A CONSUMER ACCEPTANCE STUDY OF AN ELECTRONIC DINAR PAYMENT SYSTEM

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ABSTRACT

The aim of this study is find solutions to a few limitations naturally associated with physical dinar coins. Specifically this research proposes the use of a dinar based electronic payment system. But before actual system can be implemented, this research is intended to find out whether the public would be ready to adopt the proposed electronic dinar payment system. The research framework for this study will be based on Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). It will measure user acceptance based on these constructs i.e. the Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Behavioral Intention to Use, and with two new variables added: Anxiety, and Perceived Credibility. Data collection is based on questionnaire surveys. This preliminary study discovered that most of the respondents participated in this survey generally agree with the idea of using the proposed electronic dinar payment system.

Keywords: E-Commerce, Muamalat and Islamic Issues, Dinar/Dirham

1. INTRODUCTION

With the prices of gold and silver having hit a new "all-time" high as recent as December 2009, our society has begun to take notice and thus started to ponder on the importance of the two precious metals (i.e. gold and silver). Barisheff (2006) has reported that the US dollar has lost 82% of its purchasing power, as measured by the Consumer Price Index (CPI) since 1971. He further illustrated that if 100 widgets can be bought with \$1 in 1971, only 18 of such widgets can be bought for \$1 in 2006. Mathematics calculation will reveal something even more startling. Back then in 1971 the price of gold was \$35 per ounce (Lewis, 2007). Nowadays (December 2009), we need to fork out \$1,218 (Kitco Inc., 2009) to buy exactly the same one ounce of gold. Thus from 1971 to 2009 (in 38 years), in terms of US dollars, the inflation has gone up by 3380% i.e. (1218-35)/35 x 100%. Or equivalently, for the duration of 38 years, the US dollar has lost 3380% of its purchasing power. The strength of purchasing power in gold and silver has become known facts by now and it is widely discussed in many literatures (Lewis, 2007; Meera, 2002; Turk and Rubino, 2004).

The next question also arises, why comparing the US dollar i.e. a fiat currency with the price of gold in order to calculate the purchasing power or inflation rate? The reason being, gold in the past and will always be in the future regarded as a barometer to measure the performance of fiat currencies (Lewis, 2007; Turk and Rubino, 2004). The gold price goes up in the event of dollar goes down and its (gold) price is lower when the dollar appreciates. The masses will be interested in gold every time there is a problem with the dollars or other fiat currencies. It will always be seen as a competitor to all fiat currencies; it acts as a safe-haven during any economic disaster.

From this point onwards, it is to be noted that dinar and dirham are nothing but gold and silver respectively. What makes it a difference between dinar and gold, or between dirham and silver, is simply their weight. By consensus, one dinar carries the weight of 4.25 gram of pure gold (Lewis et al., 1983; Meera, 2002) and one dirham is represented by 3 gram of pure silver (Meera, 2002). Thus, the terms dinar and gold, and similarly dirham and silver, will be used interchangeably throughout this paper. The Muslims particularly, are more familiar with dinar and dirham instead of grams or ounces of units; the formers were mentioned repeatedly in the Quran, hadith, and other authentic books written by various Islamic scholars. In Malaysian scenario, Tun Dr. Mahathir Mohamed, the former Prime Minister of Malaysia introduced this "dinar for payment" concept in 1997 when Malaysian ringgit was badly hit by currency speculators. He believed that by using dinar, speculative and manipulative activities in foreign exchange market (FOREX) could be avoided (Mohamad, 2009). And for a strategic reason, dinar is proposed in this study because it is foreseen that it would have a huge impact in the Middle East market. This study believes that they (the Middle East countries) would prefer to use dinar as a unit of gold for payments, as opposed to "gram".

1.2 Real Prices Based on Secondary Data

In order to be as close to a practical situation as possible, this study uses actual data (from real Malaysian market) to show the superior performance of gold's purchasing power as compared to that of Ringgit Malaysia (RM). Prices of a few inflationary items are shown in RM as well as their corresponding prices in dinar (gold) or dirham (silver). In this case, the price performance (purchasing power) between these two competing currencies can be compared side by side. The readers can therefore make a straight-forward comparison on the performance of purchasing power between fiat currency and that of sound money (dinar and dirham).

Tables 1.1 to 1.4 below illustrate the performance of dinar as compared to the performance of fiat currency (i.e. RM) for various critical consumer items and services. It is to be noted that dinar is to be used for high-valued items whereas dirham is used for low-valued items. Table 1.5 shows salary comparison -- paid in dinar versus paid in Ringgit Malaysia (RM).

Petrol (50 liter)	RM	Dinar
2000	60.00	0.428
2009	90.00	0.178
Price increase/decrease	+ 50%	- 58%
Diesel (50 liter)	RM	Dinar
2000	35.50	0.253
2009	85.00	0.168
Price increase/decrease	+ 139%	- 34%

Table 1.1: Fuel price comparison (RM and Dinar)

Note:

Prices of gold are USD270 and USD1050 respectively per ounce in Oct. 2000 and Oct. 2009 (London fix).
 Prices of petrol are RM1.20 and RM1.80 respectively per liter in 2000 and 2009.

Prices of diesel are RM0.71 and RM1.70 respectively per liter in 2000 and 2009.

Electricity (Domestic, 300kWh)	RM	Dinar
2000	69.40	0.495
2009	72.50	0.233
Price increase/decrease	+ 4%	- 53%
Electricity (Commercial, 3000kWh)	RM	Dinar
2000	864.00	6.163
2009	969.00	3.114
Price increase/decrease	+ 12%	- 49%

Table 1.2: Electricity price comparison (RM and Dinar)

Note: \Rightarrow

Prices of gold are USD270 and USD1050 respectively per ounce in Oct. 2000 and Oct. 2009 (London fix).

Table 1.3: Construction items price comparison (RM and Dinar)

Cement (100 kg)	RM	Dinar
2005	25.00	0.115
2007	29.00	0.090
Price increase/decrease	+ 16%	- 21%
Steel (1 ton)	RM	Dinar
2005	1800.00	8.254
2007	2100.00	6.551
Price increase/decrease	+ 17%	- 21%
Note:		
• Prices of gold are USD420 and	USD690 respectively per ounc	e in 2005 and 2

Prices of gold are USD420 and USD690 respectively per ounce in 2005 and 2007 (London fix).

Table 1.4: Cost of Hajj in RM and Dinar

Cost of Hajj (lowest package)	RM	Dinar
2002	13,500	93.53
2009	19,990	39.53
Price increase/decrease	+ 48.1%	- 57.7%

Note:

* Prices of gold are USD278 and USD1050 respectively per ounce in 2002 and 2009 (London fix).

* Cost of Hajj is based on the lowest THTS package as per stated in TH Annual Report. (TH: Tabung Haji, THTS: TH Travel & Services)

Table 1.5: Salary C	Comparison in	RM and Dinar
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Salary Paid (Malaysia)	Dinar	RM
Jan 1992	15.50	1800*
Jan 2007	15.50	4968
Feb 2009	15.50	6975
Oct 2009	15.50	7838

Note:

* Price of gold in Jan. 1992 is USD340 per ounce.

* Price of gold in Jan. 2007 is USD690 per ounce. Price of gold in Feb. 2009 is USD915 per ounce.
Price of gold in Oct. 2009 is USD1050 per ounce.

*RM1800 is a starting salary for a fresh engineer in Malaysia in 1992. (All gold prices are based on London fix)

It is to be noted that oil and electricity prices are two inflationary items whereby any price increase in these two items will subsequently give rise to prices of other daily food items (Barisheff, 2006; Leeb and Strathy, 2006). Similarly, construction items will give subsequent price rise to construction-related markets such as commercial (office) and residential (house) buildings. As for the case of salary, Table 1.5 clearly shows that dinar preserve the value of salaries over time. Apparently, salaries paid in dinar appreciate over time automatically, even without annual increments.

It should be noticed from the tables above that the performance of dinar is much superior as compared to that of RM (or other fiat money). Apparently in all tables, what appears to be a "price increase (inflation)" in RM is merely a "price decrease" in dinar. It becomes obvious from the above tables that dinar (gold) is able to preserve their "intrinsic value"; whereas the paper (fiat) money simply could not do that.

1.3 Issues Related to Physical Dinar Coins

Although it is apparent from the secondary data that dinar (or gold) holds very superior purchasing power, it does possess a few physical limitations. Therefore, the aim of this study is find solutions to this few limitations naturally associated with physical dinar coins. When compared to fiat currencies or paper money; dinar (or gold) coins are physically heavier and thus difficult to be carried around for normal daily transactions. For instance, to carry around in one's pocket a 10 dinar (42.5 gram of gold) or 10 dirham (30 gram of silver) would be a reluctant experience for many people. Moreover, due to the softness (malleability) of the precious metal, dinar coins will also be subjected to continuing "wear and tear" process if they were to be used repeatedly among the masses; whether it is done intentionally or otherwise. It was reported in Paarlberg (1993) that during the civilization of the Roman Empire, their ordinary citizens would clip the precious metal from the empire's coins perimeter in order to steal some of the value stored in the coins. He further wrote that slaves during that time "sweated" the coins by jiggling them in woolen bags hour after hour in order to wear-off some of the gold. The bags were then burned to separate the gold from the ashes. Another issue that needs to be addressed would be how to identify the purities of dinar denominations in each transaction such that fraud and cheating cases would be minimized and if possible, totally prevented. Mechanisms to facilitate or possibly bypass the unnecessary checking of purities for each transaction should be included in the dinar based electronic payment system in order to make it successful. The fourth issue is the divisibility limitation associated with the dinar. In today's price, the value of 1 dinar is in the range of RM500-RM600 a piece, thus making it impractical for buying of low-priced items. The dirham (silver) denomination is supposed to cater for these small-priced transactions. Nevertheless if the consumers insist on using the dinar still, then the proposed system must be able to offer that small-priced transactions in dinar. Last issue that needs addressing is the possible consumer losses due to the difference in selling and buying prices, which is known as "spread". In practice, the spread will be from 3% to 5% on average (for 1 ounce gold bullion), charged by gold sellers to form a profit. In this case, it is not profitable for consumers to use the electronic dinar immediately after having bought it. This is because shop owners would only buy back the same dinar at the "buying price", which is always lower that the "selling price". Please refer to Table 1.6 for an illustration of this point.

Table 1.6 Customer would stand to lose out due to the practice of "spread" by shop owners.

Item	Selling price	Buying price	Spread
1 dinar	RM525	RM500	5 %
	Initially, customers acquire dinar at this price.	For payment, shop owners would only accept the same dinar at this lower price.	Thus, if use immediately, customers will lose out RM25 in value because of this spread.

Obviously this "spread" issue needs to be solved or else it would be unprofitable and thus impractical for customers to use the proposed dinar/dirham based electronic payment system.

Therefore, those issues of portability, wear and tear, purity concern, divisibility and the dinar spread -- all of them must be properly addressed in order for dinar to be widely accepted by the public. In particular, this research would focus on using the e-commerce technology in a form of an electronic payment system to solve a few limitations associated with dinar (or gold). The reason to introduce the electronic commerce technology with dinar system is because it offers several advantages that the physical (brick-and-mortar) methods of dinar coin transactions simply could not offer. But before the actual system can be implemented, this research is intended to find out before hand whether the public would be ready to adopt the proposed electronic dinar payment system.

2. LITERATURE REVIEW

Tun Dr. Mahathir Mohamad, the once outspoken Prime Minister of Malaysia (also the former Finance Minister) who is still a strong proponent of gold dinar system, wrote in his blog (www.chedet.cc) with regards to the excessive printing of US dollars due to their latest financial turmoil (Mohamad, 2008):

7. Yet today we see the US Government readying US700 billion to brazenly bail out banks, mortgage companies and insurance companies.

8. Where does the money come from? From thin air as no real money in cash or bullion or anything tangible are moved into the bankrupt banks. The money is just in the form of loan papers and entries in the books of the banks or companies.

9. The US 700 billion has no backing whatsoever. No gold reserves, no foreign currency reserves as required for other countries. Without such backing the US Dollar is actually useless. Only the military power of the US is forcing the world to give value to the US Dollar.

^{12.} The US now owes the world US 14 trillion. There is no way it can ever settle this debt. If other countries fail to repay or service their debts, the US would demand that they be made bankrupt. Now the US is literally bankrupt but it still insists that the pieces of paper, the famous or infamous greenbacks have some value. It actually has no value. Certainly it cannot be used to finance wars of aggression against Iraq and Afghanistan, to finance the CIA (Central Intelligence Agency)

activities in undermining Governments and countries. But still the US' ability to threaten countries is undiminished.

Note: Numbering is as per written in the author's original blog, to reflect different points or topics.

Paul Krugman, the 2008 Nobel Prize winner for economics, also shared his thought on the current global financial crisis during his interview with National Public Radio (NPR) ("I Should Have Seen," 2008):

He (Paul Krugman) said that he should have anticipated the current financial turmoil.

"I should have seen it coming...I berate myself for not understanding the extent to which we have these financial domino effects...I saw there would be a lot of pain, but I didn't realize how big the pain would be."

He has said that he is "extremely terrified" of the financial crisis, and told NPR on Monday that he wondered how economist and politicians "could have been so blind."

"We created a financial system that basically outgrew the defense we created back in 1930s to protect against crises. We should have understood that because the system had outgrown those defenses, there was a possibility of another one. But very few people saw it coming," he said.

The United States of America is not only the country who has gone through financial mess and monetary crisis as per related by the two prominent figures above. Historically, several other countries had gone through very similar situation in the past. We will look upon them in this section. In order to establish a strong case for adopting gold or silver based electronic payment system, this study uses historical facts to prove the intrinsic monetary value of the two precious metals. History has proven time and time again that any nations went off from gold or silver standard -- be it gradually or drastically -- would only lead to eventual economic disaster and the downfall of the nations itself. These economic-turbulence historical facts were reported in several literatures namely Lewis (2007), Turk and Rubino (2004), and Wiggin (2008).

It is not the intention of this study however to delve into details of historical facts in highlighting the importance of gold. It is hoped that those historical-fact approaches will be covered by some other publications. Nevertheless, a few examples will be presented here in order to give a sense of believing with regards to the power of gold and that the fiat currency will doom to fail one day. Interested readers may refer to Paarlberg (1993) for excellent analysis of 15 major inflations throughout the history of 'money-debasement' process. He had recorded historical prices of important commodities from year 1937 to 1988 in 30 countries to illustrate the disastrous effect of inflation. Table 2.1 below illustrates 3 of those 15 inflations.

Table 2.1

An illustration of historical failures in paper money (Lewis, 2007; Turk and Rubino, 2004)

Rome, 3 rd century A.D.	
Year 301	1 pound of gold = 50,000 denarii
Year 307	1 pound of gold = $100,000$ denarii
Year 324	1 pound of gold = 300,000 denarii
Year 350	1 pound of gold = 2,000,000,000 denarii
Year 410	Financially broke, Rome fell to Visogoths

France, late 1700s

Year 1794

Paper money = 7 billion livres

Year 1795	Paper money = 10 billion livres
6 months later	Paper money = 14 billion livres
Soon afterwards	Paper money = 40 billion livres
Same pattern repeating, as Rome	Taken over by Napoleon's dictatorship

German, during 1900s (Weimar Republic)

Year 1922	A loaf of bread = 160 marks
Year 1923	A loaf of bread = $1,500,000$ marks
By autumn 1923	1 dollar = 1,000,000,000,000 marks*
Same pattern repeating, as Rome & France	Taken over by Napoleon's dictatorship

*Workers were paid hourly; had to rush to dispose paper marks before it became worthless

2.1 Research Framework Based on UTAUT Model

An understanding of technology acceptance models is very important in order to fully appreciate why one model is chosen over the other. Researchers are always confronted with choosing the most appropriate model for their particular researches. Often times, they must "pick and choose" constructs among the various models available. Alternatively, they may choose one "favored model" and largely ignore the possible contributions from other models. Effort by Venkatesh et al. (2003) to solve this predicament is greatly welcomed among the information system (IS) research circles. His team has introduced and tested the new and unified model, known as Unified Theory of Acceptance and Use of Technology (UTAUT) which integrates the previous eight (8) models used in technology acceptance studies. Those eight models are: Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), a model which combines TAM and TPB (C-TAM-TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT).

With the objective of introducing a comprehensive model that considers all variables included in the previous eight prominent models, Venkatesh et al. (2003) developed a research to empirically compare and test each of the constructs in those models. Their research has found that the eight previous models were able to explain (between) 17 percent to 53 percent of the variance in user intentions (that is, to use information technology). Subsequently, a unified model (UTAUT) that integrates elements across the eight models are thereby formulated and empirically validated. With UTAUT, it is found the model had outperformed the previous eight individual models (adjusted R^2 of 69 percent). Later, UTAUT was validated with data from two new organizations; it still gave very similar results (adjusted R^2 of 70 percent). Having had this substantial improvement over its predecessors, UTAUT would thus provide a very useful tool in order to assess the likelihood acceptance factors of introducing a new technology.

Therefore, the research framework for this work is adapted from UTAUT with two additional variables added. This study intends to find out the consumer acceptance of electronic dinar payment system based on the four original constructs of UTAUT model. Those constructs are performance expectancy, effort expectancy, social influence, and facilitating conditions. This research also intends to find out how significant is the contributions of moderators in this case. Out of four moderators in the original UTAUT model, only three would be applied in this study. Those three moderators are gender, age, and experience while the fourth moderator (voluntariness of use) is not included since the proposed electronic dinar payment system would be purely voluntary in nature and therefore its purpose is irrelevant in this case. The two additional variables, 'perceived credibility' and 'anxiety', are hypothesized to be very relevant to this study and therefore their influence is expected to be significant in the proposed model. Anxiety is adapted from Compeau and

Higgins (1995) as well as Venkatesh et al. (2003) while Perceived credibility is adapted from Wang et al. (2003). Table 2.2 explains all constructs included in this research framework. Figure 2.1 illustrates the model of research framework used for this study.

Core Constructs Definitions Performance Expectancy It is defined as the degree to which an individual believes that using the system will help him or her to attain gains in job performance (Venkatesh et al., 2003). (In this work) The perception that using electronic dinar payment system will benefit users in terms of purchasing power, asset preservation, and safe-haven capability. Effort Expectancy It is defined as the degree of ease associated with the use of the system (Venkatesh et al., 2003). (In this work) The ease of using electronic dinar payment system for purchasing. Social Influence It is defined as the degree to which an individual perceives others who are important to him or her believe he or she should use the new system (Venkatesh et al., 2003). (In this work) The social factors which influence the public to use electronic dinar payment system. The degree to which an individual believes that an organizational **Facilitating Conditions** and technical infrastructure exists to support the use of the system (Venkatesh et al., 2003). (In this work) External factors to accomplish adoption of electronic dinar payment system such as good ICT infrastructure, government initiatives and others. This refers to evoking of anxious or emotional reactions Anxiety (negative response) when it comes to performing a specific behavior (e.g. using computers) (Compeau and Higgins, 1995; Venkatesh et al., 2003). (In this work) To measure the fear of the public in using electronic dinar payment system i.e. fear of password/card stolen and fear of price fluctuation, and fear of gold investment scam. Perceived Credibility To measure the security and privacy concerns on usage of electronic commerce (Wang et al., 2003). (In this work) To measure the data security and privacy, misuse of data, the

Table 2.2 Research framework core constructs used in this study



Figure 2.1: Research framework for technology acceptance of electronic dinar payment system.

3. METHODS

This research is a quantitative research whereby an analysis and classification of numerical data will be collected from survey questionnaires. The questionnaires will be developed based on research frameworks which is adapted from the Unified Theory of Acceptance and Use of Technology (UTAUT) model -- with two extra variables added (Anxiety, and Perceived Credibility). The introduction of two variables is specifically tailored to reflect the individual technology acceptance of electronic dinar payment system. All surveys consist of a closed-ended question. Respondents will only choose answers already provided with the questions.

This paper investigates the results of a pilot study, of which the sample was distributed to 43 respondents in Kelantan and Melaka. The first section of the survey contains questions related to respondents' experiences with e-commerce, gold, and dinar. Section A contains questions related to Performance Expectancy. Section B will have questions measuring Effort Expectancy. Section C will have questions related to Social Influence. Section D consists of questions investigating factors related to Facilitating Conditions. Section E investigates factors related to Anxiety (concerns) of adopting the proposed electronic dinar payment system. Section F will measure Perceived Credibility (security and privacy concerns). Section G contains at least three questions measuring respondents' Behavioural Intention to electronic dinar payment system. The last section of the survey

consists of questions related to respondents' information such as gender, race, age, monthly income, educational attainment, marital status, and employment status. Gender and race is measured on a nominal scale, age and education level measured by an ordinal scale, while income level and experience are measured by a ratio scale. A five-point Likert scale will be used to measure to what extent an individual agree or disagree to the questions being asked. Likert scale is measured as follows: '1' is for Strongly Disagree, '2' is for Disagree, '3' is for Neither agree nor disagree, '4' is for Agree, and '5' is for Strongly Agree. The SPSS software is used to empirically analyse the collected data.

4. **RESULTS**

Table 4.1 and 4.2 show the gender and age groups of respondents participated in this pilot study. Table 4.3 shows respondents' experience with e-commerce services. Table 4.4 shows respondents' experiences with buying gold related products and Table 4.5 shows respondents' experience with buying dinar coins. Table 4.6 presents the results of factors affecting the respondent's acceptance (independent variables) and intention to use the electronic dinar payment system (dependent variables).

Table 4.1 Gender distribution of the respondents

Gender	Frequency	Percent
Male	12	27.9
Female	31	72.1
Total	43	100.0

Age Group	Frequency	Percent
18-24	3	7.0
25-29	21	48.8
30-34	6	14.0
35-39	2	4.7
40-44	8	18.6
45-49	3	7.0
Total	43	100.0

Table 4.2 Age group distribution of the respondents

Table 4.3 Experience with e-commerce service

User experience	Frequency	Percent
Less than once a month	4	9.3
About once a month	6	14.0
2-3 times a month	14	32.6
4-6 times a month	9	20.9
About once a week	3	7.0
More than once a week	7	16.3
Total	43	100.0

Table 4.4 Experience with buying gold products

Reason for buying gold	Frequency	Percent
For investment	6	14.0
For jewelry	16	37.2
For both, investment & jewelry	8	18.6
Never bought gold before	13	30.2
Other	0	0.0
Total	43	100.0

Table 4.5 Experience with buying dinar

Have you bought dinar before?	Frequency	Percent
Yes	9	20.9
No	30	69.8
Never heard about it	4	9.3
Total	43	100.0

Table 4.6 Ratings of BI and factors affecting respondents' intention to use

Performance Expectancy	Mean	SD
PE1: gold's appreciation	4.09	0.811
PE2: gold's purchasing power	4.00	0.873
PE3: protection against inflation	4.26	0.727
PE4: protection during currency crisis	4.26	0.727
PE5: accomplish payment quicker	3.81	0.852
PE6: payment efficiency	3.88	0.851
Effort Expectancy	Mean	SD
EE1: easy to use	3.84	0.814
EE2: easy to learn	3.93	0.704
EE3: easy to interact	3.86	0.675
EE4: convenience	4.42	0.587
Facilitating Condition	Mean	SD
FC1: compatibility	4.21	0.559
FC2: safe (to carry)	4.40	0.623
FC3: safety (banks keep it)	4.26	0.693
FC4: 'wear and tear' issue	4.21	0.675
FC5: protected from rubbing, clipping	4.21	0.638
FC6: purity issue	4.16	0.871
FC7: divisibility issue	4.07	0.884
FC8: widely accepted	4.42	0.663
Social Influence	Mean	SD
SI1: people who influence	3.88	0.793
SI2: people who are important	3.65	0.842
SI3: family factor	3.58	0.879
SI4: friends factor	3.60	0.849
SI5: people who understand gold's value	4.37	0.618
Perceived Credibility	Mean	SD
PC1: personal information	3.60	0.020
PC2: secured transactions	3.00	0.329
PC3: services backed by government	4 21	0.730
PC4: backed by physical dinar coins	4.21	0.000
PC5: physical dinar coins withdrawal allowed	4.21	0.000
r es. physical anal coms withdrawar anowed	1.21	0.000
Anxiety	Mean	SD
AX1: gold investment scam	2.79	1.013
AX2: computer hacking	3.02	1.012
AX3: lack of internet and computer skills	1.84	0.949
AX4: losing card or password	2.28	0.959
AX5: gold price fluctuation	2.72	1.161
Behavioral Intention (BI)	Mean	SD
BI1: intend to use	4.02	0.636
BI2: predict to use	3.95	0.688

5. **DISCUSSION**

Overall, most of the respondents in this pilot study would agree on the idea of using electronic dinar payment system. This is based on their ratings of behavioral intention to use which are in the range of 3.95 to 4.02. This is expected because from the questions on 'experience', this study found that about 70% of the respondents are familiar with buying gold related products. This study hypothesizes that the more people understand about gold, the more likely they would accept the electronic dinar payment system.

Performance Expectancy

It can be concluded that the respondents agree on the first four (4) factors of the Performance Expectance construct (Table 4.6) with its ratings of from 4.00 to 4.26. The other two factors in this construct carry slightly lower influence with ratings of 3.81 and 3.88 respectively. The last two factors show that, although most of the respondents agree that electronic dinar would be better than physical dinar coins in terms of payment efficiency, there are a few of them who are not sure about it.

Effort Expectancy

Most of the respondents agree that electronic dinar payment system would be easy to use, to learn, and to interact if is similar to existing e-commerce card systems (ratings of 3.84 to 3.93). The 4.42 rating on the last factor in this construct (convenience) shows that they would agree using electronic dinar would be more convenient compared to using physical dinar coins.

Facilitating Condition

This is the only construct which scores above 4.00 in all of their factors (eight of them). The range is from 4.07 to 4.42. Most of the factors that can facilitate the effective usage of electronic dinar payment system are explored in this construct. So it is not surprising, this construct carries high ratings. Please refer to Table 4.6 for factors influencing this construct.

Social Influence

There appears to be a mixed reaction from respondents whether factors from this construct could influence their acceptance of electronic dinar payment system. Among the first four factors, the 'people who influence' factor carries the highest rating (3.88). Only slightly majority of the respondents agree that 'people who are important', family, and friends would influence their perception to accept electronic dinar payment system (ratings 3.58 to 3.65). However, most of them agree with the perception that those who understand the true value of gold would likely use this system (rating 4.37).

Perceived Credibility

In this construct, there are still many respondents are uncertain whether the electronic dinar payment system would protect their personal information or whether its transaction is secured (ratings 3.60 and 3.74). This is expected since the system is not yet available and thus they have no experience using it. However most of them agree on the last three factors of this construct (ratings of 4.21 each). The last three factors explore about how this electronic dinar payment system is supposed to be operated.

Anxiety

Most of the respondents are not sure whether they are afraid of the three factors in this construct namely, of gold investment scam, of computer hacking, and of gold price fluctuation (ratings 2.72 to 3.02). However, most of them disagree i.e. they are not afraid of lacking internet and computer skills, as well as they are not afraid of losing a password/card if they were to use the electronic dinar payment system (ratings 1.84 and 2.28).

6. CONCLUSION AND LIMITATIONS

This research added a new research framework to an acceptance study of a dinar system in Malaysia, particularly in the study of the electronic version of dinar payment system. The framework for this research is adapted from UTAUT model with an addition of two new constructs; to suitably explore an 'intention to use' of electronic dinar payment system. This pilot study discovered that most of the respondents generally agree to accept the idea of using the proposed electronic dinar payment system. Apparently, it is found that certain factors are perceived to have stronger influence than the others. This is generally expected in any information system (IS) acceptance studies whereby different factors do exert various degree of influence on constructs. The performance expectance and the facilitating condition carry the most weight (roughly 4.00 and above) among all of the constructs. It is expected that researchers and practitioners in dinar and dirham institutions would benefit from this study. This preliminary result has given an early indication as to what would be the public's acceptance of dinar and dirham in the near future. This research is limited in its generalization due to the fact that only 43 pilot samples are used in the final analysis. The results would have been more significant if larger samples (in excess of 384 samples) are collected for the analysis. Furthermore, due to the time constraints and length of the paper, the effects of moderating variables (such as age, gender, experience) have not been examined in this initial study. These two limitations will be taken up in later stage of this research.

REFERENCES

[1] Barisheff, N. (2006). *August 15, 1971: Inflation Unleashed* [Online]. Available: http://www.bmsinc.ca/document/316 [2010, January 12].

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- [2] Compeau, D. R. and Higgins, C. A. (1995). Computer Self-Eficacy: Development of a Measure and Initial Test. MIS Quaterly. 19(2), 189-211.
- [3] I Should Have Seen It Coming, says Krugman. (2008, October 15), *AFP via The Star* (*Printed Edition*), section World, p. W34.
- [4] Kitco Inc. (2009). *Past Historical London Fix*, [Online]. Available: http://www.kitco.com/gold.londonfix.html [2010, January 10].
- [6] Leeb, S. and Strathy, G. C. (2006). *The Coming Economic Collapse: How You Can Thrive When Oil Costs \$200 a Barrel*. New York: Warner Business Books.
- [8] Lewis, B., Pellat, CH., and Schacht, J. (Eds.) (1983). *The Encyclopaedia of Islam*. (new ed., Vol. 2). Netherlands: E. J. Brill.

- [10] Lewis, N. (2007). Gold, the Once and Future Money. New Jersey: John Wiley & Sons.
- [11] Meera, A.K.M. (2002). *The Islamic Gold Dinar*. Selangor, Malaysia: Pelanduk Publication.
- [12] Mohamad, M. (2008, September 26). *The United States* [Online]. Available: http://chedet.co.cc/chedetblog/2008/09/the-united-states.html [2010, January 12].
- [13] Mohamad, M. (2009, April 28). Currency Trading [Online]. Available: http://chedet.co.cc/chedetblog/2009/04/currency-trading.html [2010, January 12].
- [14] Paarlberg, D. (1993). *An Analysis and History of Inflation*. Connecticut: Praeger Publishers.
- [15] Turk, J. and Rubino, J. (2004). The Coming Collapse of The Dollar and How to Profit From It. United States of America: Currency Doubleday (Division of Random House Inc.).
- [16] Venkatesh, V., Morris M. G., Davis, G. B., and Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- [17] Wang, Y. S., Wang, Y. M., Lin, H. H., and Tang, T. I. (2003). Determinants of user acceptance of internet banking: An empirical study. *International Journal of Service Industry Management*, 14(5), 501-519.
- [18] Wiggin, A. (2008). *The Demise of The Dollar...and Why It's Even Better For Your Investment*. New Jersey: John Wiley & Sons.