

Adopting Dashboard Solution Reporting Mechanism: A Case of ABC Legal Advisory Department

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Abstract

In the wake of the new norm due to the COVID-19 pandemic, many industries are affected with the new approach in doing business and operation when online and virtual platforms become ubiquitous. ABC legal advisory department is a department established under a statutory body in Malaysia. The officers under the legal advisory department are facing challenges in form of technological barriers to overcome workloads, pressures from critical deadlines, and complex matters requiring immediate response but thorough legal analysis. Currently, the rise of technology often brings innovation and benefits to an organisation. The objective of this study is to examine the implementation of dashboard solution reporting mechanism to the legal advisory department. The methodology for this study involves quantitative method where distribution of questionnaire is employed. This study enabled the legal advisory department to overcome obstacles to meet the ever-increasing appetite of the organisation and provided the management with opportunities to have an overview of the operational activities. The results show that dashboard is a good solution as a reporting mechanism for the department. It is recommended for the dashboard solution to be utilised to achieve real-time update and enable the management to make strategic and informed decisions in a swift manner.

Keywords: Technology Acceptance, Dashboard Solution, Adoption, Integration

Introduction

The legal advisory Department (Department) is a department that is established under a statutory body in Malaysia. The Department's focus is to provide core legal support and services to the body that is crucial for its regulatory roles and functions as well as operational activities. The Department's line of reporting has shifted numerous times throughout the years based on the restructuring of the organisation. Nevertheless, this does not dampen the role of the Department but instead prompted a dynamic transformation when many of the core operational activities rely on the Department's support and services. The Department has evolved from merely providing a 'business-as-usual' legal support and services to being part of the organisation's strategic management team for business decision making purposes. The officers working in the Department are in-house legal counsels and assistant executives. The assigned tasks vary depending on the required functions to be performed. The role of an

in-house legal counsel in the legal market has evolved tremendously over the years as recent studies revealed that the legal market is a dynamic, fast-changing, environment due to a combination of technology and globalization. Cybersecurity and data privacy and media and technology are the two red-hot practices in the legal market (Nadimpalli, 2017). The officers are the quintessence of the red-hot practices in the legal market where technology and law converged immensely.

Despite the nature of the job in dealing with various legal matters related to technology and law, the officers often faced challenges including technological barriers to overcome workloads, pressures from critical deadlines, and complex matters requiring immediate response but thorough legal analysis. The usage of technology to overcome the challenges faced by the Department is still unclear as there is a lack of experimentation and adoption of technology in the Department's day-to-day operation. The delay in updating the status also had created some accumulations or backlogs and contributed to the lack of real-time update. There is no integrated platform that enable the officers to consolidate their status update reports for the management's viewing. At present, a manual process is undertaken by the assistant executive on a weekly basis to consolidate the officers' reports. The different formats adopted by the officers also pose some problems for consolidation as different portfolios required different formats of reporting. Some reports are prepared in Excel sheets while others may be prepared in Word format. In addition, the huge data repository also contributed to the lack of real time update as the process of combing the documents and updating the records are time-consuming and not efficient for the purpose of quick information retrieval.

The application of technology via a dashboard solution to initiate an automation of processes in the Department's day-to-day functions can solve the above issues. The use of the dashboard solution can certainly assist the officers to streamline their work effectively and to provide real-time update. In addition, the use of technology can also improve the management's decision based on the available information and remedy any loopholes that may exist in the Department's current processes and reporting mechanism. Based on the above, the research objectives are stated as per below:

- a) to examine the issues of reporting mechanism in ABC legal advisory department.
- b) to recommend the implementation of dashboard reporting in ABC legal advisory department.

Literature Review

In the wake of the new norm due to the COVID-19 pandemic, many industries are affected with the new approach in doing business and operation when online and virtual platforms become ubiquitous. The increasing demand for more bandwidth and network capacity had driven the organization to fiberize the nation to ensure commendable network reliability and connectivity across the country. The COVID-19 pandemic situation has translated into a significant reliance on technology and it is only a matter of time for adoption rather than consideration for the acceptance of technology. In term of adoption of technology, the most important thing to observe about this kind of decision is that at any point in time the choice being made is not a choice between adopting and not adopting but a choice between adopting now or deferring the decision until later (Hall et al., 2003).

The adoption of technology in an organisation's business operations is essential to overcome the hurdles of conventional method deployed by an organisation. The adoption of a technology is distinct from the introduction of the technology itself as the introduction of a

technology may be viewed as a single event when a particular technology enters a market. The adoption part is rather a continuous but slow gradual process via assimilation process with the current norms in the market. Furthermore, innovation is also part of the requirement for the Department to overcome the challenges from the conventional method implemented in the organization. Product or process technological innovation that incorporates new technical, functional or aesthetic solutions is very important for companies to maintain their competitiveness under circumstances of constant changes (Nemoto et al., 2010). As a statutory body, it is pertinent for the organisation be agile during the COVID-19 pandemic, make use of technology and push for innovation in order to carry out its roles and functions effectively. The push for innovation is required for the organisation to set the right trajectory as guidance for the industry in accordance to its stated vision and mission.

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is one of the theory applicable to anticipate user's acceptance of a technology. TAM has been developed by Davis in 1989 and is one of the most popular research models to predict use and acceptance of information systems and technology by individual users (Surendran, 2012). TAM has been widely used as a model to help researchers around the world to understand and explain user behaviour when facing an information system and has proven to produce reliable results (Surendran, 2012). In TAM, the anticipation is mainly based on two factors namely, (1) the perceived usefulness (PU), and (2) the perceived ease of use (PEOU). From the introduction of a new technology, there are multitude of factors and variables that could influence users in its desirability and acceptance to use a particular technology. TAM is relevant to this research as the users' or the officers' perception in terms of the PU and PEOU can be assessed for the purpose of adoption of new technology. The theory will be a fundamental part of this research in addition to other applicable theory and model that can be applied to this research.

According to Davis (1989), the PU is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance". In the context of this research, the PU is relevant to determine the perception of the users or the officers in using the dashboard solution to enhance their work and productivity as the employees of the organisation. For PEOU, it is defined by Davis (1989) as "the degree to which a person believes that using a particular system would be free of effort". In the context of this research, the PEOU is relevant in terms of the integration or assimilation of the technology-based solution into the officers' daily work that it has become natural or the usual norm for the officers to use the dashboard solution in completing their daily work.

Theory of Planned Behaviour (TPB)

Although TAM theory is considered as a useful model to explain the acceptance of technology among respondents, many researchers have suggested for the TAM theory to be given additional variables to provide for stronger model (Gao et al., 2011). The PU and PEOU variables alone may not have the ability to explain on the people's acceptance or adoption of technology. Therefore, the suggestion for the Theory of Planned Behaviour (TPB) to be incorporated together with TAM theory is viable considering the limitations of the TAM theory that is based on the main 2 variables, i.e. the PU and PEOU. The TPB theory can greatly assist the researchers to understand the change of behaviour of respondents. The TPB is a theory grounded on the anticipation of deliberate behaviour because human's behaviour can be pre-meditated depending on the environment. In TPB theory, human action is guided by three

kinds of considerations: (1) behavioural beliefs, (2) normative beliefs, and (3) control beliefs (Ajzen, 1991). The human aspect can be explained through the TPB theory by assessing the three kinds of considerations for the purpose of examining the attitudes and perceived norms in presence of absence of sources or opportunities.

For the inclusion of the TPB theory into the TAM theory, a proposed research model and the definition of each construct is adopted by the researcher as per Table 1.0 below:

Table 1.0

Research Model Construct with Definition

Construct	Definition
Perceived Usefulness (PU)	The end users' belief that using the system would improve daily tasks
Perceived Ease of Use (PEOU)	The end users' belief that the usage of the system is effortless
Trust (TU)	The end users' beliefs or faith in the degree of specific service that can be regarded having no security and privacy threats
Personal Initiatives and Characteristics (PIC)	The end users' willingness to try the new system or services
Context (CT)	Information to describe the situations such as place, person or object that are relevant to the interaction between end users and system

Methodology

A quantitative method is conducted via distribution of questionnaires among the respondents. A good questionnaire is imperative for good survey results as it can be judged based on its relevance and accuracy (Sreejesh, 2004). The targeted respondents for the questionnaires are officers working in the Department. This approach was selected based on the straightforward work affiliations with the Department noting that not all of the employees in the ABC organisation handles legal matters. The targeted respondents are also the appropriate party to correspond with the questionnaire that focuses on the reporting mechanism of the Department and the usage of dashboard solution for improvement purposes.

In the context of sampling for this research, the researcher used a non-probability sampling technique in the form of convenience sampling. Convenience sampling (also known as Haphazard Sampling or Accidental Sampling) is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study (Etikan, 2016). The main reason for using the convenience sampling is because the subject matter or the respondents are chosen based on their close relationship with the researcher, which makes it easier for them to be engaged

by the researcher. In the context of the Department, the convenience sampling technique is the most appropriate due to the targeted group of respondents and the similar characteristic of information to be extracted from the targeted respondents for the reflection of the Department as a whole. On the number of respondents, 13 respondents are deemed sufficient for data gathering purpose via the quantitative method. This number derived from the targeted respondents that have direct affiliations with the Department. The respondents are chosen based on their capacity as legal officers of the Commission and their associated roles that enable the Department to perform its roles and functions.

The questionnaire distributed consists of 4 questions on demography of the respondents in section A and 25 questions related to the TAM theory and TPB theory in section B with dedicated column for responses to be recorded based on Likert scale ranging from 1 to 5 whereby 1 indicates strongly disagree and 5 indicates strongly agree. In analysing the set of data, the correct tools and technique must be deployed by the researcher to produce decent and reliable results. The appropriate tools and technique must be chosen depending on the context of the research and the data to be obtain by the researcher. The SPSS is the main tool used by the researcher. The SPSS is used to produce descriptive analysis, normality test and reliability test. For quantitative method in terms of questionnaire distribution, the Google Form platform was utilised as a tool to distribute the questionnaires to the respondents. The answers from the respondents are captured in excel sheets for ease of reference and SPSS analysis.

Results

The main platform for the quantitative analysis is the questionnaires distributed among the officers in the Department. In measuring the effectiveness of the quantitative method, the questionnaires result from were analysed using SPSS for Descriptive Analysis, Normality Test and Reliability Test. The results were then further analysed using Comparative Analysis or T-test Analysis. The purpose of conducting the quantitative analysis is mainly to determine the effectiveness of the intervention by the researcher, i.e. from the usage of the dashboard solution.

Table 2.0 shows the result for Descriptive Analysis, the findings from the demographic data suggests that the majority of the officer working in the Department are females. The findings from the age group and employment duration also suggests that most of the officers consist of Generation Y and that the Department has relatively young team members in the workforce. For designations wise, the majority of the respondents holds the position of Assistant Director, which is the first layer of executives in the organisation.

Table 2.0
Descriptive Analysis

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
gender	13	1	1	2	1.69	.133	.480	.231
age	13	3	1	4	2.31	.208	.751	.564
employment	13	1	1	2	1.46	.144	.519	.269
designation	13	3	1	4	2.46	.268	.967	.936
Valid N (listwise)	13							

For Normality Test, the researcher adopted the position that a value of skewness and kurtosis at ± 1.96 is satisfactory to determine the normality of its distribution despite many researchers prefer a ± 2.0 value. The decision to adopt the skewness and kurtosis value at ± 1.96 is mainly due to the small sample size in the research whereby data from smaller sample size tends to be skewed and kurtotic. Therefore, the adopted value of ± 1.96 should be sufficient to measure the normality of the data. From the analysis conducted, it is proven that the value of the variables is all within the acceptable value of ± 1.96 and this suggest that they are normally distributed. For Reliability Test, the data was tested for Cronbach Alpha whereby the usual Cronbach Alpha reading of 0.7 and above indicates that the data is reliable. Nevertheless, a Cronbach Alpha value between 0.6 to 0.8 is also acceptable and reliable. From the analysis conducted, the variables recorded a decent reading of Cronbach Alpha ranging between .831 (good) to .938 (excellent). Therefore, it can be said that the results from the reliability test showed that the data have reached an acceptable level of consistency and reliability.

Table 3.0
Reliability Test using Cronbach Alpha

Variables		
	Cronbach's Alpha	N of Items
Perceived Usefulness (PU)	.938	5
Perceived Ease of Use (PEOU)	.831	5
Trust (TU)	.884	5
Personal Initiatives and Characteristics (PIC)	.890	5
Context (CT)	.881	5

One of the advantages of using reliability test in a research is that the researcher can easily interpret the result. The reliability test is a method of measurement of data interrelation by measuring the consistency reliability between the items. For many researchers, a Cronbach Alpha reading of 0.70 and above nearing to 1.0 indicates coefficient, which means that it has

reached an acceptable level of consistency. Nevertheless, a stated value of Cronbach's alpha between 0.6 and 0.8 is also acceptable (Nawi et al., 2020).

Findings and Discussion

This study has achieved the first objective of the study. It is observed that there are a number of challenges in using the current reporting mechanism for monitoring and tracking purpose of the legal advisory department. Among others are insufficient documentations and late responses from the stakeholders which had delayed the effort of monitoring and tracking. It is also identified that the flow of incoming requests against existing reporting mechanism in the Department is incoherent, causing gaps in the operational activities. This is acknowledged by the key personnel and agreed upon that the matter can be resolved via technology acceptance by using the dashboard solution. Additionally, the second research objective is also achieved in this study. It is found that basic competencies are established among the officers to utilise the dashboard solution. This means that the officers in the Department are well-versed to make use of the dashboard solution features effectively. Further, this is also supported by the findings from the questionnaire distributed whereby the level of technology acceptance among the officers are evident. It can be concluded that the Department is in a prime condition to migrate from its existing reporting mechanism towards using the dashboard solution effectively. This also supports the TAM and TPB theory mooted by the researcher whereby technology acceptance (i.e. by using the dashboard solution) can certainly assist the Department's operation and working environment.

The increasing demand for legal support and services from the stakeholders necessitates a disruptive intervention on how the Department operates to ensure its operating model become relevant in the coming years and to achieve greater efficiency from the use of technology. The findings of this research contribute practically to the statutory body in reforming the Department's reporting mechanism. Technology offers in-house legal functions the opportunity to become business partners through the integration of legally important processes with other business critical processes (Brayne, 2019). The evolution of the Department's role in the organisation over the years would require the officers to become more business-savvy when lawyering, as increasing demand for a pinpoint and pragmatic response from the Department is crucial for the organisation to carry out its roles and functions.

Conclusion

Technology acceptance proves to be an effective way to improve working environment and business operation. This had benefited the officers in the Department who had experience the usage of the dashboard solution in their reporting mechanism. This study is significant as there is increasing demand for legal support and services from the stakeholders necessitates a disruptive intervention on how the Department operates to ensure its operating model become relevant in the coming years and to achieve greater efficiency from the use of technology. The theoretical contribution of this research will be in the application of TAM and TPB theories into the legal practice via the usage of dashboard solution for reporting mechanism. In terms of practical contribution, the findings from this research can greatly benefit the legal industry and legal practitioners that seeks to adopt technology in their organisations. Although this research does not attempt to reflect the practices or trends of other organisations, the findings remain relevant and should correspond with the requirement of the legal industry and legal practitioners in the fraternity. The organisation or

parties that may consider the findings of this research can be among in-house legal team, law firms, Judiciary, Attorney General's Chambers, Tribunals, and others. Therefore, the findings from this research can be the initial step for the organisations towards the adoption of technology. Based on the research findings, it is recommended that the significance of the findings to be adopted in similar type of organisations having a small group of in-house legal counsel or legal officers. The usage of dashboard solution in these types of organisational structure is highly recommended considering that high-paced organisations would require a simple yet competent technological tool to assist them on daily basis. In terms of scalability, it is recommended for the implementation of the dashboard solution to be expanded at larger organisations as this research was conducted using small sample size. Moving forward, more research is required in this area to measure the user requirement, acceptance level, competency, appropriate sampling size and other relevant factors that contribute to the usage of the technology acceptance in the form of dashboard solution, specifically in the legal sector. The potential application of the dashboard solution in organisation that has larger legal department would be required for the scalability of the findings gathered in this research.

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