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Environmental Factors and the Acceptance of Youth towards MyEG Application: A Quantitative Empirical Investigation

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ABSTRACT
The emergence of MyEG application facilitates in terms of specialized services for Malaysians. Although this application eases users, it is still not completely utilized by the youth. Therefore, this study aims to identify the types of MyEG services used by youth; thus determine the relationship between environmental factors and the acceptance of MyEG application. This study uses a quantitative approach through a survey method using a questionnaire. A total of 396 MyEG users in the Klang Valley have been selected as respondents. Data are analysed using the Statistical Package for Social Science (SPSS) version 22. Two (2) types of statistics are used in this study. They are the Descriptive Statistics and Inferential Statistics. Descriptive statistics is used to identify the mean, percentage and standard deviation. Inferential statistics, on the other hand, is used to describe the relationship between the variables studied. This study found that the type of MyEG service preferred by youth is related to information regarding summons. Through Pearson Correlation test, the result shows that there is a positive and significant relationship between the facility and the performance towards the acceptance MyEG application. This study suggests that MyEG promotes itself in a larger scale medium by utilizing the new media and electronic media so that promotions can be done quickly and widely.
Keywords: Online Services; Effort Expectation; Performance Expectation; Social Influence; Condition of Facilities

INTRODUCTION

Since its inception in the early 2000, MyEG application plays a permanent role in providing services from various government agencies dedicated to the people and the business community. This application provides a variety of online services such as foreign workers permits renewal, maids work permits renewal, replacement of MyKad, online topup / reload services, driver's license renewal, summons, e-insolvency, auto insurance renewal and road tax, Temporary Ownership Transfer System (STMS), Permanent Ownership Transfer (STMSR), and many more. The purpose of the establishment of MyEG application is to provide convenience to the public (Hasmiah, Siti Hajar & Noraidah, 2011) such as providing services that are quick (Safar Hasim & Salman, 2010), save time (Norashuha, Ros Ilyani, Nguyen, Tee Tiam, Mohd Rustam & Noriadah, 2013), and can be accessed at any time (Maizatul Haizan, Mohammed Zin, Ali, Wan Idros & Mohd. Yusof, 2011).

Through these advantages, they indirectly enhance the attractiveness towards young people to use MyEG services. This is supported by the statistics released by the Malaysian Communications and Multimedia Commission stating that youth is the largest users of online services compared to adult age groups (Malaysian Communications and Multimedia, 2013). Furthermore, according to Rust and Lemon (2011), almost all youths use online-based services. The applications are becoming increasingly popular and have gained attention from people of all walks of life. Therefore, it is obvious that MyEG application are able to assist people, especially the youth in order to facilitate in resolving matters such as checking or paying bills online and other related matters.

This research has the significant contribution towards the practical and theoretical to assist parties in promoting e-government systems especially MyEG applications to public. It has the potential comprehensive knowledge acquisition and understanding of e-government issues will be a great opportunity to help stakeholders and government agencies in strengthening the e-government policy. In addition, it can also review and revise existing online systems for future implementation of both public and private agencies. In practical aspects, this research helps to improve the field of public practice on an application. In this context, the outcome of research can open space and opportunity for the public in practicing the use of MyEG applications. When there is public awareness on the advantages of using MyEG applications, any form of information and services involving government affairs can be implemented easily. In theoretical aspects, this study is believed to contribute to the latest outlook (Gunter, 2000) and can help researchers to test and reinforce all the constructs in the UTAUT theory to predict public acceptance of MyEG applications.

PROBLEM STATEMENT

According to the statistics of internet usage in Malaysia, the youth today are more likely to use the internet for social purposes rather than online services. This is evidenced when the Ministry of Communications and Multimedia Commission issued a statement that the number of active internet users in the country has exceeded 20.1 million, with 16.8 million of them are active in

social media (Malaysian Communications and Multimedia, 2015). It triggers a question here, why the online services are still not widely used by the public, when the government tries hard to urge people to use this services offered by the government.

Several studies have shown that the rate of acceptance by the public in Malaysian towards MyEG application still not at a satisfactory level. According to Norashuha et al. (2013) the use of this application is said to be not widely used by the public. This problem exists due to the environmental conditions that act as a hindrance to the public to use the service. Selwyn (2003) states that the disturbances from the environment such as lack of material resources and information, fear of using technology, lack of support from the people close to them and the technology itself becomes a barrier for people to use new technologies. Similarly, a study conducted by Kapurubandara and Lawson (2006) also shows that among the obstacles for people to use new application is due to the condition of their environment.

In addition, among the environmental problems that cause people not to use MyEG application is the negative behavior of some Malaysians who are against the acceptance of new technologies (Kaliannan & Awang, 2010). They are more comfortable dealing on the counter instead of using online services (Maizatul Haizan et al., 2011). Thus, behavior is a barrier for them to use online service (Tan & Teo, 2000). There are users who feel difficult when using MyEG application (Hing, 2009). Such behaviors cause them to avoid from using the application. This leads to the discouraging response from the public to the introduction of new technology. According to Ahmad Syahrul Haniff, Siti Zobidah & Muhamad Sham (2012), there is only a small portion of individuals who use online service for both work and their daily activities. Whereas the rest uses new technology solely for social purposes (Siti Ezaleila & Azizah, 2010).

Futhermore, the insufficient information that is publicized about MyEG application is also a factor of the occurred environmental problems (Anthopoulos, Siozos & Tsoukalas, 2007). Television, for example, is a very effective electronic media to advertise a product or service (Md. Salleh, Sulaiman, Hayrol Azril, Mohd Shahwahid, Bahaman, Asnarulkhadi, & Siti Aisyah, 2011). However, MyEG application advertising is very limited and there are a handful of people who are still unaware of the existence of MyEG application (Suganthi, Balachandher & Balachandran, 2001). The final cause is the limited information technology and communication (ICT) facilities (Siti Hajar, Hasmiah & Noraidah, 2011). According to Farouk and Kalid (2005), the limited access to information and communication technology facilities such as telephone lines and internet connection are among the main factors for the society to refuse MyEG application. Therefore, this study will analyze each one of the environmental factors that cause this problem to occur.

STUDY OBJECTIVE

In general, this study aims to review the environmental factors that affect the youth towards the acceptance of MyEG application. In specific, this study aims to:

1. Identify the types of MyEG services utilized by youth; and

2. Identify the relationship between environmental factors and the acceptance of MyEG application by the youth.

THE YOUTHS AND THE ENVIRONMENTAL FACTORS TOWARDS MyEG APPLICATION

MyEG application is an application that offers online services available for all users (Hasmiah, et al., 2011). This online-based service is a provision of services through electronic networks (Rust & Lemon, 2001) and its use is gaining attention (Noraidah, Norashikin, Amy Salfarina, Hasmiah and Siti Hajar, 2011) by various parties.

The environment is a very important factor in influencing the youth to use MyEG application. This is because through the users' environment, it is capable of shaping their behavior (Mohd Taib, 2004) on whether they would want to use MyEG application. Involvement elements through environmental factors are important in determining the behavior of a user. According to Mohd Taib (2004), environmental factors can generally be defined as everything that is around human. The condition of the environment plays a role in influencing the behavior of every human being. As for the use of communications technology, the elements of involvement through environmental factors are very important in assessing the behavior of consumers. The more the external factors that affect human behavior, the more it is the formation of the human development.

Based on the concept of environmental factors above, it can be concluded that the variables of environmental factors involves external aspects that influence individual behavior. Besides being able to shape the development of human behavior, it is also a positive benefit to those affected such as the use of technology and also the employment sector. These conclusions are consistent with the study by Venkatesh, Morris, Davis & Davis (2003) that suggests four (4) environmental factors main constructs which are performance expectations, effort expectations, social influence and facility conditions. All of these constructs will be discussed one by one in the next discussion topic.

Environmental Factor Construct

The construct of environmental factors is important in order to assess the level of user acceptance towards MyEG application. These constructs can be used as variables in providing general description of the factors that affect individuals in the adoption and use of new technologies such as MyEG application. The construct of environmental factors is divided into four (4) parts, namely performance expectations, expectations of business, social influence and condition of facilities.

The expected performance is the level of confidence of a person in using technology. This means that by using MyEG application it is able to help users produce outstanding and maximum work performance. According to Venkatesh et al. (2003), the expected performance is the extent to which individuals believe that by using the system it will help them to gain

advantage in performance. This is supported in a study conducted by Prasetyo and Anubhakti (2011) regarding the acceptance of e-learning by students at the University of Budi Luhur, Indonesia. They explained that the noticeable behavior of users influence them to use e-learning. They added that performance expectations build hope to users that by using e-learning system users are able to produce optimum working results. Therefore, it can be formulated that performance expectations are the factors that play a role in determining a person's desire to use MyEG application.

Effort expectation is the level of easiness associated with the use of a system. Carlsson, Hyvonen, Puhakainen, and Walden (2006) stated that the effort expectation is a decisive factor for the actual usage of online services. A study by Venkatesh et al. (2003) found that the longer a user uses an information system, the more confident they are of the information system. DeLone (1988) also claimed that the increase in the direct use of information systems would enhance consumers' confidence in their ability to understand and use information systems when carrying out their duties. Thus, from this last study highlights, the researchers are able to conclude that with the overall effort expectations; the user will accept MyEG application service.

Social influence, on the other hand, can be defined as the extent to which an individual assumes that the people around them are important in influencing them into using a new system such as MyEG application. The people around them are referred to those close to users such as family members and friends. The study by Singh, Srivastava & Srivastava (2010) found that an individual's decision to adopt mobile commerce services is influenced by friends and family members. Studies conducted by Michael and Prabowo (2011) also found that social influence greatly affect a person's behavior towards the use of new technologies such as Open Source Software Database Management System. Therefore, it can be concluded that social influence plays an important role in influencing individuals to use MyEG application. Users will be influenced by the people around them, such as parents and closest friends before using the application.

The last factor is the condition of facilities. According Venkatesh et al. (2003), facilities condition is defined as a state facility that facilitates the extent to which individuals believe that the organizational and technical infrastructure exists to support the use of a system such as MyEG application. According to these researchers, behavioral intentions and state facilities are two (2) determinants of new technology adoption behavior. According to the Triandis ideology (1979), the facilities include the level and type of support provided to individuals that affect their use of technology. In addition, the facilities condition factor has also been identified as having an impact on the entry or the use of some new innovation information systems (Cheung and Chang, 2000; Jones, Sundaram & Chin, 2002). This can cause the utilization rate to be higher among the public when using electronic banking in particular. Thus, through discussion of this literature the researcher found that the condition of the facilities is one of the important elements for public acceptance of MyEG application.

METHODOLOGY

This research uses a quantitative approach through a survey method using questionnaires. The use of questionnaires is aimed to ease the data collection process, serves as a true picture of the problem, gain a large number of respondents (Hamdan & Md Johan, 2008), and simple enough to be administered by researchers (Sivo et al., 2006). The questionnaire was adapted from an instrument of the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003), and an instrument of the Technology Acceptance Model (Davis, 1989) with improvements done by researchers.

The research subject includes youth who are currently using or have previously used MyEG online application. Youths are defined as those of all races aged 15 to 40 years old (Ministry of Youth and Sports Malaysia, 2015). This is the age of youth who meets the definition issued by the National Youth Development Policy in 1997. The youth are selected as respondents for two (2) main reasons. First, this is the age group that uses the online service the most, compared to those of older age (Malaysian Communications and Multimedia, 2013). Second, youth is the largest contributor to the total population of Malaysia which is a total of 2,601,145 people (National Population and Family Development Board, 2015). Therefore, it is most suitable that this study is conducted on this group.

Klang Valley was chosen as the location for the study since this area has the criteria needed by researchers, such as high internet penetration, is among the areas with the highest population in Malaysia (> 6 million people) and consists of various ethnic composition of Malay (50.59%), China (29.03%), India (11.62%), others (0.72%) and non-citizens (8.04%). Due to the Klang Valley is a very wide area, the researchers used random sampling to select areas in the Klang Valley. According to Chua (2006), through a simple random sampling procedure, each unit or subject in the population has a chance to become respondents. After performing this procedure, Petaling Jaya was selected because it has the highest population. Furthermore, the MyEG main headquarters and customer service center is located there. From a total of 632,429 population in Petaling Jaya (Department of Statistics Malaysia, 2011), the sample size determination is based on the formula of Yamane (1967). Based on the calculations from this formula, the sample size required is 400 people. However, researchers have distributed a total of 420 questionnaires to the respondents. It aims to facilitate researcher's analyzed data when there is an extreme value in the distribution of data variables. A big sample size has a lot of benefits to researchers.

After selecting the sample size, researcher uses the purposive sampling method in order to determine the characteristics of the respondents. Purposive sampling refers to a group of subjects that have certain characteristics, selected to participate as respondents based on their knowledge and specific objectives of this research. According to Wiersma (2000), purposive sampling can be used when the purpose of the study focuses on a specific group of people only. In this study, there are three (3) main criteria set by the researcher. First, respondents from the public who are multiracial aged between 20 to 40 years old. Second, respondents from the

public who are in the vicinity of Petaling Jaya. Third, prior to distributing the questionnaires, respondents will be asked in advance whether they have used MyEG application. Only respondents who use MyEG application are eligible to answer the questionnaire on a voluntary basis.

Therefore, to measure the environmental factors of youth against MyEG application, researchers have adapted and modified the questionnaire developed by Venkatesh et al. (2003), according to the local cultural context. There are a total of twenty eight (28) items that measure (4) four environmental factors (performance expectations, expectations of businesses, state facilities and social influence) have been submitted. In addition, in order to identify the acceptance of MyEG application by youths with the relationship with environmental factors, a total of nineteen (19) items covering four (4) factors receipts have been used. Among these factors are the intentions of behavior, consumption behavior, barriers to the use and concerns the use that are adapted and modified from Davis (1989) in the context of Malaysian society.

In this study, the reliability test was conducted on the variables of environmental variables and acceptance of youth. Cronbach Alpha was used in this reliability test. Instruments deemed acceptable when the value of Cronbach alpha is at least 0.6 and above and the alpha value is between 0.65 and 0.95 (Chua, 2006). Thus, the questionnaire related to environmental factors and acceptance of youth towards MyEG application has been tested. The result of tests using the Cronbach Alpha's procedure shows a value of environmental alpha at 0.924 and acceptance at 0768. Thus, the reliability of the scale of the environment and the acceptance has a good consistency.

Finally, in order to test the first objective of the study, descriptive statistics were used. This method aims to identify the mean, percentage and standard deviation, which is the essential of the descriptive statistical procedures (May, 2004). Whereas researcher used a test correlation coefficient known as Pearson Product-Moment to test the second objective of the study.

FINDINGS OF STUDY AND DISCUSSION

This section discusses the result of a study based on the demographics of the respondents, choice of MyEG services and youth environmental factors against MyEG application. In addition, this section also discusses the relationship between environmental factors and the acceptance of MyEG application by youth.

Respondents' Demography

Table 1 below shows the distribution of MyEG users by demography. In terms of gender, a percentage of (71.2%) samples were male while the remaining users were female (28.8%). As for the composition of race, the Malays were the highest in the study with the percentage of (68.4%), followed by Chinese (17.2%), India (12.4%), and other races (2.0%). From the point of age, nearly half (47.2%) of MyEG application users were between 26 and 30 years of age. For

the use of online services, more than half (57%) have used the online services for about two (2) to four (4) years, whereas the rest (42.9%) have used online services for less than two (2) years.

Table 1: Demography

Profile	Frequency	Percentage
Gender		
Male	282	71.2
Female	114	28.8
Race		
Malay	271	68.4
Chinese	68	17.2
Indian	49	12.4
Others	8	2.0
Age		
< 20	2	.5
21-25	29	7.3
26-30	187	47.2
31-35	136	34.3
>36	42	10.6
Duration of online services usage		
Less than a year	65	16.4
1-2 years	105	26.5
2-3 years	59	14.9
3-4 years	54	13.6
More than 4 years	113	28.5

Choice of Types of MyEG Services

The choice of types of MyEG services were also requested by the researcher in this study. Table 2 shows that more than half (60.9%) of the users have used JPJ summons service and this is followed by (56.6%) of consumers who used PDRM summons service. In this study, MyEG users have been using these services by JPJ and PDRM for the purpose of reviewing and paying fines. These findings support the findings issued by Malaysian Administrative Modernisation and Management Planning Unit (2011) that stated transaction service users in Malaysia comprises services of those related to traffic matters such as checking and paying JPJ and PDRM traffic summons.

Table 2: Distribution of MyEG users according to the type of services used

Types of MyEG Service	Yes (%)	No (%)
JPJ Summons	60.9	39.1
PDRM Summons	56.6	43.4
Auto Insurance and Road Tax Renewal	41.4	58.6
Driving License Renewal	38.1	61.9
Online Reload Service	7.8	92.2
Foreign Workers Permit Renewal	1.8	98.2
Maids Work Permits Renewal	1.5	98.5
MyKad Replacement	1.3	98.7
e-Insolvency	.3	99.7
1 Malaysia Identification (1MID)	.3	99.7
Temporary Ownership Transfer System (STMS)	.3	99.7
Others	.3	99.7
Permanent Ownership Transfer (STMSR)	-	100

* Note: Percentage does not total up to 100 percent due to more than one answer

Environmental Factors Influence Users of MyEG Application

Environmental factors have been operationalized to acquire the mean score on a five point scale. This mean score is designed to measure environmental levels (performance expectations, effort expectations, social influence and condition of facilities) on an overall basis and by constructs. Environmental levels are categorized into poor, good and excellent. The highest total score shows that the use of MyEG application is excellent among consumers, the second highest mean score refers to the use of MyEG applications that is good among consumers, and while the lowest score refers to the poor use of MyEG application among consumers. The distribution of scores for each level using a statistical approach based on the cut point is as shown in Table 3.

Table 3: The division of mean score of environmental factor

Level	Mean Score
Poor	1.00 – 2.33
Good	2.34 – 3.67
Excellent	3.68 – 5.00

Based on the distribution of scores on the users environment level towards MyEG application (Table 3), Table 4 shows the mean scores of the whole environment is at the level of both 3.65 and SP = 0:51. The finding shows that environmental factors affect MyEG application users. The result of this study is in line with the study by Carlsson et al. (2006), which states that the elements in the environmental factors affect the behavior of consumers to use MyEG application.

At the same time, this study also identifies whether the constructs of environmental factors exist in MyEG application users. Through analysis, the results in Table 4 below shows that the condition of facilities has the highest mean value of 3.87 and SP = 0.78. This is followed by the performance expectations with a mean value of 3.83 and SP = 0.82. Meanwhile, effort expectations comes at third place, with a mean of 3.81, SD = 0.74. This situation explains that on average, respondents agree that the condition of facilities, followed by the performance expectations and the effort expectations are important factors that should be taken into consideration in order to encourage the use of MyEG application. Finally, the lowest mean position is the social influence factor (mean = 3.08; SD = 0.51), which describes that respondents moderately agree that the social influence factor is an important factor to encourage the public to use MyEG application.

Table 4: Environment mean score according to construct

Construct	Mean	Standard Deviation
Facilities Condition	3.87	0.78
Performance Expectation	3.83	0.82
Effort Expectation	3.81	0.74
Social Influence	3.08	1.19
Total	3.65	0.51

The Relationship between External Factors and the Acceptance of MyEG Application by Youth

Pearson Correlation 'r' is used to determine whether there is a significant correlation between environmental factors and the acceptance of MyEG application among youth. Based on the relevance of each element in the environment that is used by MyEG application users this study, all of these elements positively correlated with the level of acceptance of MyEG application.

The Relationship between Performance Expectation and the Acceptance of MyEG Application

Table 5 below shows that performance expectations have a strong positive correlation (r = 0,728, p = 0.000) with the acceptance of MyEG application compared to other elements. This means MyEG application users agree that the element affects the rising level of their acceptance towards this application. The results of this study is parallel with Marchewka et al. (2007) who found that through performance expectations, it is able to determine the user acceptance towards information technology.

The Relationship between Effort Expectation and the Acceptance of MyEG Application

In addition to the elements of performance expectation as a factor that prompts user to accept MyEG application, this study also shows that effort expectation have elements in the note to

encourage people to continue using the application. Table 5 shows that effort expectation has a positive and moderate correlation (r = 0.651, p = 0.000) with the level of acceptance of MyEG application. When the element of effort expectation is agreed by the users, the level of acceptance of the MyEG application will increase as well. This illustrates that a number of factors are able to encourage people to continue using MyEG application, including the element of effort expectations. This study supports the finding of Carlsson et al. (2006) who found evidence that the effort expectation is a decisive factor for the actual usage of online services by the youth in particular.

The Relationship between Condition of Facilities and the Acceptance of MyEG Application

The condition of facilities is also a factor related in a moderate and positive way (r = 0,611, p = 0.000) with the acceptance of MyEG application. It can be concluded that as the user agrees to the conditions, the higher the level of acceptance of MyEG application. The condition of facilities is also is one of the important factors in assessing the public's view of their admission to the MyEG application. This is because when the facility is in place such as the presence of the internet, users will feel convenient for them to navigate MyEG application. These findings match the finding of (Cheung and Chang, 2000; Jones et al., 2002) which states that the condition of facilities has a positive effect on the use of new innovation in information systems.

The Relationship between Social Influences and the Acceptance of MyEG Application

As for the social influence factor, this study found that there is a weak positive correlation (r = 0.465, p = 0.000) between the social influence and the acceptance of MyEG application. Although this correlation is weak but it is significant. Thus, the higher the social influence factor agreed upon, the higher the potential level of acceptance of the MyEG application although at a lower rate. This weak positive correlation can be associated to the influence of those close to the users, such as family members and friends to help users use MyEG application. This is because typical MyEG application consumers will not use this application until they witness other people or other sources such as television, radio or newspapers using this application. Nevertheless, a previous study shows that there is a difference with the finding conducted by Yu (2012) with respect to mobile banking in Taiwan. He found that there is a strong correlation between social influence in affecting a person's intention to use mobile banking compared to other factors.

Table 5: Correlation test among performance expectation, effort expectation, facilities conditions and social influence towards the acceptance of MyEG application

Variables	MyEG application acceptance	
	r	Significant Value
Performance Expectation	.728	.000
Effort Expectation	.651	.000
Facilities Condition	.611	.000
Social Influence	.465	.000

CONCLUSION AND RECOMMENDATION

MyEG application is an online facility provided by the government to the people. However, the results show that the MyEG application today is focused on certain types of services such as JPJ summons and PDRM summons. All kinds of services in the MyEG application should be used by users as they help resolve matters quickly and cost-effectively. Through the results of this study, a few recommendations can be contributed to the parties involved. First of all, the government, especially MyEG must review the types of services offered to users. This is important to ensure that no service that is established in MyEG application that is not used by users. In addition, it is also to focus on the services frequently used by young people in particular.

Secondly, since this study was conducted in the Klang Valley, it is hoped that future researchers could conduct a research in every state of Malaysia. This is because the public acceptance towards a new technology is different between those in the urban area and in the rural area (Akhter, Onishi, & Kidokoro, 2009), especially the issue of internet access (Hamizah, Jusang, Siti Zobidah, Hayrol Azril, Jeffrey L., 2014). Thus, the findings might still be the same, or in contrarily different from the results of this study. In conclusion, the youth of today are those who are struggling with the advancement of science and technology. The efforts of the government in order to ensure its people receive the facilities in terms of infrastructure should be supported.

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