

COUNTER TELLER SERVICES VERSUS AUTOMATED TELLER MACHINE AND CASH DEPOSIT MACHINE: XYZ DEPOSITORS' PREFERENCES

Syed Jamal Abdul Nasir bin Syed Mohamad¹, Raja Saliza Raja Kahar Amran, Yusni Abdul Wahab and Nurhayati Baharudin

Abstract

Despite the increasing usage of automated teller machine (ATM) and cash deposit machine (CDM) in transacting depositing and withdrawal activities within the financial institutions environment, still, the demand for counter teller services is deemed high for XYZ (not the real name) Malaysia. Indeed, switching the mode of transactions usage from counter teller services to ATM and CDM has become the greatest challenge for XYZ Malaysia. The research was developed to cover both of the factors, the counter teller usage, and ATM and CDM usage. However, in this part of the paper only ATM and CDM services issue will be discussed. In this study, a quantitative model of research was developed to determine (1) the enticing factors for depositors to use ATM and CDM Services, (2) the repelling factors and NOT to use Counter Teller Services, and; (3) the relationship between the enticing factors and repelling factors with the preferences of depositors towards ATM and CDM Services. This study investigates the relationship between the dimensions on the ATM and CDM usage. A survey instrument was used to gather data to estimate the proposed research model. Based on the findings, factors relate to range of services and conveniently located and accessible by depositors in performing their ATM and CDM transactions give the highest contribution towards the usage of ATM and CDM. Indeed, this research is giving some highlights in the acceleration of ATM/CDM usage within the business environment of XYZ.

Keywords: Counter teller service, automated teller service and depositor

Introduction

Since the establishment of Bank Islam in 1983 and other conventional banks that offer Islamic banking services under the approval of Bank Negara Malaysia in 1993 (Mokhtar *et al.*, 2006), Islamic banks have contentiously been growing in size and thus the numbers of the relative institutions. The main objectives of these banks had led to superiority in the achievement of the economy and social development through the delivery of financial services aligned with the main beliefs and teaching of Islam. Conforming to these missions, it is essential for every Islamic bank, and XYZ that has the banking attributes to continue learning the changing behavior and perception of their customers.

In the new era of technology, electronic data processing and computers have been the engines in every industry, more often than not in the banking industry. In recent years, apparently internet/electronic banking had become a critical service delivery channel (Sriluck & Mark, 2004). Many have radically discussed information benefits that internet/electronic technology provides to business, as for instance Shaqiri Aferdita Berisha, (2015). Nonetheless, internet and electronic technology offer

¹ Correspondence concerning this article should be addressed to Syed Abdul Jamal Nasir Bin Syed Mohamad, Arshad Ayub Graduate Business School, University Technology Mara. Email: syedjamal145@salam.uitm.edu.my

the ability to automate business transaction, which may allow more responsive provision of service to customers (Sriluck & Mark, 2009).

It is further emphasized through research on electronic business, indicating that customers utilize a number of factors when evaluating technology-enable services (James, Matthew & Carol, 2003), where some of these factors include expectations of the organization and its interfaces along with the organization's performance (Newell, 2000).

The ability of electronic services that enable customers to do their jobs and meeting their customers' individual needs (Sindell, 2000). Each of these issues is found to be critical in the evaluation of the organization and its electronic service technology (James et al., 2003).

There are several banking products provided by banking institutions, namely, phone banking, tele-banking, and internet banking. Nonetheless, one of the most important technological innovations was the introduction of ATM, which was introduced in 1939 and was first used by the New York's First National Bank (now Citibank) (The New York Times) had made the breakthrough, perceived to be the catalysts in economic, assisting banks with quick financial services. Although there is nothing new in today's perspective, still the effective usage of ATM by banking customers is still being debated. Being the most prominent banking institution in Malaysia, there is no exception of this matter to XYZ.

In many cases, bank customers actually prefer to conduct their transactions on ATM rather than using human teller (Worku, Tilahun and Tafa, 2016). From the marketing perspective, ATM is an important channel where cash withdrawals, deposits, balance reporting, inter-account transfers and other services in retail banking is being transacted.

Customers' acceptances of ATMs are the key to successful self-service banking and enhance the bank's image (Chandio, 2011), thus it is essential to understand the impact and consequences of electronic banking machines on the customers. This is literally true in the case of XYZ, being a prominent institution, the need to obtain a high degree of customer utilization to make ATM and CDM cost effective is deemed crucial.

This fact is substantiated by a study done in Kuwait, where ATM had made a large contribution to Kuwaiti banking industry by reducing labor costs and producing an annual savings of \$21 million (Awad & Muhammad, 1992). Further study made by Levinsohn (1998); and Greaves *et al.* (1999), reveals that by encouraging business clients to use electronic banking, financial institutions would be able to save considerable operating and marketing cost, thus providing banks with economies of scale, improve customers' services and create long-term profit. As further cited by Anesh (2004), by providing sophistication in their services via electronic banking, banks will enjoy:

- a. Additional Transaction Revenues as they can drive revenues over and above their offline revenues by charging for online services and value-added services;
- b. Savings From Reduction Of Transactional Costs where savings are gained from reductions in staff, reduction in branch sizes, reduction in consumable costs such as paper, ink cartridges and other stationeries;

- c. Opportunities For Acquiring New Customers, particularly to customers who is looking for the flexibility and convenience offered via ATM and CDM banking will be attracted to banks providing the best services;
- d. Improved Ability To Retain Customers, where customer relationship management can be facilitated by the data acquired and captured on the corporate database.

Services can be customized to suit the needs of the customers, thus breeding customer loyalty. As also argued by Evans and Wurster (2000), business investment in electronic technology is driven by expectations that this technology should provide better opportunities to establish a distinctive strategic position as compared to the previous generation of information technology. However, XYZ faces problem on how to reduce costs and at the same time to be able to develop and maintain relationship with their depositors. As argued by Sriluck and Mark (2009), customer adoption of electronic banking has not been as strong as most banks might have wished. Nevertheless, banks that can persuade their customers to adopt technology whilst enhancing current and future relationships can offer significant cost advantages compared to those from conventional "brick-and-mortar" bank-customer channels (Dabholkar, 1996).

However, the dimensional of this perspective is arguable in the case of XYZ. Despite the advances of technology applied in the banking services, the custom usage of services by XYZ depositors over the counters teller is still perceived to be considerable. Based on the findings of the preliminary study conducted at XYZ Shah Alam, ironically, XYZ depositors still prefer to maintain the "brick-and-mortar" concept and it is rather challenging for XYZ to substantiate the usage of ATM and CDM services to its depositors due to some predicaments. Further, the depositors of XYZ expect the employee of XYZ to fulfill their needs in the best tune, and the quality of services given by XYZ in the area of their concern, need to recognize the depositors' expectations.

Thus, the main purpose of the study is to understand and investigate about how and why XYZ depositors adopt or reject counter teller services or ATM and CDM services, ultimately as it is necessary to guide the effective usage of ATM by the depositors of XYZ.

As denoted by Cees, Paul and Ronnie (2011), the starting point is that customers have a choice. For that matter, it is indispensable to undercover the associated factors, and in this study these factors are classified under three main categories. The first group focuses on the enticing factors that lead the preferences of depositors to use counter teller services, whilst the second group however focuses on the repelling factors that lead the preferences of depositors NOT to use ATM and CDM services.

Literature Review

a. The Enticing Factors for Depositors to Use ATM and CDM Services

Based on the study made by Awad and Mohammad (1992), conveniences were the motivating or enticing factors for depositors to use ATM and CDM. From their study,

conveniences were referred to the following variables arranged respectively to its rank (see *Table 1*):

Table 1: Rank of variables

Rank	Variables
1	Quicker than human tellers
2	Handy and easy to use
3	24-hours availability of services
4	Convenient location to shopping center
5	Convenient location to work
6	Avoid cash-carrying risks
7	Convenient locations to residence
8	ATMs are more reliable

The most recent study made by Katono (2011) also suggested that reliability and location were the most important factors of the service quality of ATM that entice depositors in using ATM. Nevertheless, further researches by the following researchers have suggested that the respective variables, among others are perceived to be the most compelling factors, which can be related to the problem of XYZ and indispensable for the research's independent variables (see *Table 2*):

Table 2: The Dimension of ATM Service Quality

Dimensions	Related Items	Literature Evidence
Reliability	<ul style="list-style-type: none"> Reliability represents the ability of the web site to fulfill orders correctly, deliver promptly, and keep personal information secure ATM functions at all time and provides consistent services The importance of reliability has been emphasized by the information technology-based service. Reliability dimension has a direct positive effect on perceived service quality and customer satisfaction by electronic banking systems 	Al-Hawari, Hartley and Ward (2005), Khan (2010); Katono (2011); (Parasuraman, Zeithaml, and Berry, (1988); and Zhu, Wymer and Chen (2002)
Responsive-ness	<ul style="list-style-type: none"> ATM systems compensate for wrongful deductions ATM problems are settled to the satisfaction of 	Khan (2010); Kumbhar (2011)

	the customers	
	<ul style="list-style-type: none"> • Breakdowns of ATM are fixed promptly • ATM cards are promptly replaced • ATM banking settles complaints in a reasonable time frame 	
Ease of Use	<ul style="list-style-type: none"> • ATM provides clear instructions on usage • ATM is easy to use for transactions • ATM language is easy to understand • ATM provides graphics and adverts of banking services 	Mobarek (2007); Chong, Ooi, Lin and Tan (2010); Kumbhar (2011)
Convenience	<ul style="list-style-type: none"> • ATM provides different range of services • ATM is conveniently located and easy accessible • ATM waiting time is acceptable • ATM cards are compatible on other platforms 	Al-Hawari <i>et al.</i> (2005); Khan (2010); Katono (2011)
Security	<ul style="list-style-type: none"> • Customers feel safe during ATM transactions • Customers have trust and security over ATM services 	Al-Hawari <i>et al.</i> (2005); Khan (2010)

However, security of electronic technology is somehow debatable by some literatures such as Ratnasingam (1998) and Rotchanakitumnuai and Speece (2003) where electronic markets create new transaction risk for electronic market participants and security is one of the crucial factors that discourage the successful implementation of electronic services. However, for the purpose of the research work, this variable has been adopted as one of the independent variables in ascertaining the correlation of this variable on the enticing factor to the usage of ATM and CDM by the depositors of XYZ and thus its correlation with the dependent variable i.e. the preferences of depositors in selecting the services offered by XYZ.

b. The Repelling Factors for Depositors NOT to Use Counter Teller Services

Evans and Lindsay (2001) suggested that services are divided into three basic components:

- Component (1) - Physical facilities, process and procedures;
- Component (2) - Employee's behavior; and
- Component (3) - Employee's professional judgment

In a nutshell, designing a service essentially involves determining an effective balance of these three components (Norudin & Che Hamdan, 2010). The ultimate goal of any services provided is to meet or exceed customer's expectation over the lifetime of a particular product or services (Juran, 1981). This is supported by Jones and Sesser (1995), providing customer with outstanding values may be the only reliable way to achieve sustainable customer satisfaction. Based on the theories, organization

must realize that different customers have different expectations and fundamentally they are required to convert neutral customers to satisfied customers and thus converting satisfied customers into completely satisfied customers (Norudin & Che Hamdan, 2010).

These theories giving a notion that on failure of an organization in meeting the expectation of their customers, the following variables that are initially perceived to be positive contributors to an organization success in carrying the value of its customers services over the counters, may indeed rebound as defector and intimidating variables to the organization, that may lead to their customers in repelling to use the services:

i. Employees' Performance

Nowak and Washburn (1998) have suggested that in today's increasingly competitive environment, it is essential to measure the service performance of a firm as it significantly contributes to the overall satisfaction of its customers. Through previous researches, this area of concern is relatively conjoint with the aspects of product quality, service quality, cost management and timeliness.

As denoted by them through 155 marketing survey conducted, timeliness is embraced as the significant variable that contribute to the competitive advantage and thus customers' loyalty. Timeliness which can be translated as employees' performance in attending customers over the counter had given a notion that the significance of employees' performance towards customers' preferences in choosing the type of services offered.

ii. Counter Service Quality

Carlzon (1989) has also suggested that the quality of any services encounters or "moment of truth" experienced by their customers, forms part of their overall impression of the whole service provided (Dale, 2003) and by implication thus impression of the organization itself. Service quality perception results form a comparison of customers' expectations with actual service performance. As quoted by Schneider and Bowen (1995), the quality of the core services influences the overall quality of the service perception and thus leads to customers' satisfaction.

iii. Perceived Crowdedness

Another variable that significantly contributes to the repelling factor is perceived crowdedness by customers which conveys some type of social information, such as time consuming (Machleit, Eroglu & Powel, 2000). Although this matter is not substantially discussed in any marketing research but more in psychology researches, the implication of this variable to the research work is crucial. By understanding the human behavior, it definitely assists the research in determining the correlation between the variable and the reluctance of the depositor to use the counter teller services.

2. Research Methodology

This research is a descriptive study where data was obtained through questionnaires in order to understand the phenomena at the exploratory stage of the study. The quantitative analysis such as frequencies, mean and standard deviation were carried

out to establish the tendency of the sample of the population in using counter and, ATM and CDM services. Factors attributing to the preferences of the depositors were further divided into two main determinants; a) the enticing factors that brought the depositors to use the ATM and CDM services and; b) the repelling factors for not using the counter teller services.

a. Types of Investigation and Objectives

In relation to describing the phenomenal of the study, this calls for *correlational study*. Through the correlational study, the researchers are able to establish and examine the following factors:

- i. The relationship between the enticing factors of the depositors in using the ATM and CDM services with the preferences of the depositors;
- ii. The relationship between the repelling factors of the depositors NOT to use counter teller services with the preferences of the depositors;
- iii. The relationship between the enticing factors and repelling factors with the preferences of depositors towards ATM and CDM services.

b. Extent of Research

The research is conducted within the *natural environment of XYZ*, as required to fulfill the requirement of the correctional study. To undertake the study, the researchers had developed a theoretical framework (see *Figure 1*) and collection of data was made through survey of the respondents confined to XYZ's nature of business; i.e. the counter teller service users and the ATM and CDM users.

c. Study Setting

The respondents were the depositors that received the services from the selected XYZ branches and the respondents that performed their XYZ transactions through ATM and CDM. As the study was carried out within the natural environment of XYZ business operations, the research setting is a *non-contrived setting*, which is classified into a *field study*. To collect data from the counter teller depositors, the study was carried out within the waiting areas of XYZ counters teller. Respondents were approached while they were queuing for services.

As for ATM and CDM, the environmental setting is within the boundary where the ATM and CDM were near the locations of XYZ counters visited. Respondents were approached after performing their transactions through ATM and CDM. Only respondents that fit into the criteria of the research work were questioned.

d. Units of Analysis

Unit of analysis of the research study is *individual*, i.e. the depositors of the XYZ and each individual response were gauged via questionnaires to determine each and every one's preferences over the services provided by XYZ. Data was gathered from personally administered questionnaires. Survey was confined to the locality of Shah

Alam and Kuala Lumpur and data was collected from (a) a group of depositors that used counter teller and (b) a group of depositors that were using ATM and CDM.

e. Sampling Design

The research work applied *area sampling* where the population of sampling is confined within the area of Selangor and Wilayah Persekutuan of Kuala Lumpur. The sampling frame is however, drawn within *individuals* that are registered with XYZ as a member under the Laws Of Malaysia Act 535 – XYZ Act 1995, individuals of Muslim persons who are citizens of and residing in Malaysia.

f. The Population and Sample Size

In determining the *relatively accurate* estimation of the population perimeter or sample size, the research work had adopted the simplified formula of Krejcie and Morgan (1970), which is in accordance with the National Education Association (Educational and Psychological Measurement, 1970). Based on the total population of the depositors within Selangor and Wilayah Persekutuan area, which makes up to 1,792,122 in term of head counts, thus, the sample size applied is 384 in total as required (Sekaran & Bougie, 2010).

g. Data Collection Method

i. Primary Data

The primary source of data was gathered from the distributed questionnaires based on the sample population stated below. Although the sample size was 384, the numbers of questionnaires distributed were 386, with equal distribution to the respective group of depositors; 193 counter respondents and 193 ATM/CDM respondents.

ii. Secondary Data

The secondary data was gathered through the followings sources:

- a. XYZ statistical data on the population of XYZ's depositors;
- b. XYZ statistical data on the number of transactions for ATM and CDM users as of October 2012;
- c. XYZ statistical data on the deposits amount as of October 2012;
- d. XYZ annual report of 2011
- e. Journals
- f. Laws Of Malaysia Act 535 – XYZ Act 1995

h. Theoretical Framework

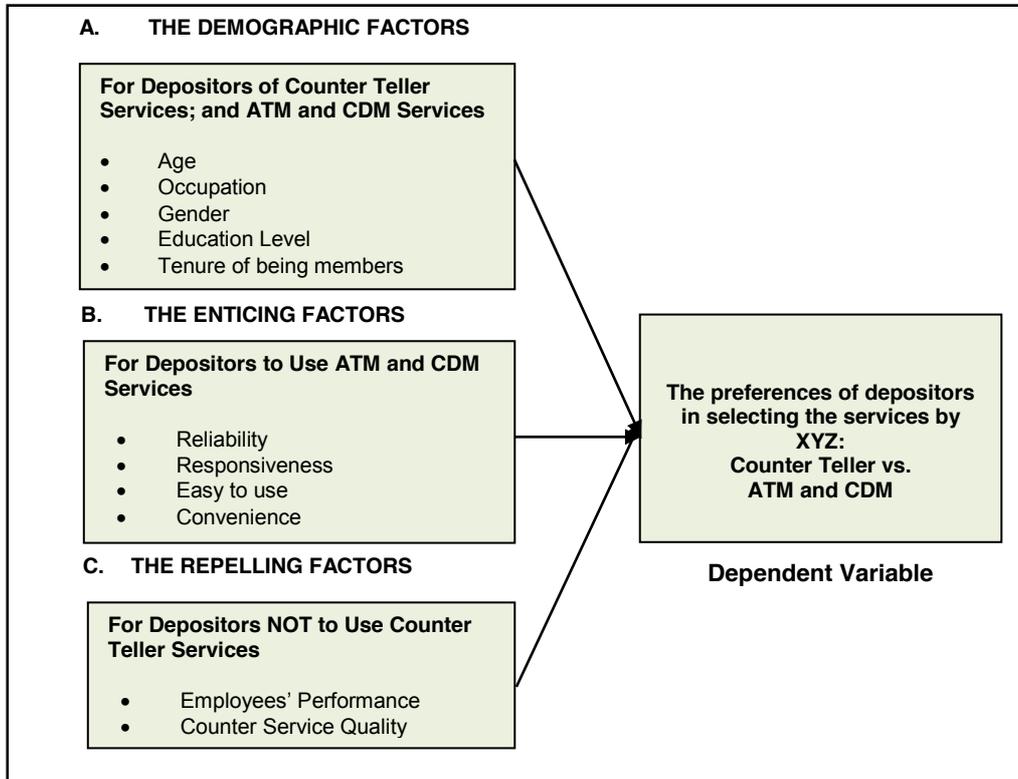


Figure 1: Theoretical framework of the study

i. The Scaling

In designing the questionnaires, the type of attitudinal scale used in measuring the variables was the Rating Scale. However, the types of scale adopted were further classified into nominal and interval scaling. The nominal scales were used to measure the demographic factors of the respondents, which is deemed important for the researchers to establish the findings associated to the research objective. The interval scale was used to allow the researchers in performing certain arithmetical operation on the data collected from the respondents. No ordinal and ratio scales were applied in designing the questionnaires.

j. Data Analysis

i. Frequency Distribution

The total distributed questionnaires were altogether 386 sets. Distributions of questionnaires were made based on the ratio of 1:1 between the respondents of the counter teller services and ATM and CDM services. However, from the 386

sets distributed, only 375 sets (193 counter respondents and 182 ATM/CDM respondents) were completed and this represents 97.1% of the total number of the sample of this study. 11 sets were not completed, representing 2.9% of the defaulted total sample of questionnaires due to incomplete questionnaires received from the ATM and CDM respondents. However, the percentage was rather insignificant when compared to the total sets distributed.

ii. Reliability Test

The reliability of measurements of the dependent variable and the independent variables are laid in Table 3 below. In the reliability test, the general measurement of Cronbach's alpha was used to measure the internal consistency of the instrument used in the questionnaires, by that, it tends to establish the "goodness" of the measurement.

A pilot study was conducted with 20 respondents to determine the reliability of the instrument used in the research questionnaires before the actual survey took off.

Table 3: Reliability of Measurements

	Variables	No. of Items	Cronbach's Alpha	Remark
Section B	Preferences of Depositors in Counter Teller or ATM/CDM Services Offered by XYZ	9	0.754	> 0.70
Section D	ATM/CDM			
	Enticing Factors for ATM/CDM Usage	10	0.784	> 0.70
	Repelling Factors for Depositors NOT Using Counter Teller	4	0.896	> 0.80

Based on the Cronbach's alpha, the reliability value is 0.754 for the *Preferences of Depositors in Counter Teller or ATM and CDM Services Offered by XYZ* (dependent variable, denoted as Section B), which is greater than the acceptable range of 0.70. Each set of variables has its alpha value of greater than 0.70, indicating that not only there is high a degree of reliability for the entire dependent variable, but also in each set of its variable.

Section D, as for the ATM/CDM respondents, is further segregated into two elements, the *Enticing Factors for ATM/CDM Usage and Repelling Factor for NOT Using Counter Teller*. The alphas for both elements are 0.784 and 0.896 respectively which indicate the reliability are greater than 0.80.

3. Research Findings and Discussion

a. Frequency Distribution Analysis of the Demographic Profile

Table 4 shows the demographic profiles of the research respondents. Consequent to the XYZ's Acts that limit the membership to Muslims, majority of the ethnic group of the respondents came from Malay ethnic background. From the finding, majority of the respondents are females, representing 53.6% of the total population in which 27.7%² were the users of the counter teller services. This indicates more than a quarter of the population prefer to use counter teller services than ATM and CDM. However, this may not be a conclusive evidence to depositors' preferences as a whole.

In term of the age group, the respondents within the age of 21 to 40 tend to use more ATM and CDM as opposed to counter teller services, with the head count of 121 (ATM and CDM) to 100 (counter teller), denoting the trend in using ATM and CDM is preferred more by the younger and middle age generation. Although, the distinction is perceived minor, considering the fact that the ratio is 1.21 times higher, thus, the possibility for XYZ to induce the usage of ATM and CDM is greater.

This fact is further supported from the findings that 76%³ of the respondents are highly literate people possess qualification backgrounds higher than diploma. Indeed, 47%⁴ of the above respondents were counter teller users, their resistance towards ATM/CDM usage however, can be reformed otherwise. As suggested by Tuire, Tommi, and Mika (2007), resistance may occur in every adoption process but not necessarily result in non-adoption or rejection.

Table 4: The Demographic Profile of Respondents

Demographic Profiles	Valid Number			%	
	Counter	ATM	Total		
Gender	Male	89	85	174	46.4
	Female	104	97	201	53.6
Ethnic Group	Malay	180	162	342	91.2
	Chinese	2	10	12	3.2
	India	10	4	14	3.7
	Others	1	6	7	1.9
Age Group	<20 year old	17	11	28	7.5
	21-30 year old	51	59	110	29.3
	31-40 year old	49	62	111	29.6
	41-50 year old	37	30	67	17.9

² 27.7% = 104/375

³ 76% = (46+61+28) + (42+81+27)/375 = 285/375

⁴ 47% = (46+61+28)/285

MALAYSIAN JOURNAL OF CONSUMER AND FAMILY ECONOMICS

	>50 year old	39	20	59	15.7
Marital Status	Married	134	116	250	66.7
	Unmarried	15	27	42	11.2
	Single	44	38	82	21.9
	Missing	0	1	1	0.3
Employment Background	Government Servant	65	54	119	31.7
	Self-employed	26	39	65	17.3
	Private Sector	72	65	137	36.5
	Pensioners	19	9	28	7.5
	Others	11	15	26	6.9
Academic Qualification	SRP/LCE	21	7	28	7.5
	SPM/MCE	37	25	62	16.5
	Diploma	46	42	88	23.5
	Degree	61	81	142	37.9
	Professionals	28	27	55	14.7
Average Annual Income	<RM30,000	63	32	95	25.3
	RM30,000- RM40,000	34	30	64	17.1
	RM41,000- RM50,000	35	52	87	23.2
	RM51,000- RM60,000	31	44	75	20
	>RM60,000	30	23	53	14.1
	Missing	0	1	1	0.3
Household Income to XYZ	<RM100/month	45	34	79	21.1
	RM101- RM300/month	55	52	107	28.5
	RM301- RM500/month	46	50	96	25.6
	RM501-RM1,000	27	30	57	15.2
	>RM1,000/month	13	9	22	5.9
	Not Applicable	6	6	12	3.2
	Missing	1	1	2	0.5

Tenure being Member of XYZ	< 1 Month	13	6	19	5.1
	1 - 6 Months	18	26	44	11.7
	6 - 12 Months	15	20	35	9.3
	> 1 Year	147	129	276	73.6
	Missing	0	1	1	0.3
Frequency Using Counter	Every Month	58	21	79	21.1
	Once A Year	32	42	74	19.7
	1-3 Times A Year	66	72	138	36.8
	> Times A Year	37	47	84	22.4

b. Descriptive Analysis Result for Objective 2 – The Enticing Factors for Depositors for Using and NOT ATM and CDM Services

The detail descriptive analysis for the enticing factors for depositors using the ATM and CDM services are tabulated as follows (see *Table 5*):

Table 5: Descriptive Analysis for the Enticing Factors for Using ATM and CDM

Enticing Factors	Rank	Mean	Standard Deviation
Reliability	2		
Q38 ATM and CDM provide constant services		4.16	0.644
Q39 ATM and CDM fulfil orders correctly		4.08	0.724
Mean Average		4.12	
Responsiveness	4		
Q40 ATM and CDM compensate the wrongful deduction.		3.51	1.091
Q41 Breakdown of ATM and CDM systems are fixed promptly		3.64	0.952
Mean Average		3.58	
Ease of Use	3		
Q42 ATM and CDM provide clear instruction on usage		4.06	0.666
Q43 ATM and CDM language is easy to understand.		4.21	0.616
Mean Average		4.14	
Convenience	1		
Q44 ATM and CDM provided range of services		4.30	0.656

Q45	ATM and CDM are conveniently located and accessible		4.18	0.762
Mean Average			4.24	
Security		5		
Q46	Customer feels safe during transaction		3.51	0.703
Q47	Customer has trust and security over ATM and CDM		3.54	0.694
Mean Average			3.53	
Enticing Factors for ATM and CDM Usage		Overall Mean	3.85	0.486

The overview of the overall mean is 3.85, whilst deviation is 0.486, indicates that the deviation from mean which is low and high confidence level of the data output. From the ATM and CDM respondents' point of view portrayed in *Table 5*, convenience has become the most enticing factor that led depositors in using the ATM and CDM services. Factors relate to range of services and conveniently located and assessable by depositors in performing their ATM and CDM transactions, received an average mean of 4.24, indicating that convenience factor is not only enticing, but also, important. This followed by the reliability factor, reliable in term of providing constant services and filling depositors' order correctly, received a mean average of 4.12, considerably high. Consequently, is the ease of use, where ATM and CDM provide clear instructions of usage and languages used are easy to understand by users. Responsiveness in terms of compensating and technical corrections due to breakdowns, as well as security factor received less priority to ATM and CDM users as the mean averages are 3.58 and 3.53 respectively; these factors are not the pulling factors that favors depositors in using ATM and CDM.

Table 6: Descriptive Analysis for the Repelling Factor for NOT Using Counter Teller Services

	Repelling Factors	Rank	Mean	Standard Deviation
	Performance of Counter Teller Staff	2		
Q48	The counter teller staffs are not friendly and courteous.		3.08	1.281
Q49	The counter teller staff sometimes make mistake and take longer time than the specified time frame.		3.24	1.084
Mean Average			3.16	
	Counter Service Quality	1		
Q50	The seating facilities provided at the waiting area are not enough.		3.25	1.142

Q51	I have to wait in a long queue before being served.	3.46	1.145
Mean Average		3.36	
Repelling Factors for NOT Using Counter Teller Usage		Overall Mean 3.11	1.049

From the *Table 6* above, the overall mean for the repelling factor is 3.11 with the standard deviation of 1.049, indicating that the dispersion of the repelling factors is also close to the data mean. Indeed, from this perspective, it was observed that the service quality of the counter services, the seating facility and the long queuing count most XYZ customers to use ATM and CDM instead. However, based on these results, both factors, enticing and repelling, are tolerable on the ground that both means are closed to the "natural" point of view of the respondents, giving a notion that depositors have less concern neither over the counter teller service quality nor the performance of the counter teller personnel. This also suggests that the ATM and CDM users are perhaps dual users of XYZ services which are the ATM and CDM and counter teller users.

c. Descriptive Analysis to Determine the Relationship between the Enticing and Repelling Factors with Preferences of Depositors towards Counter Teller Services and ATM and CDM

In analyzing the above objective of this research, Pearson's Correlation Coefficient denoted as "r", is used to investigate the relationship between the enticing factors and the repelling factors of the ATM and CDM usage with the depositors' preferences towards the usage of the services. Based on the above findings, the relationship between the enticing factors of depositors in using ATM and CDM and the preferences of the depositors in the usage of the services (see *Table 7*), is loosely related with $r = 0.252$. However, the correlation coefficient is highly significant with $P < 0.000$. Hence, these variables are somehow positively correlated with each other. The relationship of repelling factors of depositors NOT using the counter teller at XYZ and the preferences of the depositors in the usage of the services reveals a negative relationship with $r = -0.02$, giving an indication that the correlation coefficient is non-significant as $P > 0.01$.

Table 7: Pearson's Correlation Analysis

Variable	Preferences of Depositors	The Enticing Factors of Depositors in Using ATM and CDM	The Repelling Factors of ATM and CDM Users NOT Using Counter Teller Services
Preferences of the Depositors	$r = 1$		

The Enticing Factors of Depositors in Using ATM/CDM	$r = 0.252^{**}$	1	
	Significance = 0.000		
The Repelling Factors of ATM/CDM Users NOT Using Counter Teller Services	$r = -0.02$	$r = 0.136^{**}$	1
	Significance = 0.487	Significance = 0.010	

** Correlation is significant at the 0.01 level (1-tailed), $p < 0.01$

4. Conclusions

Demographic backgrounds were strongly associated with adoption of ATM and CDM services. With its nationwide depositors make up of a total population of 5.7 million from the younger and middle age generation, or equivalent to 70% of its total population of its depositors' base, thus, the usage of the electronic technology can be enhanced through encouragement by providing more units, accommodating to the needs of the population. XYZ should capitalize this opportunity to further induce ATM and CDM usage. This is supported by the argument made by Evans and Wurster (2001), that business investment in electronic technology is driven by expectations that this technology should provide better opportunities to establish a distinctive strategic position as compared to the previous generation of information technology.

From the descriptive analysis of the enticing factors of the ATM and CDM usage, factors related to range of services, locations and accessibility received the highest average mean, indicating that convenient factor is important. This is followed by the reliability of providing constant services and filling depositors' order correctly.

From the correlation analysis, it is observed that although the correlation between the enticing factors of ATM and CDM usage and the preferences of the depositors towards the services is low, the correlation coefficient is nevertheless, highly significant. As for the repelling factors of depositors NOT using the counter teller with the preferences of depositors in using the services rendered by XYZ, it reveals a negative relationship with giving an indication that the correlation coefficient is non-significant. For future research, bigger sample by involving more branches would give clear picture of the depositors' preferences.

References

- Al-Hawari, M., Hartley, N. and Ward, T. (2005). Measuring banks' automated service quality: a confirmatory factor analysis approach. *Marketing Bulletin*, Vol. 16 No. 16, pp. 1-19. Analysis. *International Journal of Bank Marketing*, Vol. 28 No. 4, pp. 267-287.
- Anesh, M.S. (2004). "Trends in South African Internet Banking", *Aslib Preceding*, Vol. 56 Iss: 3, pp. 26-38
- Awad, B.E. and Mohammad A.A., (1992). ATM Banking Behavior in Kuwait: A Consumer Survey. *International Journal of Bank Marketing*, Vol. 10 No. 3, 1992, pp. 25-32
- Carlzon, J. (1989). *Moments of Truth*. HarperCollins, New York, NY.

- Cees, J.G., Paul, W.T.G., Ronnie, V.D., (2011). Choosing Self-Service Technologies or Interpersonal Services – The Impact of Situational Factors and Technology-Related Attitudes. *Journal of Retailing and Consumer Services*. Doi:10.1016.
- Chandio, F. H. (2011) Studying Acceptance of Online Banking System: A Structural Equation Model System: A Structural Equation Model (Unpublished PhD Thesis). Brunel Business School, Brunel University London.
- Channon, D.F. (1988). *Bank Strategic Management and Marketing*, John Wiley and Sons Ltd, p. 167.
- Chong, A.Y., Ooi, K., Lin, B and Tan, B. (2010). Online banking adoption: an empirical.
- Dabholkar, P., (1996). Technology-based service delivery. *Advances in Services Marketing and Management*, Vol. 3.
- Dale, B.G. (2003). *Managing Quality*. Fourth Ed. Blackwell Publishing. Oxford.
- Evans J.R. and Lindsay, W.M. (2001). *The Management and Control of Quality*. Fifth Ed., South-Western, Thomas Learning.
- Evans P and Wurster T S, (2000). Blown to Bits: how the new economics of information transforms strategy, Harvard Business School Press, Boston, USA
- James, M.C., Matthew, L.M. and Carol, F.S. (2003). Intentions to Use Self-Service Technologies: A Confluence of Multiple Attitudes. *Journal of Service Research*, 5:209
- Jones, T.O. and Sesser, W.E. Jr. (1995). Why Satisfied Customer Defect? *Harvard Business Review*, 73(6), January, pp. 88-89.
- Juran, J.M. (1981). Product Quality: A Perception for the West. *Management Review*, 70(6) pp. 8-14
- Katono, I. W. (2011). Construction of an instrument to measure social valuation in an emerging market context. *Education and Training*, Vol. 53 No. 5, pp.371 – 386.
- Khan, M.A. (2010). An empirical study of automated teller machine service quality and customer satisfaction in Pakistani banks. *European Journal of Social Science*, Vol. 13 No. 3, pp. 333-344.
- Krejcie and Morgan, (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement* 1970, 30, 607-610.
- Kumbhar, V. M. (2011), Reliability and validity of eBankQual scale in ATM setting: a study, Available at SSRN: <http://ssrn.com/abstract=1766052>.
- Laws of Malaysia Act 535 - Tabung Haji Act 1995
- Levinsohn, A. (1998), Modern miners plumb for gold. *American Bankers Association Journal*, Vol. 90 No. 12.
- Machleit, K.A., Eroglu, S.A., Powel M.S. (2002). Perceived Retail Crowding and Shopping Satisfaction; What Modifies Relationship? *Journal of Consumer Psychology*. Vol. 9 No 1, pp. 29-42.
- Mobarek, A. (2007), *E-banking practices and customer satisfaction: a case study in Botswana*. Retrieved in August 14, 2009 from http://papers.ssrn.com/so13/papers.cfm?Abstract_id=1011112.
- Newell, Frederick (2000). *Loyalty.com: Customer Relationship Management in the New Era of Internet Marketing*. New York: McGraw-Hill.

- Norudin, M. and Che Hamdan, C.M.R. (2010). Customers' Satisfaction Towards Counter Services of Local Authority in Terengganu, Malaysia. *Asian Social Science*. Vol. 16 No. 8.
- Nowak, L.I. and Washburn, J., (1998). Antecedents to Clients Satisfaction in Business Services. *The Journal of Service Marketing*, Vol. 12, No. 6, pp. 441-452.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: a multiple item scale for measuring consumer perception of service quality. *Journal of Retailing*, Vol. 64 No. 1, pp. 12-37.
- Rotchanakitumnuai, S. and Speece, M. (2003). Barriers to internet banking adoption: a qualitative study among corporate customers in Thailand, *International Journal of Bank Marketing*, Vol. 21 Nos 6/7, pp. 312-23.
- Schneider, B. and Bowen, D.E. (1985). Employee and Customer Perceptions of Services in Banks : Replication and Extension. *Journal of Applied Psychology*, Vol. 70 pp. 423-33.
- Sekaran U. and Bougie R. (2010). *Research Methods for Business*. A Skill Building Approach. Fifth Edition. United Kingdom: Wiley Publication.
- Shaqiri Aferdita Berisha, (2015) Impact of Information Technology and Internet in Businesses Academic Journal of Business, Administration, Law and Social Sciences Vol 1 No 1, pp 73-79
- Sindell, Kathleen (2000). *Loyalty Marketing for the Internet Age: How to Identify, Attract, Serve and Retain Customers in an E-Commerce Environment*, Chicago: Dearborn Financial Publishing.
- Sriluck, R. and Mark, S. (2009). Modeling Electronic Service Acceptance of An E-Securities Trading System. *Industrial Management and Data System*, Vol. 109 No. 8 2009 pp. 1069-1084
- Ratnasingam, P. (1998). The Importance of Trust in Electronic Commerce. *Internal Research: Electronic Networking Applications and Policy*, Vol. 8, No. 4, pp. 313-321.
- Tuire, K., Tommi, L., and Mika, H., (2007). Mapping the Reasons for Resistance to Internet Banking. A Means-End Approach. *International Journal of Management*, 27 (2007) 75-85.
- Worku G, Tilahun A, Tafa MA (2016) The Impact of Electronic Banking on Customers' Satisfaction in Ethiopian Banking Industry (The Case of Customers of Dashen and Wogagen Banks in Gondar City). *J Bus Fin Aff* 5: 174.doi:10.4172/2167-0234.1000174
- Zhu, F.X., Wymer, W.J. and Chen, I. (2002). IT-Based Services and Service Quality Consumer Banking. *International Journal of Service Industry Management*, Vol. 13. No. 1, pp. 69-90.