity of use of a digitalization system may have a favorable impact on RTD efficacy.

H2: Perceived ease of use is positively related to the intention to use RTD digitalisation

Relative Advantage

Relative advantage is associated with time and cost; According to (Tornatzky and Klein (2012) "individuals use the aspect of cost of product or service to make the decision to trust or not to trust". The relative advantage of one technology over another is a key determinant of the adoption of new technology. The issue of relative advantage has been shown to have a positive relationship with adoption of digitalisation (Tornatzky and Klein, 2012). Thus in this study, the hypothesis for the third research question is relative advantage is positively related to the intention to use RTD digitalisation.

H3: Relative advantage is positively related to the intention to use RTD digitalisation.

Compatibility

Companies do not want compatibility concerns to become a problem when they deploy IT, therefore compatibility is a crucial factor of implementation as long as sufficient infrastructure is in place (Mustafa, et. al., 2020). The incompatibility of new technology with current standards and business operations is one of the biggest obstacles to IT adoption. The acceptance of new technology may be hampered or aided by previously presented ideas. Compatibility practices can help determine whether or not a new idea will be implemented. As a result, the goal of this study is to determine the compatibility of using digitization.

H4: Compatibility is positively related to the intention to use RTD digitalization

Trustworthiness

In many ways, trustworthiness is just as important as the organisation itself. Trustworthiness indicates the existence of good systems of digitalisation of an organization (Parviainen, et. al., 2017). In addition, in this study, the organisation which refers to RTD, trustworthiness in the organisation is not just something the RTD deserves, but also something the RTD should have in this new Industrial Technologies 4.0.

H5: Trustworthiness is positively related to the intention to use RTD digitalization

Intention to Use

The final hypothesis, is with the higher the intention to use digitalisation among the employees, the organisation becomes more effective. This is because the communication between organizations and employees can be enhanced by sending reports, live meetings from outside the office, email access and programming remote applications. The employees may use the technologies that enables them to perform tasks faster and systematically. Also, the efficiency and advantages of cost factor technology should also be taken into account for the organisation to be more effective.

H6: Intention to use is positively related to the RTD organization effectiveness

Conceptual Framework

Research framework will be for implementing the steps taken throughout the research. It is normally used as a guide for researchers so that they are more focused in the scope of their studies. Figure 1 shows an operational framework that will be followed in this study.

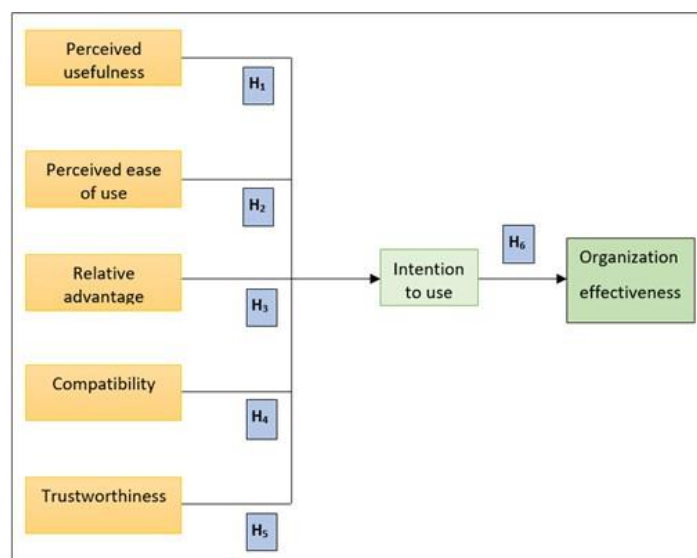


Figure 1: Proposed Conceptual Framework.

Source: Jeyaraj A. et al., (2006).

Sample and Data

This research is based on a quantitative research method and uses questionnaires to collect the required data. According to Tuckman (1976), the questionnaire method is a powerful way to get information from respondents. Apart from that, the result can be interpreted easily according to Grinnell, (2010). Along with that, descriptive research is also an appropriate

technique to study the questionnaire data. The questionnaire that selected is the Cultural Diversity Awareness Inventory (CDAI), which was published by Gertude B. Henry, from the Michigan Reading Association, in October of 1986. Quantitative methodology is defined as a scientific method, and its grounds can be identified in a positive paradigm (Grinnell, 2010).

In order to select the research sample, the suitable population should be the staff of RTD in Melaka, Malaysia. The population of a research refers to the number of individuals, groups, organizations, or even things that the research aims to cover in the area of the research (location) (Grinnell, 2010). On the other hand, the sample is a certain number of individuals in a population that represents the population participating in the research. This research will apply the number of sample provided by Krejcie and Morgan (1970) as display in Figure 3.1. As suggested by Krejcie and Morgan (1970) the total number of sampling needed is 159 to 162 for population of 277.

According to Creswell (2009), data collected by quantitative approach can be analyzed by using computer software 'Statistical Package for Social Science' (SPSS). Therefore, in this study, the statistical data analyze will be the using the SPSS in order to produce accurate and error-free results.

The five independent variables (X), which are perceived usefulness (X1), perceived ease of use (X2), relative advantage (X3), compatibility (X4), and trustworthiness (X5), are known as the independent variables (X). The regression equation is established to show how the independents variables overall fit and examine the relative contribution of each of the predictors to the total variance explained. The equation of multiple regression of this study shows below:

$$\text{Equation: } Y = a + bX1 + cX2 + dX3 + eX4 + fX5$$

Results and Discussions

Table 1 indicates the descriptive statistics of perceived usefulness, perceived ease of use, relative advantage, compatibility, trustworthiness and use intentions influencing quality organization effectiveness towards green eco lighting products. Compatibility, trustworthiness and use intentions have the highest value of the mean, which is 4.04, followed by perceived usefulness and relative advantage, which are 4.01 respectively. However, perceived ease of use has the mean value of 3.99, which is the lowest mean value. Other than that, standard deviation means how measurements for a group are spread out from the mean. The lower the standard deviation value, the more of the numbers are closer to the average. The result shows that perceived ease of use has the lowest standard deviation value of 0.80, followed by relative advantage, which is 0.81. However, the standard deviation value of perceived usefulness and compatibility is 0.82. Use intention has the highest value of standard deviation, which is 0.85. All the value of standard deviation indicates that respondents do not deviate from their mean.

Table 1
Descriptive Statistics for Each Independent Variables

<i>Independent Variables</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Dev.</i>
perceived usefulness	208	1.50	5.00	4.01	0.82
perceived ease of use	208	1.50	5.00	3.99	0.80
relative advantage	208	1.75	5.00	4.01	0.81
compatibility	208	1.50	5.00	4.04	0.82
trustworthiness	208	1.25	5.00	4.04	0.84
e use intention	208	1.25	5.00	4.04	0.85

Source: from SPSS.

Multiple Regression Analysis

The results of coefficient analysis of independent variables and dependent variable. Based on the outcomes, three variables show positively significant determinants that influence the use of intention except perceived usefulness ($p = 0.249$) and perceived ease of use ($p = 0.262$). Trustworthiness has the highest beta values, $\beta = 0.315$ indicates that trustworthiness has the highest impact towards the use of intention. Next goes to relative advantage at $\beta = 0.314$, then compatibility where $\beta = 0.293$.

Based from Table 2, there are positively significant relationship between use intention and organization effectiveness as the value of p is less than 0.05 and beta value is 0.808. From the results of the descriptive of perceived usefulness, this could mean that although the most of the respondents believe that digitalization do enhance the work, some of them consider that digitalization may not help them to complete the work faster. This also implies that digitalization helped the staff to enhance their work productivity comparing to manually doing their work. Still, adjustment and improvement of the digitalization may need so that the work could be done faster and eventually increase the productivity of the staff.

For perceived ease of use, most of the respondents may have difficulties while learning the digitalization during their work. Thus, training may be necessary for them. Training could be done regularly so that all of the staff could attend and improve themselves. Continuous learning may be necessary because of the dynamic changes of the technologies thus, they will not be outdated and left behind due to the rapid changes of technology. Although, once they have mastered the technicalities, it would be easy for them to understand the process.

According to the results of descriptive relative advantage, most of the respondents believe that interactions is easier but they may not have greater control by using digitalization. Interactions and communications from one another, whether it is interdepartmental or intradepartmental, or between the public and staff, has been easy by using digitalization.

However, it also implies that communication through the system are not private and could be accessible to all from the finding. Perhaps the system could be adjusted so that any communication within a department should only accessible form the related staff only and there are barriers that limits the public’s access.

The results for compatibility indicated that the digital system has fitted well on the most of the respondents’ interacting with one another whether it is with their colleagues or with the public. Work could be done smoother when the interaction and communication between governmental services and the public. This may help to ease and smoothen the process and services provided by the RTD towards the public. However, there may be concerns among the respondents on ways of gathering data through digitalization. If the data could be gathered more easily and could fit well among the respondents, it may increase their productivity and effectiveness.

Finally, results of trustworthiness indicates that respondents may have concerned regarding the credibility and dependability of the digitalization of their work. They may have concerned if the data is leaked in the future and released by the irresponsible people. This could have jeopardized the customers and public personal information may harm their safety. Furthermore, with the dynamic rises of technology, it also increases the amount of hackers and their capabilities. Thus, the system should be equipped with the state of the art firewall that could prevent any breached in the future.

Table 2
Coefficient of Multiple Regression

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	.234	.147		1.598	.112
Perceived usefulness	-.079	.068	-.078	1.157	.249
Perceived ease of use	.089	.079	.085	1.125	.262
Relative advantage	.321	.083	.314	3.867	.000
Compatibility	.297	.078	.293	3.798	.000
Trustworthiness	.317	.071	.315	4.484	.000

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	.647	.173		3.748	.000
Use intention	.833	.042	.808	19.713	.000

Source: from SPSS.

H1 Accepted

Regrettably, the researcher did not find a significant relationship between perceived usefulness and the intention to use digitalization among the staff of RTD Melaka. A similar pattern of results was observed in the study of (Carter and Belanger, 2005). However, the results show broadly difference traits from the study of Ramayah and Ignatius (2005); (2016); and Alkali et al., (2017). Beta of standardize coefficients for perceived usefulness is -0.078, which shows there is a negative relationship between perceived usefulness towards use intention. This means that higher level of perceived usefulness would not give a significant impact of use intention of digitalization among staff of RTD Melaka. Although the results may display that perceived usefulness seems insignificant to the use intention of digitalization among RTD staff, it may be because the staff did not fully understand the importance of digitalization. Hence, training and awareness should be imposed regularly and continuously in RTD so that the staff will adapt and eventually understand the significance and importance of digitalization in government services such as RTD. However, this could signal that this construct need more work, perhaps as performance expectancy, as indicated by (Venkatesh et al., 2003).

H2 Accepted

Alike perceived usefulness, perceived ease of use also did not have significant impact on the use intention of digitalization among staff in RTD Melaka. Compared to the previous studies by Carter and Belanger (2005); Ramayah and Ignatius (2005); (2016); and Alkali and Mansor (2017), the result is remarkably different. The previous author has showed that perceived ease of use is significant to the use intention. This means that higher level of perceived ease of use would not give a significant impact of use intention of digitalization among staff of RTD Melaka. Beta of standardize coefficients for perceived ease of use is 0.085 which shows that the variable did not have significant impact towards use intention. Based on their educational background and experiences in computer and internet use, the reason could be related to the employees' competency and expertise in computer and internet use. Furthermore, this could indicate that employees do not believe the digital system has provided them with an edge over the manual approach in terms of work efficiency. So, consistent training may be needed for all staff so that they could do their work easily using the digital system. Besides, this indicates that the digital system should be easy to navigate and browsed thus allowing users to quickly and effortlessly find the information or services they seek. If a user becomes frustrated because of the inability to seamlessly locate information and complete transactions, this will decrease his or her intention to adopt to digital system under the government services (Carter and Belanger, 2005).

H3 Accepted

Findings from this study showed that relative advantage is one of the significant factors of use intention among RTD staff. Prior studies by Bandara and Amarasena (2018) also produced the same results. On the other hand, there is contrast in studies by (Carter and Belanger, 2005; Sinniah et al 2019). Beta of standardize coefficients for relative advantage is 0.314, which shows that relative advantage has the second highest impact on the use intentions of digitalization. This means that higher level of relative advantage would give a significant impact of use intention of digitalization among staff of RTD Melaka. This could imply that, when the staff of RTD Melaka used the digital system, there can received many advantages compared to the manual system. Not only that, their work also become more

efficient and easy to gather information and interacting through digitalization. Thus, in order for the management to encourage their employees to continue using digital system over manual system, enhancement and improvement could be made in terms of relative advantage of the digitalization

H4 Accepted

Compatibility has been identified as significant predictor to the use intention of digitalization among staff in RTD Melaka. The result is similar with prior studies by Carter and Belanger (2005), although in their study, compatibility was the most significant in the study. In this study, compatibility was the third most significant as the beta value of standardized coefficient is 0.293. A similar pattern of results was also observed in the study of Lee et al., (2011). Thus, this indicates that use intention of digitalization are driven by whether the technology fits with their likeness in handling and doing work. When a staff find that digitalization fits the way they like in terms of work, they are likely to use this mode of working. To increase their intention to consistently using digitalization, the management could provide information on how to interacting using digitalization among the co-workers or the public. The compatibility of the personnel will be improved by making the interfaces and interactions with the sites consistent and well-fitting throughout the agencies.

H5 Accepted

Trustworthiness was the most significant variable in use intention of digitalization among the staff of RTD. The beta value of standardization coefficient of trustworthiness is 0.315. This means that, when the trustworthiness and confidence increase in digitalization it will encourage more staff of RTD Melaka to adapting to digital system compared to manual system. The developer of the digital system adopted by the RTD agency should ensure the system is dependable, reliable and trustworthy. Then it is the job of the management in RTD agency to convey the same message to their staff on the system's assurance. This will create a confidence among the staff to use the digital system compared to the manual system. The result is similar with the study of Carter and Belanger (2005), where trustworthiness is deemed significant to the use intention of user. There are also similar traits of results from prior study by Fakhoury and Aubert (2015), where consumers will definitely rely on their perception of trust when providing confidential and personal information electronically.

H6 Accepted

In this study, the use intention of digitalization shown a significant impact to the organization effectiveness of RTD Melaka. The beta value of standardization coefficient is at 0.808 suggesting strong relationship between the variables. Thus, it is believing that, in order for the management to increase the organization effectiveness in RTD Melaka, they should encourage the use intention of digitalization among their staff and employees. The ultimate benefit for using the digital system would enhance the effectiveness of RTD in terms of providing a systematic manner to the public while establishing and enforcing the road and transport law by following the standards.

Conclusion

The empirical analysis demonstrated several major findings. The study implies that relative advantage, compatibility and trustworthiness are the significant determinants of use intention of digitalization among the staff in RTD Melaka. Interpretations based on these findings and implications will be discussed.

As relative advantage was observed to be significant to the use intention of digitalization, thus designer and developer of digital system may focus on designing both useful and easy-to-use system that could cater all levels of staff (Carter and Belanger, 2005). If the staff find digital system easy to use and in terms of interactions and gathering information for their work, they will discover that digitalization is more favorable compared to manual system and will continue doing so.

Likewise, in compatibility, staff or employees will favor to use digitalization if the system is matching with their lifestyle (Carter and Belanger, 2005). Therefore, the developer and designer of the digital system must not ignore the compatibility of digitalization with individual lifestyle and preference. Hence, the management should always listen to the feedback, response, and criticism by the employees regarding the digital system. Comments from the employees and staff could be conveyed to the system developer so that the digital system could be improved to their liking.

As trustworthiness had the most significant impact, the management should ensure that security and the privacy of the data could not be breached or leaked by irresponsible person. The confidence of the staff should be increased so that they will not have any doubt when entering undisclosed or personal information (Fakhoury and Aubert, 2015). Thus the developer may design a system that have enough security protection and also accessible only by authorized person by commanding password or any security protocol. This will also increase the public trust as RTD is providing services to the public.

Finally, the study revealed that use intention of digitalization would affect greatly towards organization effectiveness. Hence, the management should always encourage the usage of digitalization throughout the RTD agency. Consistent training and continuous learning of digital system will help the staff to favor digital system and continue doing so. Besides, the management should always consider relative advantage, compatibility and trustworthiness of the system, as they are the determinants of the digitalization.

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References

- Alkali, A. U., Mansor, A. and Naha, N., 2017. Interactivity and Trust as Antecedents of E-Training Use Intention in Nigeria: A Structural Equation Modelling Approach. *Behavioral Sciences*, 7(3), p.47.
- Bandara, U. C., and Amarasena, T. S. M. (2018) October. Impact of Relative Advantage, Perceived Behavioural Control and Perceived Ease of Use on Intention to Adopt with Solar Energy Technology in Sri Lanka. In 2018 International Conference and Utility Exhibition on Green Energy for Sustainable Development (ICUE) (pp. 1-9). IEEE.
- Caroline, P., and Sandra, P. S. (2019). How Are Digital Technologies Changing Innovation? OECD Publishing. No.74.
- Carter, L. and Belanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information systems journal*, 15(1), pp.5-25.
- Cascio, W. F., and Montealegre, R. (2016). How Technology Is Changing Work and Organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 349-375
- Collin, J., Hiekkanen, K., Korhonen, J. J., Halen, M., Itala, T., and Helenius, M. (2015).
- Creswell, J. W. (2009). Mapping the field of mixed methods research.
- Davis, Fred D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, pp.319-340
- Eboli, L. and Mazzulla, G., (2012). Performance indicators for an objective measure of public transport service quality, *European Transport \ Trasporti Europei*, 51(3).
- Fakhoury, R. and Aubert, B. (2015). Citizenship, trust, and behavioural intentions to use public e-services: The case of Lebanon. *International Journal of Information Management*, 35(3), pp.346-351.
- Goodsell, C. T. (1981). *The public encounter: where state and citizen meet*. Indiana University Press.
- Grimsley, M. and Meehan, A. (2007). e-Government information systems: Evaluation-led design for public value and client trust. *European Journal of Information Systems*, 16(2), pp.134-148.
- Jeyaraj, A., Rottman, J. W. and Lacity, M. C. (2006). A review of the predictors, linkages, and biases in IT innovation adoption research. *Journal of information technology*, 21(1), pp.1-23.
- Kersten, W., Blecker, T., and Ringle, C. M. (2017). Digitalization in Supply Chain Management and Logistics: Smart and Digital Solutions for an Industry 4.0 Environment. *Proceedings of the Hamburg International Conference of Logistics (HICL)*, No. 23
- Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), pp.607-610.
- Layne, K., and Lee, J. (2001). Developing fully functional E-government: A four stage model. *Government information quarterly*, 18(2), pp.122-136.
- Lee, Y. H., Hsieh, Y. C. and Hsu, C. N. (2011). Adding innovation diffusion theory to the technology acceptance model: Supporting employees' intentions to use e-learning systems. *Journal of Educational Technology & Society*, 14(4), pp.124-137.
- Liaw, S. S. (2008). Investigating students' perceived satisfaction, behavioral intention, and effectiveness of e-learning: A case study of the Blackboard system. *Computers & education*, 51(2), pp.864-873.

- Matheus, R., Janssen, M. and Maheshwari, D. (2018). Data science empowering the public: Data-driven dashboards for transparent and accountable decision-making in smart cities. *Government Information Quarterly*.
- Moore, G. C. and Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information systems research*, 2(3), pp.192-222.
- Moore, M. H. (2005). Break-through innovations and continuous improvement: Two different models of innovative processes in the public sector. *Public Money and Management*, 25(1), pp.43-50.
- Mustafa, R., Sam, M.F.M., & Feisal, A. F. (2020). The Factors Financial Institutions Rejected Malaysian SMEs Loan Application. *Journal of Environmental Treatment Techniques*, 8(1), 162-266
- Ogryzek, M., Adamska-Kmie, D., and Klimach, A., (2020). Sustainable Transport: An Efficient Transportation Network—Case Study. *Sustainability*.
- Parviainen, P., Tihinen, M., Kaariainen, J., and Teppola, S. (2017). Tackling the digitalization challenge: how to benefit from digitalization in practice. *International Journal of Information Systems and Project Management*, 5(1), 2017, 63-77.
- Ramayah, T. and Ignatius, J. (2005). Impact of perceived usefulness, perceived ease of use and perceived enjoyment on intention to shop online. *ICFAI Journal of Systems Management (IJSM)*, 3(3), pp.36-51.
- Ramli, R. M. (2013). Hybrid Approach of e-Government on Malaysian e-Government Experience. *International Journal of Social Science and Humanity*, 2(5), 366-370.
- Saarikko, T., Westergren, U. H., and Blomquist, T. (2020). Digital transformation: Five recommendations for the digitally conscious firm. *Business Horizons*, 63(6). 825-839.
- Salmane, L. A., (2015). Ethical Aspects of Sustainability. *Latgale National Economy Research* 1(7):5 DOI: 10.17770/Iner2015vol1.7.1176
- Sam, C. S., Chandrika, C., Murray, G., Caroline, L., and Alexa, S. (2016). Intervening to change behaviour and save energy in the workplace: A systematic review of available evidence. *Energy Research & Social Science*. Vol. 17, 30-51.
- Sinniah, S., Makhbul, Z. K. M., Subramaniam, M., Perumal, G., Kumar, R., and Mohamed, M. H. (2019). Intention to use fingerprint system in electronics industry. *Humanities and Social Sciences Reviews*, 7(5), pp.536-544.
- Suleiman, M. M. (2018). A Review of Improving Good Governance through ICT Revitalization. The 1st National Conference Organized by Research & Academic Development Committee, Sorted Rano, Kano State.
- Tuckman, H. P. (1976). *Publication, Teaching, and the Academic Reward Structure*.
- Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, pp.425-478.
- Zafar, S. M. T. (2019). Role of Information Communication Technology (ICT) in Education and its Relative Impact. *International Journal of Engineering Research & Technology*, 7(4), 1-10.