[POM 1] KEY DETERMINANTS OF STUDENTS' PERCEPTION AND ACCEPTANCE TOWARDS UPSB LAUNDRY SERVICE

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ABSTRACT

Laundry service provided by UPSB Sdn. Bhd. is one of the business services provided by them in UUM, as well as being the most widespread laundry services available in UUM. Due to that, it is important that a research conducted will identify the key determinants of students' perception and acceptance towards the service provided. Referring to the study, this article reflects critical outcomes in view of following objectives: 1. To identify the key determinants that would affect the perception level of the students towards the laundry service that is provided by UPSB Sdn. Bhd. 2. To identify the differences in perception in between the demographic attributes. The respondents of this study are UUM undergraduate students that are currently residing in hostels located at Route C areas, i.e. DPP Muamalat and DPP Yayasan Al-Bukhary. A quantitative research mthod is applied in this research, with the research instrument of survey questionnaire that consists of 5-point Likert scale questions adapted from the Technology Acceptance Model by Davis, Bagozzi and Warshaw (1989).

Keywords: *UPSB Sdn. Bhd., laundry service, user perception, user acceptance*

INTRODUCTION

Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement (Meuter, Ostrom, Roundtree & Bitner, 2000). Hilton, Hughes, Little and Marandi (2013) define SSTs as "technologies provided by an organization, specifically to enable customers to engage in self-service behaviours. In many cases this will involve customers performing tasks that were previously undertaken by the employees and transforming the customer role from essentially passive to active." Self-service technologies (SSTs) are attracting a great deal of attention from academicians and practitioners because of their relative newness and strategic importance (Cunningham, Young & Gerlach, 2009). The introduction of SSTs to the delivery of a service removes the provider's personnel from the transaction and places additional responsibilities on the customer to transact the service (Curran & Meuter, 2005).

Self-service technologies have now been applied to many industries and businesses since its introduction to the world. The most common application of the self-service technology is the use of automatic teller machines (ATMs) in the banking industry to reduce the waiting time and the required manpower to conduct banking and financing

services, therefore increasing the effectiveness and efficiency of the overall industry. Many service providers have adopted a wide range of technologies in the process of service delivery and customers use the new technologies to produce and consume services without direct personal contact with firm representatives (Lin & Hsieh, 2006). The self-service technology has been growing to spread to many industries and the industry that will be focused on in this article will be the laundry industry.

Laundry services are facilities in which customers can bring their laundry to be cleaned and dried using the provided washing machines and dryers in the facility with a charge of a fee. Like the rest of the business industries, the application and assimilation of technology has happened in the laundry industry as well, giving birth to the self-service laundry services.

Ajayi, Nwosu and Ajani (2015) in their research about students' satisfaction with hostel facilities in Federal University of Technology, Akure, Nigeria stated that the facility such as self-service laundry will affect the decision of the students to enter certain university. This research also recommends the need for provision of more hostels with better designs and current facility like laundry through public-private partnership to meet the needs of the growing students' population.

OVERVIEW OF THE INDUSTRY

The laundromat industry in Malaysia has been developing at a positive trend recently as well. According to Chang (2015), self-service laundry was introduced to Malaysia around 30 years ago but it has not been widely accepted by the public until recently. The biggest players in self-service laundry industry is Clean Pro, Laundrybar and Adan Laundry, with the major player being Clean Pro, with 100 outlets under its belt, of which 80% are franchised outlets (Lee & Tan, 2016). Clean Pro also has branches all over the country, with expansions to Singapore and Bangkok as well. They pose as a competitor for Uniutama Property Sdn. Bhd., which is the main target company of this study.

Uniutama Property Sdn. Bhd. (UPSB) is established on 14th March 2004 to handle matter regarding real estate and management in Universiti Utara Malaysia. It is established with an initial capital of RM5,000,000. UPSB is one of the many subsidiaries branching out from Uniutama Management Holdings Sdn. Bhd., which is fully owned by Universiti Utara Malaysia. Up until now, UPSB has been expanding its business operations from the hygiene and landscaping management and building management to hotel management, real estate investment, transportation, insurance, restaurant and catering as well as agribusiness-related management. UPSB's mission is to provide products and services that are based off on the "value for money" principle, to give maximum return to its shareholders, as well as becoming a pioneer company in real estate development around the northern part of West Malaysia. Its vision is to become a leader in the management services including real estate and hospitality services in the northern part of West Malaysia, especially in the states of Kedah and Perlis. UPSB has also established 2 sub companies to smoothen the commercial operations of the company to increase its core business to investments and real estate development around the state of Kedah as a long-term business strategy.

One of UPSB's business unit is the placement of washing machines in each of the hostel washroom areas located in the university. The machines are coin-operated and requires no manpower for service delivery. The students, who acts as customers bears most of the responsibility in the service delivery process. This study will mainly focus on determining the key determinants that affect the students' acceptance towards the self-service laundry provided by UPSB Sdn. Bhd. This study also looks to rectify the differences in perception and acceptance amongst the students' in difference of gender and age.

RESEARCH OBJECTIVES

The aim of this study is generally to study the key deteminants of student perception and acceptance towards UPSB Laundry Service. Specifically the study aims to:
1. To identify the key determinants that would affect the perception level of the students towards the laundry service that is provided by UPSB Sdn. Bhd.
2. To identify the differences in perception in between the demographic elements.

PROBLEM STATEMENT

Globally, a Self-Service Laundry, is a technology that are widely known in the United Kingdom, United States, Canada, Australia and also New Zealand where clothes are washed and dried using less human energy. In Malaysia, the Self-Service Laundry technology is also not something new. From day to day, the number of the Self-Service Laundry are increasing, whereas this technology started can be found in virtually all neighborhood areas across all 14 states in Malaysia (coinlaundry.org, 2014). This technology is considered as a need of life among certain people, including students.

In the scope of Universiti Utara Malaysia (UUM), the Self-Service Laundry technology service is provided by Uniutama Property Sdn Bhd (UPSB). They are a subsidiary company that is set up by Uniutama Management Holdings Sdn Bhd (UMHSB). Washing machines are installed at the shared cleaning areas of students and students can have access of usage to the washing machine with a price of RM2.50 per wash. Although there are a number of students that uses the self-service laundry services, the number of active users still remains a minority in comparison to the large number of students. Most of the students would still be doing their laundry by hand, rather than using the laundry service provided.

LITERATURE REVIEW

Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB) & Technology Acceptance Model (TAM)
Theory of Reason Action (TRA) is focusing most on human behavior. It is usually being used in making prediction towards a wide range of behaviors. TRA had been applied by Davis et al. (1989) towards individual acceptance of technology. The variance on that study stated that there are largely consistent with the studies that had employed TRA in the context of other behaviors. Attitude toward behavior is adapted in TRA, it means that the target behavior of an individual is usually influence by their

own positive or negative feelings toward into it, or it can be stated as evaluative effect (Fishbein & Ajzen, 1975)

Theory of Planned Behavior (TPB) is an extension of TRA by having perceived behavioral control as their additional factor. Perceived behavioral control can be defined as extra determinant towards behavior and intention. Perceived Behavioral control having a meaning of the ease or difficulty faced while performing a kind of behavior (Ajzen, 1991). TPB had been successfully used in making prediction in a wide variety of settings especially towards behavior and intention (Ajzen, 1991). According to Mathieson (1991), he also stated that TPB has been successfully applied to the usage of variety types of different technologies and also in understanding towards one's/ individual acceptance.

Davis (1989) had introduced a great model regarding to technology acceptance and use that is named as the Technology Acceptance Model (TAM). TAM helps in making better explanation and prediction towards the user behavior especially within information technology context. TAM can be considered as an extension towards theory of reasoned action (TRA). But TAM is unlike TRA, because TAM excluded the attitude construct so that intention can be explained in a better way. TAM is chosen to be conduct in this study because most of the researches in which done in the past had proven that TAM is one of the most influential, commonly employed, and highly predictive model of IT adoption (Adams, Nelson & Todd, 1992; Davis, et al., 1989; Lee,Kozar, & Larsen, 2003; Venkatesh & Bala, 2008; Venkatesh & Davis, 2000). Yet, TAM is applicable in our topic too because our topic is focus on key determinants of students' perception and acceptance towards UPSB laundry service.

METHODOLOGY

This study proceeded with the quantitative path on 120 UUM undergraduate students that are currently residing in hostels located at Route C areas. The data collection exercise was done in two weeks within the month of November 2015. The analysis was done performed by IBM SPSS Statistics 23.

FINDINGS

Table 14

Correlations between key determinants and behavioral intention (BI)

Variables	p-value	r-value
Perceived Usefulness (PU)	≤ 0.01	0.610
Perceived Ease of Use (PEOU)	≤ 0.01	0.549

As shown in the result of Pearson Correlation, Perceived Usefulness (PU) and Behavioral Intention (BI) has a high significance with $r= 0.610$ at $p \leq 0.01$. Perceived Ease of Use (PEOU) also has a significant relationship with Behavioral Intention (BI) at $r= 0.549$, $p \leq 0.01$. Cohen (1988) in his study rated that for the r value, 0.10 to 0.29 represents a small effect and r value above 0.50 represents a large effect or strong association. Therefore, the results above show that the correlation between PU, PEOU and BI are significant and positive.

Table 15

Regression analysis results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.192	0.416		-.461	0.646
Perceived Usefulness (PU)	0.574	0.128	0.441	4.503	0.000
Perceived Ease of Use (PEOU)	0.333	0.132	0.247	2.517	0.013

R Square = 0.405

Adjusted R Square = 0.394

} Model Summary

F change = 39.766

sig. = .000b

} ANOVA[a]

From the results of the regression analysis, the R^2 coefficient shows an unsatisfactory value which is 40.5%. This means that 40.5% of the variation of in the students' perception and acceptance are explained by the two independent variables, which are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). The other 59.5% are remain unexplained. This is due to the fact that it is hard to predict the behavior of the human such as psychology (Frost, 2013). Other than that, significant F-value in this result has verified that the set of predictors (key determinants) did a good job in predicting the dependent variable (students' perception and acceptance). The t-value is analyzed in this research in order to determine each dependent variable weight's significance, which refers to the two (2) key determinants in this study. It can be seen that both Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) variable are significant at $p \leq 0.01$ and $p \leq 0.05$ respectively. Hence, it means that all the independent variables, namely Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) have significant impact on students' perception and acceptance towards UPSB laundry service.

In a nutshell, correlations and regression results above are contributed to research objective 1. The key determinants that would affect the perception level of the students towards the laundry service that is provided by UPSB Sdn. Bhd. are PU and PEOU.

Table 16

Mean scores of PU, PEOU & BI

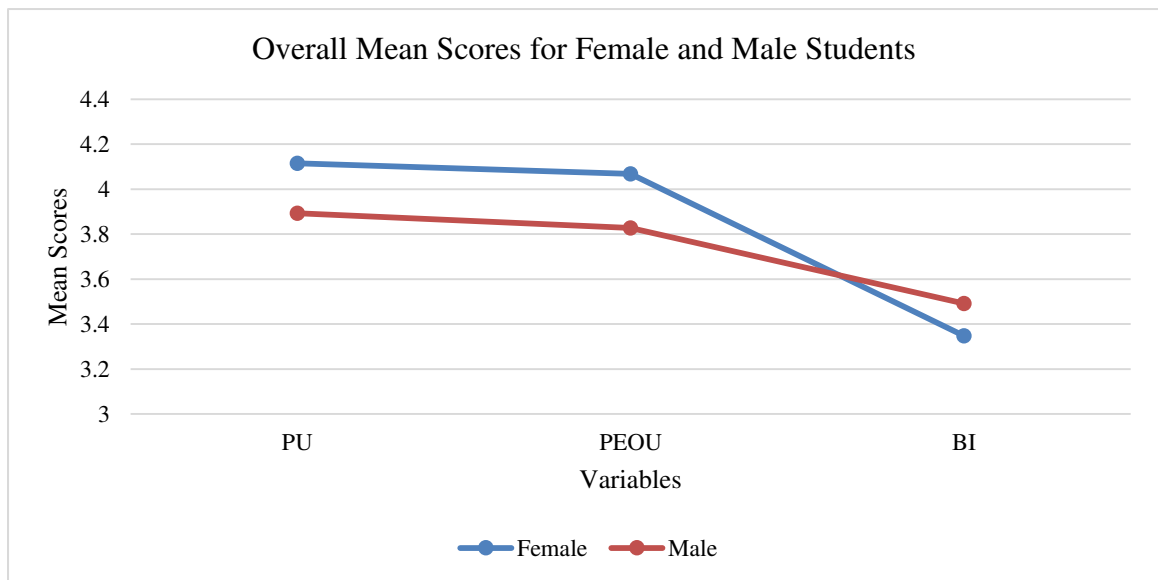|	Female					Male				
	Year 1	Year 2	Year 3	Year 4	Over all	Year 1	Year 2	Year 3	Year 4	Over all
PU	4.23	4.13	4.03	4.05	4.11	3.73	4.02	3.73	4.10	3.89
PEOU	4.12	4.00	4.02	4.14	4.07	3.52	3.83	3.85	4.13	3.83
BI	3.13	3.18	3.22	3.89	3.35	3.27	3.62	3.52	3.58	3.49
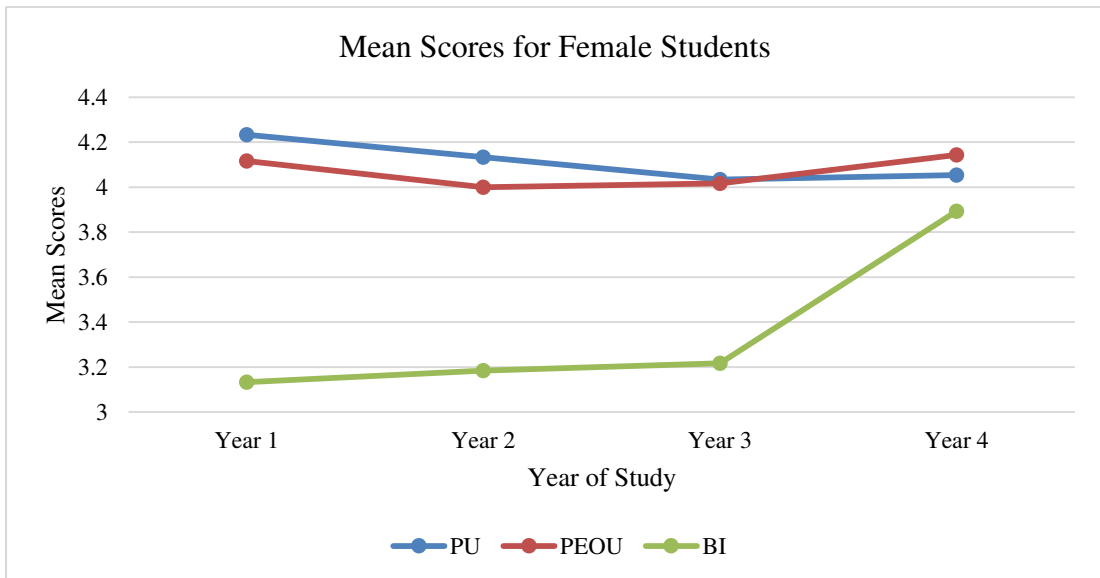
Figure 3

Graph of mean scores of PU, PEOU & BI for female students
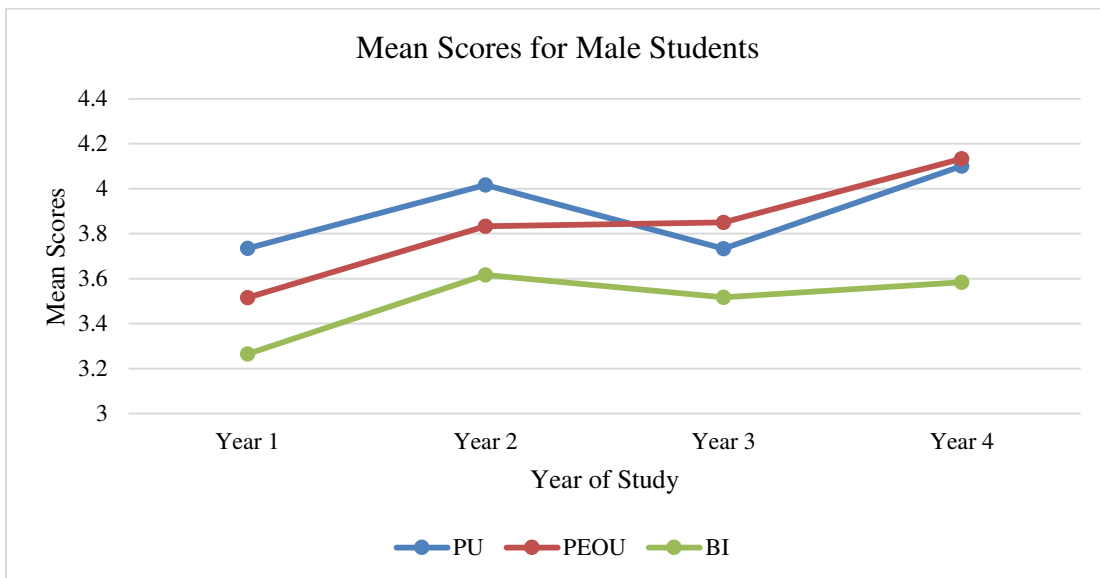
Figure 4

Graph of mean scores of PU, PEOU & BI for male students

The table and graphs above shows that the mean scores of PU and PEOU for female students are beyond 4. 0 throughout all of the years of study, which represents that all of them from different years of study have a positive perception level towards PU and PEOU. On the other hand, most of the mean scores of PU and PEOU for male students are below 4.0 throughout all of the years of study, which also represents that most of them have a neutral perception level but most of mean scores shows that they are leading to a positive side. In the context of BI, the mean scores for female students has increased about 24.24% from Year 1 students to Year 4 students. Besides that, the mean scores for male students have fluctuated and reach a peak mean score of 3.6167 which is rated by Year 2 students. However, in general, the mean scores for male students are increased about 9.73% from Year 1 students to Year 4 students.

Figure 5

Graph of overall mean scores of PU, PEOU & BI for female and male students

In conclusion, the overall mean scores of PU and PEOU for female students are beyond 4.0 and for male students are low than 4.0, which mean that female students has a more positive perception level towards PU and PEOU. In addition, the overall mean scores of BI for female students and male students have not much significant difference, both of them indicate a mean score lower than 4.0. Therefore, it means that both of the male students and female students has a neutral perception level towards BI.

In a nutshell, tabulation and graphs of mean scores of PU, PEOU and BI above are contributed to research objective 2 as well. There are no significant difference on the perception level towards UPSB laundry service among female students from different years of study while there are significant difference on the perception level towards UPSB laundry service among male students from different years of study. Besides that, there are significant difference on the perception level towards UPSB laundry service between male students and female students.

DISCUSSION

There are several speculations can be carried out based on the tabulations and graphs for mean scores of PU, PEOU and BI which are presented in the research findings. Female students have a more positive perception level towards PU, PEOU than male students. This phenomenon can be explained as female students are more in need of UPSB laundry service as female students have a higher volume of clothing compared to male students. Therefore, UPSB are encouraged to assign customer focus of laundry service more on female students. Besides that, Year 4 students has the most positive perception level towards PU, PEOU and BI. This can be explained as Year 4 students are more inclined to use UPSB laundry service as they tend to have a more hectic lifestyle compared to students from other years of study. In additions, students have a neutral perception level towards BI although they are having nearly positive perception level towards PU and PEOU. This situation can be explained as students are not intended to acquire UPSB's laundry service although they perceived UPSB laundry

service usefully. There are some factors that may pull students away from the using of UPSB laundry service. Those factors can be hygiene factor, pricing factor and perceived service reliability factor.

CONCLUSION

The key determinants that is identified by this study in regards to the students' acceptance towards UPSB self-service laundry service is the Perceived Usefulness (PU) and the Perceived Ease of Use (PEOU). Other factors remained unexplained as human behaviour is affected by a large number of internal and external factors.

The acceptance level of female students towards UPSB's self-service laundry service is comparably higher than those of male students. Female students have a positive perception towards the service while the male students remain a neutral but leaning to positive side of perception for the service. The perception level of female student towards the service has not experienced major changes while there is significant fluctuation in the acceptance level towards the service amongst male students of different years.

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