

THE FACTORS TOWARDS TO USE BEHAVIOR AMONG PRIVATE EMPLOYERS USING E GOVERNMENT APPLICATION: JOBSMALAYSIA SYSTEM.

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Abstract

In order to achieve the objective of this research, two research questions have been constructed. The research questions were constructed on theoretical considerations found in the literature review. Since the aim of this research is to explore the behaviour of the JOBSMALAYSIA system, the study is descriptive in its nature. The study primarily uses the Technology Acceptance Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT) Model as the theoretical basis. Both theories are widely used in information technology and information systems research to evaluate user acceptance of a system and to understand determinants of individual behaviour towards the system usage. The Ordinal and nominal scale were applied to thirty-two items. Out of 188 distributed questionnaire which used convenient sampling, only 57 usable responses were returned by the respondents among the private employers in Terengganu Darul Iman. The questionnaires were distributed by using postal, hand to hand delivery, faxes and also email. Although the return rate of the survey is only 30.3 %, but it has proved by prior research sample that use TAM or other user acceptance model shows that their response rates were also below 20%, similar to our case. This paper will discuss the factors towards to use behavior among private employers in the East Coast of Malaysia towards E-Government application: JOBSMALAYSIA system. It was found that the anxiety factor was chosen to be the most agreed factors among others. This study should also be able to highlight and emphasize the importance of user involvement during the development of a new system especially as the reference for the Government in the future.

Keywords: User Acceptance, JOBSMALAYSIA, Employer Labour Exchange, UTAUT model, TAM model, and Private Employer.

1.0 INTRODUCTION

Employee Labour Exchange which is also known as ELX is one of the applications created under the seventh (7th) Multimedia Super Corridor Flagship, the Electronic Government Project. ELX comprises three (3) modules namely Job Clearing System, Labour market Database and Office Productivity Support System. In 2004, the Job Clearing System module's name was changed to JOBSMALAYSIA. JOBSMALAYSIA offers a free of charge (FOC) job matching services in Malaysia especially for Malaysian publics and employers. This application has been developed to align with the concepts of one service, one delivery, no wrong doors to optimize the number of vacancies for job seekers and more employers to get potential candidates from one database.

In Malaysia context, E-government is defined as a multimedia networked paperless administration linking government agencies within Putrajaya with government centres around the country to facilitate a collaborative government environment and efficient service to businesses and citizens (Afrika-Asia, 2002, as cited in Rosita & Nadianatra, 2007). The myGovernment Portal (www.gov.my) acts as the one-stop source of Malaysian government information and services for the citizens.

However, Malaysian e-government has also faced many challenges while implementing the notion, for instance, lack of expertise, low-quality of technical infrastructure, financial constraints, public servants' resistance and so forth (Ramli, 2012). Therefore, it is important to understand the factors that might influence citizens' intentions to engage

in government services provided over the Internet (Al-Adawi, Yousafzai, & Pallister, 2005). The involvements of the citizens in the E-government also plays important roles in making the e-government can be utilized efficiently and effectively. It is also important to make sure the e-government to be the service inclusive and people-centred sustainable development (United Nation, 2012).

JOBSMALAYSIA was designed to cover every single type of jobs available in Malaysia. It caters all the needs of Malaysian from a different kind of background including the handicapped person, from cooks to professional workers in both private and public sectors. The system caters a much wider net as its cover both private and public sector job matching available in Malaysia (Goh, 2009). The application offers a one-stop service where few services are being offered such as job registration and matching, place of work registration and employer's annual returns or retrenchment reporting, the list of private employment agencies and report on foreign employee engaged. Besides that, it also offers a job-clearing system for the handicapped. By using this e-service, employers can send or update personal information, post job vacancies, search for job opportunities and apply online and seek advice and help from the ministry (Rosita & Nadianatra, 2007).

Since the implementation of JOBSMALAYSIA in May 2002 and the rebranding of a new version of JOBSMALAYSIA in 2004, there were no tools developed to measure or monitor the success or failure of the JOBSMALAYSIA system implementation and whether the system has been accepted by the users specifically the employer in private sectors. It is found that the lack of literature and findings on electronic recruitment acceptance in Malaysia and most of them were only focusing on the job seekers' acceptance on technology but not the employers. Ahmad and Othman (2006) stated that as services become more complex and expensive, it is increasingly important to assess this demand and incorporate the users feedback. According to Y. Bhg. Tan Sri Samsudin Bin Osman in his keynote speech during the Government Leaders Conference 2005, the Government must determine an effective way to measure the return on public sector investment in these delivery channels in terms of the actual adoption of electronic services and how the government could turn that adoption into value. Therefore, it is important to understand the factors that might influence the citizens' intentions to engage in government services which were provided over the Internet (Al-Adawi et al). The purpose of this paper is to gain a better understanding of the influence factor in use behaviour that encourage the users of JOBSMALAYSIA system to use the system and how well do they accept and use the system.

Based on the finding in the previous literatures in E-Government in Malaysia, none of these research to date, known to the researchers have been conducted to study on the user acceptance among employers that use JOBSMALAYSIA system. According to Datuk Sheikh Yahya Sheikh Mohamad, JOBS MALAYSIA can be called as single window job recruitment agency as everything is there. He also added that feedback from users; job seeker and employers are really welcomed to improve the services provided in Jobs Malaysia (Goh, 2009). Thus, to fill the gap of non-existing research on e-government application particularly on JOBSMALAYSIA system, the researcher believes that this study is a preliminary study of this kind.

The aim of this research is to explore the behaviour of the JOBSMALAYSIA system, the study is descriptive in its nature. The study primarily uses the Technology Acceptance Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT) Model as the theoretical basis. TAM have two particular constructs, perceived usefulness and perceived ease of use that are important in order to predict the users' acceptance behavior. As illustrated in Figure1, the external variables are the key assumption of TAM and they influence the decision to use technologies through their impacts on users' belief, perceived usefulness and perceived ease of use.

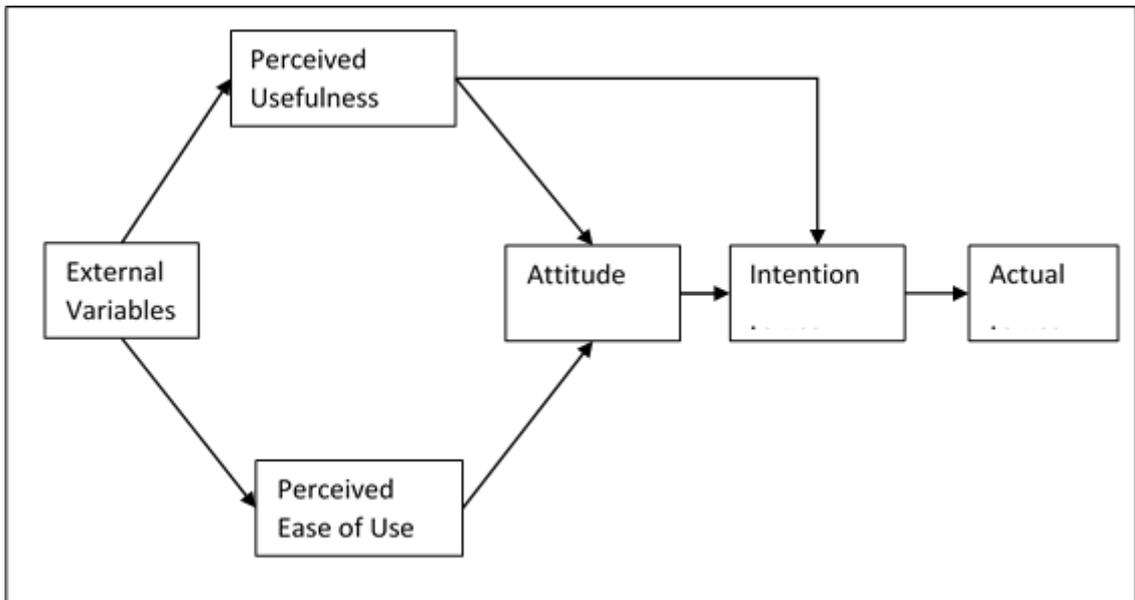


Figure 1 TAM model (Davis,1989)

The Unified Theory of Acceptance and Use of Technology (UTAUT) were developed by Venkatesh, Morris, Davis & Davis (2003) after reviewing and comparing the user acceptance literature of eight prominent models. The UTAUT was formulated to present an integrated view of user acceptance and usage of new technology. The eight models reviewed are: 1) Theory of Reasoned Action (TRA),2) Technology Acceptance Model (TAM),3) Motivation Model (MM),4) Theory of Planned Behavior (TPB),5) Combined TAM and TPB (C-TAM-TPB),6)Model of PC Utilization (MPCU),7)Innovation Diffusion Theory (IDT) and 8)Social Cognitive Theory (SCT).

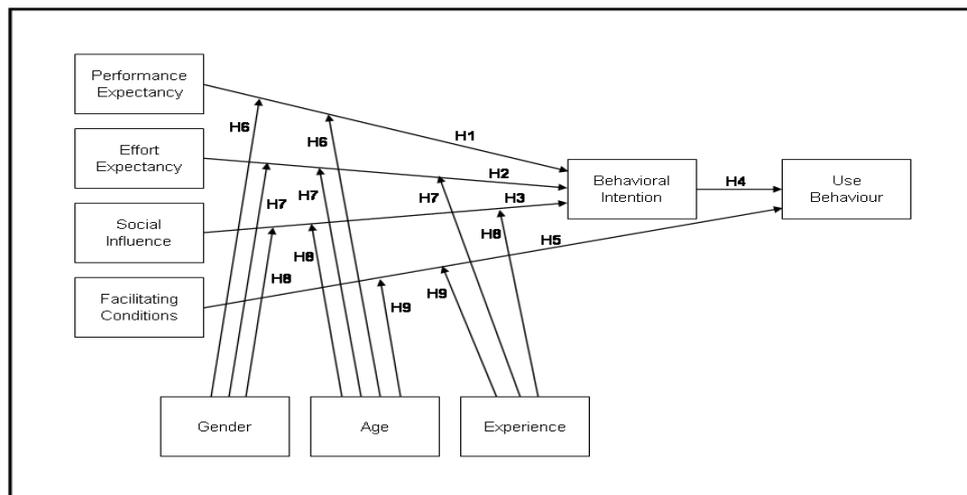


Figure 2 Research Model (Adapted from Venkatesh et al., 2003)

The purpose of this paper is to discuss the factors that influence users to accept JOBSMALAYSIA system among private employers in Terengganu Darul Iman. A questionnaire with ten-point Likert scale is applied to 57 usable responses. The combination of TAM and UTAUT research model is used to be the study basis model. Three items in demographic profile and seven factors with 28 attributes are tested, namely Gender, Age, Experience, Performance Expectancy (PE), Effort Expectancy (EE), Attitude towards Technology (ATT), Social Influence (SI), Facilitating Conditions (FC), Self-Efficacy (SE), and lastly Anxiety (A) as shown in figure 2.

2.0 RESEARCH METHODOLOGY

In order to achieve the objective of this research, two research questions have been constructed. The research questions were constructed on theoretical considerations found in the literature review. Since the aim of this research is to explore the behaviour of JOBSMALAYSIA system, the study is descriptive in its nature. The study primarily uses the Technology Acceptance Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT) Model as the theoretical basis. Both theories are widely used in information technology and information systems research to evaluate user acceptance of a system and to understand determinants of individual behaviour towards the system usage. Figure 3 shows the research framework.

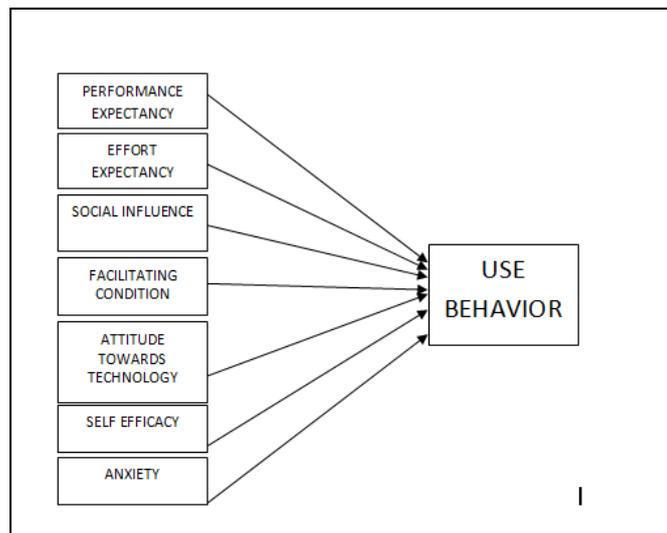


Figure 3 Research Framework for JOBSMALAYSIA system

For this study, the researcher used non-probability sampling whereby the elements in the population do not have any probabilities attached to their being chosen as sample subject (Sekaran, 2006). Therefore, the sampling technique that applied in this study was convenient sampling. Convenient sampling involves the collection of information from members of the population who are conveniently available to provide it. This sampling is most often used during the exploratory phase of a research project and the best way to get some basic information quickly and efficiently (Sekaran, 2006).

Convenient sampling method was used for this study and the sample size chosen is 123 respondents as suggested by Krejcie and Morgan (1970) as well as Cohen (1969) for the decision on the sample size. The targeted respondents were employers who were registered with Jobs Malaysia system in Terengganu Darul Iman from 2010- 2013. The selection of the employers was made by the recent list of registered private employer in Terengganu with Jobs Malaysia system from January 2010 till July 2013. The list had also been filtered since some of the employer's contact details in the system list were not complete. Thus, from the total of 256 potential respondents, only 188 private's employers were valid to be respondents for this survey.

The ordinal and nominal scale were applied to thirty-two items of questionnaires. The questionnaire was given in various methods (by hand directly to company location, by postal, fax and also email) in order to get fast response from the respondents. Each respondents were followed up to remind them to fill in the questionnaire by phone and to return the questionnaire before the dateline given. Approximately, 188 questionnaires were distributed and only 57 were returned, yielding a response rate of 30.3% as stated in Table 1, the response rate of a survey is a measure of how many people approached, i.e. sampled actually completed the survey. It is usually assumed that the higher the response rate, the more likely the results represent the population, provided by the sampling that is appropriate in the first place and that people who did not respond are roughly the same in their opinions as the people who did respond. Ideally, statistical surveys based on scientific probability samples should be conducted to obtain information on

designated populations. A response rate of about 75 percent or more is a typical target range for a scientific sample and is considered acceptable.

However, a study reported by Lin, Fofanah, & Liang (2011) stated that prior research sample sizes in user acceptance studies that they have discovered are ranged from 140 to 165, and the response rates were below 20%, are quite similar to their Gambian case. This proves this study sample size is comparable to prior research and the response rates (30.3 %) are similar to other studies using the User Acceptance Model (TAM). This is also supported by Uma Sekaran (2006), cited from Roscoe (1975), that the sample size larger than 30 and less than 500 are appropriate for most research. In this study, though the percentage of the returned survey is only 30.0%, it is still accepted as it is according to the range compared to the previous study.

Table 1: Return rate of Responses

Distribution Method		Distributed	Returned	% Response Rate
Valid	By Hand	100	31	31
	E-Mail	74	26	35
	Fax	14	0	0
	Total	188	57	30.3

3.0 RESEARCH FINDING

3.1 Demographic Profile

From the demographic profile that has been reported (refer to Table 2), 33.3% of respondents are male and 64.9 % were female. Most female respondents are more interested in using the system compared to the male respondents. Most of the respondents are in an age group of 20-29 years old which is 42.1% compared to other age group, the closest age group is 35.1% from age group of 30-39 years old. It indicates that younger users are more involved with the system compared to the senior users. Respondent’s experiences with the information system also indicate most of the respondents are likely to have 2 to 6 years experience compared to the other group years of experiences.

Table 2 Demographic Profil : Gender, Age and Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
GENDER	Male	19	33.3	33.9	33.9
	Female	37	64.9	66.1	100.0
	Total	56	98.2	100.0	
	???	1	1.8		
AGE	20<x<29	24	42.1	42.9	42.9
	30<x<39	20	35.1	35.7	78.6
	40<x<49	6	10.5	10.7	89.3
	>50	6	10.5	10.7	100.0
	Total	56	98.2	100.0	
	???	1	1.8		
EXPERIENCE	0<x<2	6	10.5	11.1	11.1
	2<x<6	20	35.1	37.0	48.1
	7<x<10	7	12.3	13.0	61.1
	10<x<15	11	19.3	20.4	81.5
	>15	10	17.5	18.5	100.0
	Total	54	94.7	100.0	

3.2 Factors that influence the user’s acceptance

Section II of the questionnaire covers the questions on Factors that Influence the Use Behavior of the Jobs Malaysia system. The variables used in the questionnaire were adapted from the well-developed, refined and validated measures of UTAUT model (Venkatesh et al, 2003). As have been mentioned in the literature review of this study, the UTAUT model was developed based on eight prominent models of Use Behavior in Information System IS research. The total of 28 variables used in this study was adapted from various models. To ease the analysis process of the data collected in this study, these variables will be divided into its original structure namely attitudinal structure, normative structure and behavioral structure. Each variable will be analyzed under each structure and then the effect of moderators on variables which considered as direct determinant will also be analyzed and discussed. Attitudinal structure, normative structure and behavioral structure in the questionnaires were summarized using the descriptive statistics.

Figure 4 and 5 represent the overall achievement for Attitudinal Structure. The result shows that majority of the users, 48.83% agree that none of attitudinal structures (PE, EE and ATT) influence them negatively where only 16.08% chose disagree. It means that JOBSMALAYSIA system is being accepted by the majority of the respondents with the average score of mean is 6.265 and standard deviation is 2.052. A high mean value always represents a high level of acceptance base on scale 1 = Strongly Disagree and 10 = Strongly Agree. The summary of frequency output on Attitudinal Structure is represented in Figure 6.

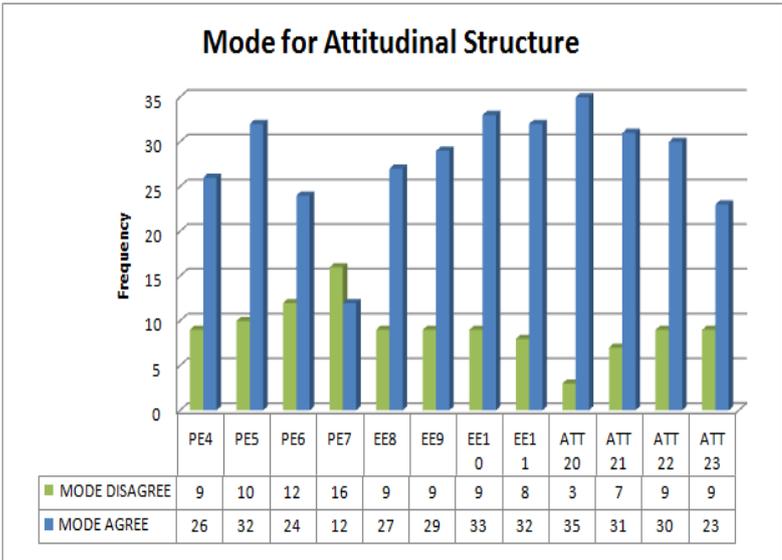


Figure 4 Mode for Additional structure

N	Valid	57
	Missing	0
Mean		6.265
Std. Deviation		2.052

Figure 5 Respondent

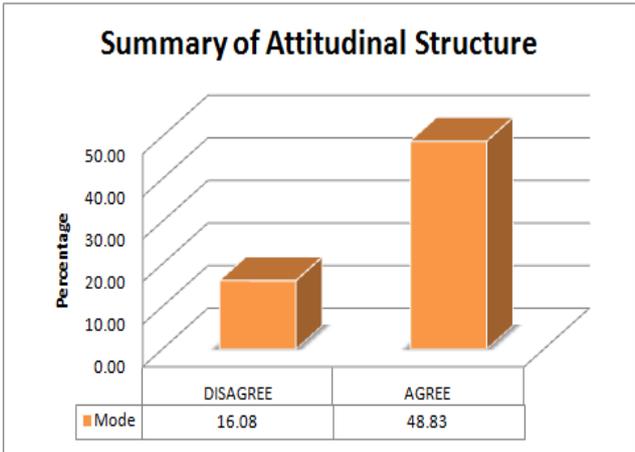


Figure 6 Summary of Additional Structure

Figure 7, 8 and 9 represent the overall achievement for Normative Structure. The result shows that the majority of the users 42.54% agree that none of the normative structures: Social Influence (SI) influence them negatively where only 19.74% chose to disagree. It means that JOBSMALAYSIA system is being accepted by the majority of the respondents with the average score of mean is 5.905 and standard deviation is 2.275. A high mean value always represents a high level of acceptance base on scale 1 = Strongly Disagree and 10 = Strongly Agree. The summary of frequency output on Normative Structure is represented in Figure 9.

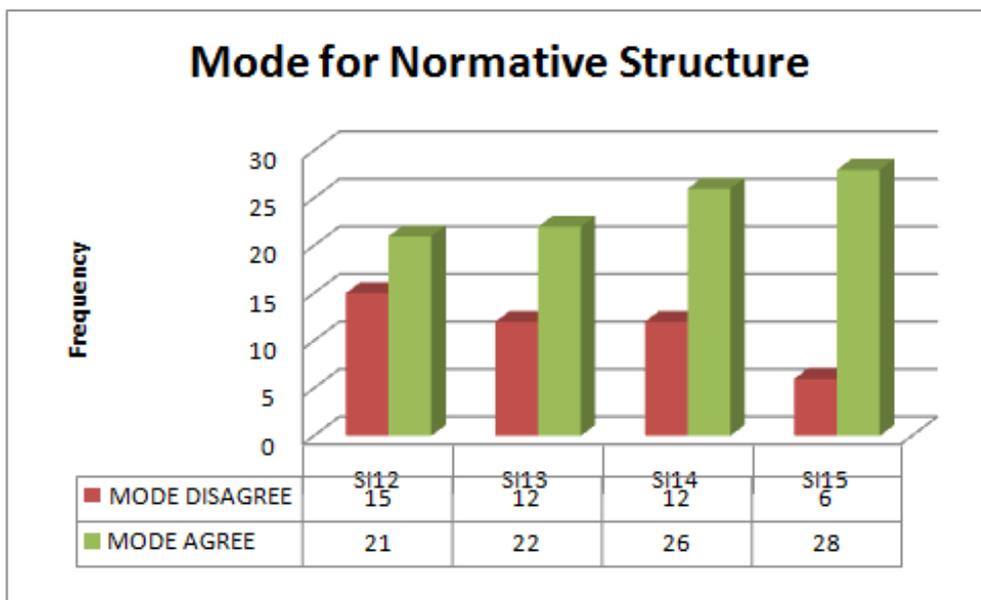


Figure 7 Mode for Normative Structure

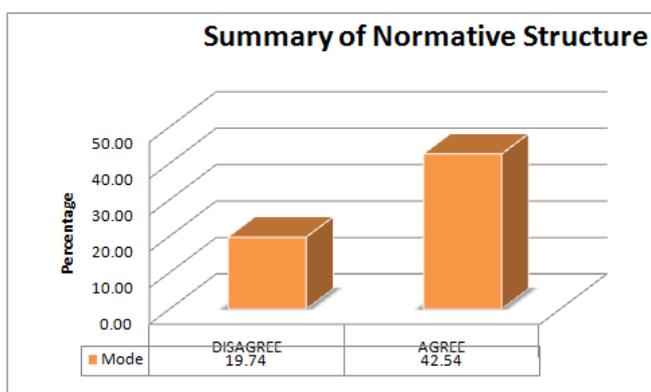


Figure 8 Summary of Normative Structure

N	Valid	57
	Missing	0
Mean	5.905	
Std. Deviation	2.2755	

Figure 9 Respondent

Figure 10,11 and 12 represent the overall achievement for Behavioral Structure. The result shows that the majority of the users 50.88% agree that none of behavioral structures Attitude, Self-Efficacy, and Facilitating Conditions(A, SE, and FC) gives influence them negatively where only 14.33% choose disagree. It means that JOBSMALAYSIA system is being accepted by the majority of the respondents with the average score of mean is 6.395 and standard deviation is 2.0135. A high mean value always represents a high level of acceptance base on scale 1 = Strongly Disagree and 10 = Strongly Agree. The summary of frequency output on behavioral structures is represented in Table 4.25.

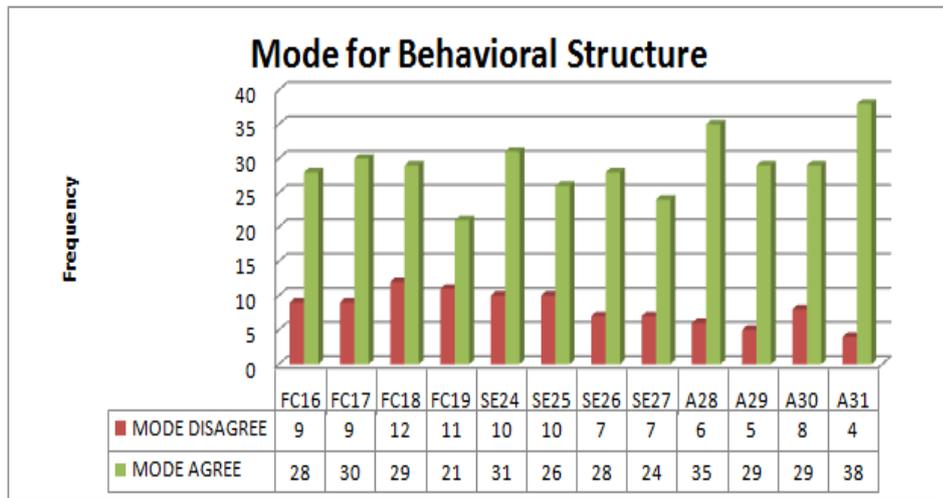


Figure 10 Mode for Behavioral Structure

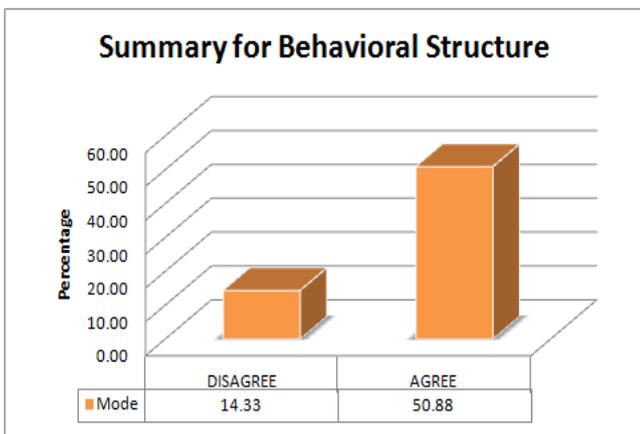


Figure 11 Summary for Behavioral Structure

N	Valid	57
	Missing	0
Mean	6.395	
Std. Deviation	2.0135	

Figure 12 Respondent

4.0 THE INFLUENCE FACTOR

In this section, descriptive analysis as in Table 3 and Table 4 are used to display the result of the most influence factors of User Acceptance for JOBSMALAYSIA system. Table 3 shows that the Anxiety factor is the most agreed factors compared to other factors used in this study. The total frequency number of mode Agree in Anxiety factors shows that most respondents felt this factor was the greatest asset that allows the users of JOBSMALAYSIA system to use the system without any fear of making mistakes. Followed by ATT (Attitude towards the Technology), EE (Effort Expectancy), PE (Performance Expectancy), SE (Self-Efficacy), FC (Facilitating Conditions) and last but not least is SI(Social Influence) as the most least agreed factors among others.

Table 3 Summarization of the factors to use towards User Acceptance

Factors	Items		N	Min	Max	Median	Mode		SD
							Disagree	Agree	
PE	PE5	It is easy for me to become skillful at using the JOBSMALAYSIA system.	57	1	10	6.16	10	32	2.094
EE	EE10	I find the JOBSMALAYSIA system is easy to use.	57	1	10	6.46	9	33	2.045
ATT	ATT20	Using the JOBSMALAYSIA system is a good idea.	57	1	10	6.89	3	35	1.961
SI	SI15	In general, the organization has supported the use of the JOBSMALAYSIA system.	57	1	10	6.54	6	28	2.071
FC	FC17	I have the knowledge necessary to use the JOBSMALAYSIA system.	57	2	10	6.54	9	30	1.946
SE	SE24	When there was no one around to tell me what to do as I go.	57	1	10	6.23	10	31	2.236
A	A31	The JOBSMALAYSIA system is not frightening to me.	57	1	10	7.23	4	38	2.000

Table 3: Rank of factors based on Mode Agree

Factors	Rank
PE	4
EE	3
ATT	2
SI	7
FC	6
SE	5
A	1

This study has found that the JOBSMALAYSIA system has been averagely accepted by the respondents among selected employers in Terengganu Darul Iman. Descriptive statistics of the attitudinal structure which consists of Performance Expectancy (PE), Effort Expectancy (EE), Attitude toward Using Technology (ATT), showed a medium acceptance on the use of JOBSMALAYSIA system with the percentage of 48.83%. The role of attitude confirms it's importance for the bottom line of any successful and satisfactory information system. The result shows in Figure 8 that subjective norms have often affected the users' decision making in using the system with a 42.54% of the responses represent medium acceptance on the use of JOBSMALAYSIA system. While the result in figure 12 confirms that none of behavioral structures (FC, SE and A) influence the users negatively to use the JOBSMALAYSIA system. The result shows that behavioral structures have often affected the users' decision making in using the system with a 50.88% of the responses. Results also reveal that Effort Expectancy (EE), Facilitating Conditions (FC) and Anxiety (A) factors play important roles in determining the users' acceptance of JOBSMALAYSIA system with respect to the different segmentation of gender, age group, and experience level.

5.0 RECOMMENDATION

This study excludes the voice of the users of JOBSMALAYSIA system as a whole, for this study, should there be more respondents because JOBSMALAYSIA system has been used widely throughout Malaysia. Their views should be taken into account for future study. The results are expected to provide a practical contribution in the area of E-government services and in understanding users' behavior in the Malaysian E-government services.

6.0 LIMITATION

One of the limitations in this study is to the context of respondents which was very limited to only selective private employers in Terengganu Darul Iman. This study is attempted to answer basic research questions about the influence factors toward the use behavior of JobsMalaysia among private employers in Terengganu. The finding of this study

shall not be used as generalization due to the sample size which was limited and hence care should be taken when generalizing the findings of this study. Thus, further study should also be given serious consideration in terms of accessibility to the data collection because most of the employers that have been reached had been very reluctant in giving good cooperation.

7.0 CONCLUSION

The anxiety factor is chosen to be the most agreed factor among others from the response given by the respondents who used the system. The employers in Terengganu Darul Iman are considered to be at the average level of acceptance to use the system. In conclusion, this research should make a contribution to the understanding of factors that contribute to the user acceptance of the JOBSMALAYSIA system.

Since JOBSMALAYSIA is one of the modules in E-Government applications which is being implemented in Malaysia, this research should contribute in assisting the Government to quantify the return of investment in Government's information system project in the future. This research should also be able to highlight and emphasize the importance of user involvement during the development of a new system especially as the reference for the Government in the future. Based on the finding from literature review, none of these research done in Malaysia to date, known to the researchers has been conducted to study on the user acceptance among private employers that use JOBSMALAYSIA system particularly in the state of Terengganu Darul Iman. Thus, to fill the gap of non-existing research on e-government application, particularly on JOBSMALAYSIA system, the researcher believes that this study is a preliminary study of this kind.

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