INVESTIGATING THE FACTORS THAT INFLUENCE ACCEPTANCE OF ISLAMIC CREDIT CARD AS A NEW BANKING SERVICE

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Abstract  
Islamic banking expansion in the world is known as one of the most influential financial incident during the last three decades. These Shariah based banking institutions are necessitated to remain innovative in order to achieve higher market share of spirited banking industry in the world. Accordingly, Islamic credit card as a new innovation has been issued by numerous Islamic as well as dual banking institutions, nonetheless, it seems that this Islamic innovation services has not achieved adequate market share nor adopted by bank customers. Therefore, this conceptual study is an attempt to identify a theoretical framework which on its basis adoption and usage of Islamic credit card be forecasted. In view of that, perceived attributes of innovation which is originated from Rogers’ Diffusion of Innovation theory along with trust as well as demographic factors as imperative indicators of adoption has been applied to provide a new way of Islamic credit card adoption among bank clientele. This study justify the applicably of Diffusion theory into a completely new context which is Islamic credit card adoption. The bank managers and policy makers regarding Islamic banking facilities may consider the study outcome to have better strategy concerning Islamic credit card issuance as new Islamic financial innovation.

**Keywords:** Islamic banking, Islamic Credit Card, Banking, Rogers’ Diffusion of Innovation Theory, Malaysia, consumer policy

Introduction  
Emergence of Islamic banking in Muslim countries is the most important inspiring financial phenomena at the end of this century (Daud et al., 2011). Islamic banking system is comparable to conventional banking scheme as a profit maximizing business; however, Islamic banks are not allowed to participate in trading prohibited products nor have deal with interest. On the other hand, large number of conventional banks products and facilities cannot be presented by Islamic banks noting to interest basis of most conventional banking facilities (Dali and Hamid, 2007). Actually, resilient nature of Islamic banks to potential financial crisis has improved its popularity and enhanced its adoption around the world (Ecchabi and Olaniyi, 2012). Accordingly, this system attempts to achieve social as well as economic progress in different societies by
implementing economic and fiscal facilities which are on the basis of Shariah rules (Metawa and Almossawi, 1998). Islamic banking scheme greatly concentrate on ethics, right and also wrong in its financial procedures (Hamid and Masood, 2011). Besides, prohibition of monopoly, usury (riba) prohibition in all banking proceedings paying zakat, considering business operation implementation based on legitimate and profit basis, effort for increasing all halal aspects of business are the key doctrine of Islamic banking functions (Mirakhor, 2000). High level of popularity is achieved by Islamic banks during the past years and this new banking structure has been extended in numerous part of the world from Australia to Singapore, United States and United Kingdom (Amin, 2007).

Remaining competitive in aggressive banking industry, Islamic banking system are required to Consider customers’ necessities and wishes in regards with representing new products and services (Thambiah et al., 2011a). Importantly, to remain profitable and competitive in banking industry in different parts of the globe, there is a high competition for Islamic banks to offer numerous types of products and facilities. While due to doubts regarding customers’ response and demand, achieving to these goals seems to be difficult, however, introduction of Islamic credit card as an Islamic new innovation has been managed noting to this facility merits. These numerous merits help its issuer institutions to extend their operations and also activities portfolio which in turn lead to attaining more profits. Nonetheless, although Islamic credit card as an new innovation by Islamic banking scheme has been issued in Malaysia competitive banking industry, this new Islamic banking facility is remained unnoticed or unused by different groups of bank clientele (Amin, 2012).

Actually, credit card is described as a kind of plastic money in which buy first and pay later choice for its users is included (Choo et al., 2007). Consequently, Islamic credit card is known as plastic money in which buy first and pay later option for its holders is forecasted, while its performance is strictly according to Shariah principles and objectives. Specifically, haram transactions’ conducting is severely prohibited by Islamic principles and therefore Islamic credit card is eligible to be applied solely for halal transactions financing (Amin, 2012). The main reason for introducing this Islamic innovation refers to fulfilling customers’ banking needs while simultaneously considering Shariah requirements in its implementation. To achieve this important objective Bai Al-Inahl, Al-Wadiah and Guardhul Hassan as Shariah financial principles have been mostly applied in Islamic credit card transactions. These aspects enhance Islamic credit cards to be in accordance with Shariah values and contracts which are free of gharar and riba (interest), fixed profit margin, impose zero interest on easy payment plan, offer balance transfer facility and charge low rate of earnings on the outstanding balance. Actually, these beneficial features of Islamic credit card as new innovation offered by Islamic banking system encourage Muslim as well as non Muslim bank clients to use this Islamic banking product (Dali and Hamid, 2007).

In addition, although adoption of conventional credit card has been investigated in some studies (Qi and Yang, 2003), the Islamic credit card adoption has received less attention by scholars. Accordingly, it is significantly vital to comprehend likelihood factors that affect adoption of this Islamic banking innovation among different groups Malaysian bank customers. In other words, the newness of Islamic credit card necessitate of forecasting the factors that enhance its adoption. Lawrence, (2000) indicates that “it should not be a surprise that judgmental forecasting is a relatively accurate technique”. Moreover, forecasting diffusion of different innovations is an interest practical and academic topic (Meade and Islam, 2006). Hence, the aim
of this conceptual paper is to explore and forecast the nature of Islamic credit card adoption intention among Malaysian bank consumers. These factors can expand adoption and continues usage of this Islamic banking service which in turn leads to enhance its current low market share in competitive banking industry of Malaysia as well as whole world.

Theoretical Model
Diffusion of Innovation theory (DOI)

According to Rogers, (1983), innovation diffusion process refers to series of events that a person go beyond from early level of knowledge about a product or innovation to get positive or adverse approach about it to decide whether adopt or reject which consequently lead to exploitation of innovation as well as support for adoption decision. In general, the diffusion of new technology or innovation would be very slow at first due to the fact that its adopting means risk taking in an uncertainty situation (Dalla Valle and Furlan, 2011). Therefore, approximating as well as forecasting patterns of diffusion of an innovation is important (Michalakelis and Sphicopoulos, 2012).

Norazah, (2006) argued that diffusion and adoption process are two effectively associated procedures concerning acceptance as well as using of new innovations, services and products. On the other hand, in Diffusion of Innovation theory, the adoption process is inseparable from diffusion process and in turn diffusion is composed of individual adoptions decisions (Straub, 2009). Therefore, customers’ perception, user acceptance, behavior prediction and finally innovation adoption is frequently highlighted by the core theoretical constructs in diffusion and adoption studies. Generally, Rogers’ Innovation Diffusion Theory is known as one of the most useful models concerning adoption behavior prediction in different area of social science context studies. Diffusion of Innovation model affords the ability in which different scholars inspect the way a new innovation, expand among diverse individuals groups (Anuar et al., 2012). In view of that, whereas Rogers is working on 5th edition of his text, more than 5200 adoption and diffusion studies in multiple contexts. Particularly, this Diffusion of Innovation model has been empirically experienced in an extensive number of researches associated to new innovations (Hernandez et al., 2009).

Rogers, (2003) argued that adoption process is passing from awareness to of acceptance of a product innovation. Hence, Rogers (2003, 1995) believed that five characteristics of an innovation (relative advantage, complexity, compatibility, trialability and observability) are the most important determinants of adoption rate of an innovation. These five attributes are known as crucial factors concerning acceptance, usage and adoption behavior of latent adopters (Liao and Lu, 2008, Kim and Park, 2011, Hameed et al., 2012). Additionally, these innovation attributes have been used in different framework solely or incorporation with other models as the important indicators of adoption decision rate in multiple adoption area including, online shopping adoption intention (Vijayasarathy, 2004), internet banking adoption (Nor et al., 2010), smart phone adoption (Chen et al., 2009), , electronic grocery shopping adoption (Verhoef and Langerak, 2001) and mobile payment usage intention (Kim et al., 2010). Moreover, Rogers (2003) emphasized that from 49 to 87 percent of the variance in innovation adoption rate in different innovations studies has been elucidated by these five characteristics. Accordingly, the diffusion of literature researches offer an appropriate framework to be utilized for Innovation adoption studies in context of Islamic banking studies (Thambiah et al., 2011b). In area of Islamic banking researches, a study by Thambiah et al., (2011b) have investigated the Islamic
retail banking services adoption in Malaysia by applying Innovation Diffusion Theory and specifically utilizing perceived attributes of innovation. Therefore, this paper would attempt to increase the domain of Diffusion of Innovation theory implementation and specifically perceived attributes of innovation in to a new area of researches which is Islamic credit card adoption.

Makridakis and Hibon, (2000) argued that in the diffusion literature studies, necessarily complex models are not favored. Thus, indigenous as well as exogenous variables of this study are derived from Rogers’ (2003) Diffusion of Innovation theory. Accordingly, independent variables of this study refers to relative advantage, complexity, trialability, observability and compatibility, trust and finally demographic factors while the dependent variable is intention to adopt Islamic credit card (ICC) that would be measure within the dimension of Islamic credit card acceptance as well as usage. The Figure A illustrates the framework of this conceptual paper.

**Relative Advantage**

Rogers, (2003) define the relative advantage as the degree to which an innovation or products recognized to be better than the substituted ones. According to (Flight et al., 2011), relative advantage has been intended to reflect customers’ perception which all or part of qualities of the future innovation would be able to offer incremental value to its potential user compared to current available options. According to Rogers (1995, 2003), relative advantage can be made clear in terms of economic profitability, social prestige, and/or other potential advantages that potential adopter would received by implementing the current innovation. Even organizations are more eager to adopt a new innovation if they perceive that this innovation would be able to raise efficiency, effectiveness and economic gains in their companies (Lin and Chen, 2012).

Different groups of scholars in numerous adoption of innovation, product or service researches argued that relative advantage as a perceived attributes of innovation is one of the most extraordinary predictors regarding adoption rate of innovations (Tan and Teo, 2000, Lu et al., 2011, Brown et al., 2003, Tung and Rieck, 2005, Hsu et al., 2007). However, a study by Duan et al., (2010) proved that relative advantage do not have any significant influence on adoption of e-learning among Chinese students. Rogers, (2003) argued that improvement of social status and also economic profits is important terms by potential adopter in relative advantage perception. Accordingly, in this study we consider relative advantage of Islamic credit card in economic benefits (reduce risk, decrease interest burden, profit and loss sharing), convenience as well as efficiency of this Islamic banking innovation.
Compatibility
Rogers, (2003) delineate compatibility concept as the degree to which an innovation or new idea is constant with past experience, existing values and current desires of potential adopters. an innovation that is incompatible with social system norms of a society as well as values would not be able to be accepted as well as adopted by potential clientele with the speed of innovation that is compatible with existing standards as well as consumer values (Anuar et al., 2012b). Moreover, according to Flight et al., (2011) how well the innovation or new idea fits into consumers’ social structure is known as social compatibility. In other words, if a new idea or innovation is congruent with potential adopters’ social expectation compatibility will exist. Kim and Park, (2011) indicated that literature of adoption studies suggest that the more the innovation is compatible, the greater the possibility of adoption.
In previous researches it has been indicated that compatibility in concept of beliefs and past experiences, current needs as well as values influence innovation adoption rate in multiple context (Giovanis et al., 2012, Wu et al., 2007, Arts et al., 2011, Papiès and Clement 2008, Hernández and Mazzon, 2007, Elahi and Hassanzadeh, 2009, Tung et al., 2008). Bank customers in context of Malaysia have the long established knowledge concerning conventional credit card holding. Besides, Islamic credit card as an Islamic innovation is on the basis of ethical, fair and religious values which need to be adopted by bank customers.

Complexity
Rogers, (2003) describes the complexity as the degree to which an idea or innovation is difficult to understand or use. In view of that, some types of innovations are easy to understand, communicate and even use, whereas, some other kinds are more complex and therefore need more time to be adopted. Nor et al., (2010) argued that complexity make clear required level of physical as well as mental efforts which is necessary by people for adopting of a particular

Figure A: Islamic credit card adoption conceptual model
innovation or service. Besides, it is believed that complexity is negatively related to adoption rate of different innovations (Corrigan, 2012, Rogers, 1995) owing to the important fact that complexity of an innovation is able to act as an inhibitor for its successful implementation (Wang et al., 2010). Consequently, there is a probability long time is needed that potential users understand and implement the new idea, service or technology (Wang et al., 2010). Accordingly, complexity refers to the exact opposite concept of ease of use which have been discussed to have direct positive impact on adoption of internet (Lederer et al., 2000).

A study by Tan and Teo (2000) in context of Singapore revealed that complexity as a perceived attributes of innovation did not have any notable influence on internet banking adoption. However, complexity of internet banking as a new innovation negatively influenced its adoption and usage among different groups of bank customers in Malaysia (Ndubisi and Sinti, 2006). In addition, Ramamurthy et al., (2008) revealed that complexity affect on adoption and usage of data warehouse among manufacturing and service sector corporations. Although, bank consumers in Malaysia are familiar with practice and usage of conventional credit card, but on the basis of earlier researches and their mixed outcome on the area of complexity and adoption rate of different innovation, it is crucial to examine perceived complexity of Islamic credit card and its possible impact on adoption of this Islamic innovation among bank consumers.

**Trialability**

Trialability refers to the degree to which an innovation, product or service could be tried out by people on a limited trial (Rogers, 2003). On the other hand, a kind of test driving regarding an innovation is offered by trialability for potential adopters and additionally its meaningfulness for potential users would be tested. According to Kolodinsky and Hogarth, (2001), trialability give a possibility to customers in order to evaluate a new innovation benefits. In addition, Agarwal and Prasad, (1997) indicated that latent users would be more contented and accordingly would have more tendency to adopt and use the new innovation when they are able to experiment it first. Accordingly, Carayannis and Turner, (2006) pointed that trialability seems to be an opportunity in which, a service or innovation could be applied by potential consumers or experimented with on a trial basis. Importantly, these opportunities in which latent adopters are able to have prior experience with new idea, innovation or product would diminish their fears as well as uncertainties. Besides, as a new innovation or idea is trialable by possible end users, the hesitation or vagueness about it would dispel (Rogers, 2003). Hence, basic self-reliance for using a service or innovation for anxious users will be provided (Gerrard and Cunningham, 2003). In theoretical studies, many scholars have indicated to significant relationship between trialability and adoption as well usage intention rate in numerous context (Hsu et al., 2007, Liao and Lu, 2008, Lee et al., 2011, Gounaris and Koritos, 2008)). However, although clientele would not able to use Islamic banking facilities in a similar style in which they be able to test a car before they buy it, nevertheless it is necessary that Islamic banks considered this important need of customers and provide a condition that their potential users test their Islamic financial services (Thambiah et al., 2010). Consequently, Islamic credit card pretesting by different banks should be considered by multiple issuers of this new Islamic banking innovation in which customers be able to have more awareness regarding the process of usage of this service.

**Observability**

According to Rogers (2003) observability is the degree to which results of using an innovation could be visible to other people. According to Lin and Chen, (2012), observability is associated to visibility of doing well other practices and cases. While, some ideas, products or
services are easily observed by other group of people, however some types of these innovations are not easy to be observed by other individuals (Thambiah et al., 2011b). It should be noted that, per se observability do not signify benefits or advantage of an innovation, but it would be able to help latent users to assess the potential benefits of adoption; meanwhile, perceived observability will be able to confirm key outcome which stimulate motivation of adopters to receive latent profit of new innovation (Meuter et al., 2005). Bank consumers who adopt Islamic credit card as new innovation may suppose that they have participated in novel method of implementing their banking activities. Accordingly, they may consider themselves in a more suitable technological and social situation.

Lee et al., (2011) point that perceived observability has significant positive influence on usage intention e-learning service among Taiwanese business employees. In addition, Wei and Zhang (2008) revealed that Chinese rural respondents who have further optimistic insight relating to observability of services of mobile phone would adopt it faster. In Islamic banking adoption studies, it will be likely that bank clients perceive it is easy to elucidate and form evaluative feedback to other possible users concerning Islamic banking services usage benefits which would lead to adoption of these Islamic services.

**Trust**

Trust has been defined in numerous description by different scholars on the basis of researches’ perspective including, economics (Williamson, 1975), sociology (Lewis and Weigert, 1985) and, marketing (Sirdeshmukh et al., 2002). However, due to its multidimensional meaning as well as interesting dynamic impact, there is lack of general agreement in regards with trust description (Rousseau et al., 1998). In general, Mayer et al., (1995) define trust as enthusiasm of individuals to be vulnerable related to another person or part actions. Pavlou, (2003) argued that it depends on the other part of action or person that is responsible for mode of events. Importantly, customer trust in self service technology depends on competent as well as reliable performance expectation (Johnson, 2007).

According to Johnson et al., (2008), patrons’ trust to innovation as well as technology services seems to be different from trust of clients to general performance and therefore differentiated from trust to employee behaviors. However, uncertainty level of some banking services has been increased due to fears from professional hackers as well as privacy invasion (Yap et al., 2010). Importantly, in different adoption studies concerning different types of innovation and services, trust has been identified as important predictors of adoption and usage (Suh and Han, 2003, Gefen, 2000, Sohail and Shammugham, 2003, Liu and Wu, 2007.). This paper intends to explore the potential influence of trust in a completely new context namely Islamic credit card adoption from customers’ view connecting its performance and ability of this Islamic innovation. Actually trust to Islamic credit card would enable this Shariah compliant innovation to be known as a predictable, profitable and reliable financial facility that does not provide any harmful consequences for its holders around the world.

**Demographic factors**

Different individual characteristics of clientele for example socio-demographic items usually have been extensively applied in numerous types of usage as well as adoption studies so as to classify its potential connection with usage and adoption of diverse type of innovation and services. Nevertheless, regardless of this high level of attention and applying, their affect on adoption discussion are often conflicting (Lee et al., 2010). Likewise, Peter Verhoef and Langerak, (2001) argued that different characteristics of customers should receive more attention
in context of innovation adoption researches. Different characteristics of Customers and specially their demographic items have been chosen owing to the importance of these items, variables and predictors in identifying customers’ decisions and also identifying segmentation by providers (Al-Ashban and Burney, 2001). Therefore, Demographic factors are appropriate measures to be considered in adoption of Islamic credit card due to the fact that it will enhance the of issuer of Islamic credit card to classify card holders more appropriately because during the years, numerous researches have provided evidence in regards with the relationship between banking channels and different demographic items (Howcroft et al., 2002; Wan et al., 2005).

Understanding the demographic characteristics of different adopters (users) and non adopters (non users) of Islamic credit card would enhance banks and issuers to segment their customers and market, recognize their consumers and improve appropriate strategies in order to have better outcome and representing regarding their services. In addition, because of low explanatory power of Rogers’ (2003) Diffusion of Innovation theory as well as other adoption models, some scholars have investigated the likelihood of increase in the explanatory power of their study by considering customer demographic items profile of their study (e.g. Guriting and Ndubi, 2006; Lai and Li, 2005; Eriksson et al., 2005). A study by Wong et al., (2010) revealed that age and income positively influence using of e-banking. Another study by Chong et al., (2011) proved that higher level of education respondents are more likely to 3G service. Considering these discussion regarding potential impact of demographic factors in adoption studies, it seems to be necessary for investigating the connection between demographic items (age, education, gender and income) and adoption of Islamic credit card due to the fact that it could influence the market segmentation of this Islamic financial service innovation and the way that it could be marketed.

**Conclusion and direction of future research**

This conceptual paper aims to introduce a new theoretical framework which is based on Rogers’ (2003) perceived attributes of innovation of Diffusion of Innovation theory related to Islamic credit card adoption as an Islamic banking innovation which needs to be marketed by its issuers due to the fact that its usage and adoption among diverse groups of bank consumers in Malaysia needs to be developed. Actually, based on the literature that has been done regarding adoption studies, this paper is the first in its kind that suggest and justify the applicability of Rogers’ Diffusion of Innovation theory in area of Islamic credit card adoption. In fact, based on the evaluation of fitness of perceived attributes of innovation aspects jointly with extensive literature review area of banking affairs as well as Islamic banking context, current conceptual paper try to provide details on the topic of Islamic credit card adoption in context of Malaysia.

Moreover, this conceptual paper aims to draw attention to the importance as well as benefit of Islamic credit card which is known as Islamic banking innovation. Besides, the due to widespread application of trust as an important factor in adoption of innovation and services studies the potential impact of this antecedent have been considered in this new context. However, demographic factors also have been identified as important proxies that influence individuals to accept or reject new idea or innovation. Therefore they have been justified as suitable factors in context of Islamic credit card adoption. In fact, this paper is one of the first academic efforts in its kind regarding Islamic banking and more particularly adoption of Islamic credit card which attempt to present suitable information and theoretical framework on the area of the most important potential factors that influencing Islamic credit card adoption in Malaysia. The outcome of study provides suitable details about Islamic credit card for its issuers and
identify the most important factors which are possibly enhance the bank managers to design appropriate marketing strategy for this Islamic financial innovation to be marketed among Malaysian customers. It seems to be significantly important that this Islamic innovation to be adopted by different groups of bank customers in Malaysia and therefore this type of study seems to be required to help its issuers.

Due to low level of applied theoretical researches in the area of Islamic banking and particularly Islamic credit card adoption, more number of researches in this area is recommended. In future studies, other adoption models such as Davis, (1989) Technology Acceptance Model (TAM) could be justified and practically examined. Moreover, different variables related to adoption of innovation and technology context such as social image, customer awareness, financial cost, attitude, user prior experience, religious obligation, social influence, users culture and self efficacy could applied and tested in this new area of research.

REFERENCES


