A COMPARATIVE STUDY OF INTENTION TO USE AGENT BANKING VIS-A-VIS TRADITIONAL BANK BRANCHES IN BANGLADESH

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Abstract   *Information technology has signaled a paradigm shift in the service availability to the customers. Banking services have grown in phenomenal dimensions and agent banking is much to be credited for this increase in market reach. Researchers conducted a review of literature which brought about numerous advantages and challenges of agent banking services. This research paper has used the social exchange theory (SET) as the basis in trying to understand and analyze the case of Bangladesh in identifying the factors relating to adoption of agent banking compared to traditional banking systems. The study is corroborated from data collected at Tongi area of Bangladesh, and seeks to validate the findings with the help of empirical evidence analyzed using SPSS software. The paper serves as an extension to prior literature on intention to use services. The findings can be used as a foundation to design marketing strategies for developing markets with similar demographics.*

Keywords: *Agent Banking, Social Exchange Theory (SET), Banks, Bangladesh*

INTRODUCTION

The challenges of many service industries are based on the characteristics of services themselves, namely, intangibility, heterogeneity, perishability and inseparability (simultaneous production and consumption) (Lewis, 1898). These can lead to difficulty in evaluating the quality of the services by consumers. Companies and organizations that provide facilitating conditions for innovation often lead to improvements in quality (services offered) or result in developing new products (Kumar Behera et al., 2015; Dangolani, 2011). However, these provisions may not be available or accessible for all industries, thus creating value to attract and retain customers (Parameswar et al., 2017) poses a unique challenges for these institutions.

However, with the advancement (and adoption) of technologies, certain innovations have changed the operations and perceptions of few service-based institutions, including banks (Dhir, Aniruddha & Mital, 2014). For example, banking functions and activities are now carried out using online customer-driven processes rather than through manual-entry processes (Parameswar et al., 2017).

On the other hand, point-of-sale (POS) terminals make banking transactions convenient to achieve real-time transaction processes (Wint, 2018). Similarly, agent banking is another innovation (from the banking sector) that provides value to consumers and acts as an alternative for banking services (Wairi, 2011). Aside from providing coverage and convenience to consumers (Wairi, 2011), they also provide banks with competitiveness (relative to competitors). Relying heavily of using Information communication technologies (ICT), agent banking is basically a component of banking system that allows banks and financial institutions to offer financial services outside the branches (or bank premises) (Mas, 2008; Mas & Siedek, 2008). Moreover, agent banking programs are deemed to enhance financial inclusion in many developing areas such as Latin America, Asia and South Africa (Wairi, 2011). Ever since its initial inception, agent banking has been growing in popularity and adoption. For example, in 2010 Russia had about 10,000 agents and 500,000 various types of automatic terminals, while Colombia had 13,296 agents within 6 months of operations in 2011 (Mugai, 2011). Literature further reveals the many

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benefits of using agent banking, including increasing cost effectiveness, convenience (for customers, banks and the agents alike) (Wint, 2018), while providing similar services as bank branches with both low transition costs and time saving (Wint, 2018).

In the context of Bangladesh, registration though agent banking (i.e., MFS) was deemed to be the fastest rate of increase of any country in 2013 (Klapper & Singer, 2014), while simultaneously providing opportunities for financial inclusion (Villasenor, West & Lewis, 2015). According to Bangladesh Bank, agent-banking services are defined as "providing limited scale banking and financial services to the underserved population through engaged agents under a valid agency agreement, rather than a teller/cashier". Furthermore, agent banks are constituted as "an entity authorized by a bank or Mobile Financial Services (MFS) provider to carry out financial transactions for mobile financial services on behalf of the bank/MFS provider" (Bangladesh Bank). Bangladesh Bank issued the guidelines for agent banking with the authority conferred to it by Article 7A(e) of Bangladesh Bank Order, 1972, Section 45 of Bank Company Act, 1991 and Section 4 of Bangladesh Payment and Settlement Systems Regulations, 2009 (Bangladesh Bank, 2017).

As of September 2018, 18 banks had MFS with 862,103 agents and registered clients, while active accounts stood at 66.74 million and 31.45 million, respectively. Despite the numerous services that can be provided by agents, Bangladesh Bank has imposed certain restrictions to them, including:

- Agent shall not ask any charge to the customers for its services, in addition to the charges fixed by the Bank.
- Agent cannot provide any products or services other than the banks products and services.
- Agent are not allowed any transaction by cheque except fingerprint & card.
- Agent should refrain from asking any personal information including account details and PIN number of customers; without getting any written permission, agent cannot engage any other banking business besides agent banking.
- Agents are not allowing to appointing another sub-agent to provide banking services on their behalf.
- Dealing with loans and financial appraisal.
- Encashment checkups dealing in Foreign Currency.
- Apart from above restrictions for any sort of transactions, an agent must have the guideline giving final approval of opening of bank account and issuance of cards.

Despite the limitations, a total of BDT 3,112 crore (approximately 367 million USD) was deposited through the agent banking channel in 2018 (Daily Star, 2019). In terms of individual account holders, 87% were from rural areas with a total deposit of BDT 2,455 crore (approximately 289 million USD) (Daily Star, 2019).

Undoubtedly, agent banking has extended the distribution of financial services which were deemed unreachable by traditional banking networks (Siedek, 2008) and coupled with lowering cost of delivery (i.e., fixed assets and maintenance costs), the agency banking model is successful in enhancing the performance of commercial banks, especially in developing countries (Shankaran & Roy, 2009) such as Bangladesh. Though literature discusses the benefits and challenges [i.e., low (poor) utilization of funds (Onyango, 2011), high-security measures (i.e., handling large cash transactions) and liquidity (Pickens, 2009)] of agent banking mechanisms of agent banking, there seems to be a gap in highlighting the intention to opt for agent banking rather than traditional banking.

Moreover, we believe that the relationship between consumer psychology and relation exchange (i.e., customer and agent) has been previously addressed in literature. For example, trust is a vital component in agent banking as a perception of breach associated with decreased levels of trust of the organization (Grimmer & Oddy, 2007; Clinton & Guest, 2014). However, a gap exists in literature while applying this construct in agent banking. Given the sheer size of the market, these consumer behavior traits are worth investigating especially for marketers seeking to increasing sales of financial products. This study centers on the application of the social exchange theory (SET) to address the adoption of agency banking in the context of Bangladesh. As a result, the study attempts to understand the factors associated with influencing consumers to choose agent banking rather than traditional mediums (i.e. bank branch).

The questions addressed in this study is thus: 1) does reputation, reciprocity and trust serve as antecedence to adopt agent banking. The paper is organized by discussing relevant literature on SET theory (along with the constructs) in the next section, followed by proposed research model, methodology and finally presents the data analysis along with discussing the key findings (including limitations).

LITERATURE REVIEW

Originally, the SET theory is based on building foundations for analyzing human behavior (Homans, 1958) and was later applied to understand organizational behavior (Blau,

1964; Emerson, 1962). According to the social exchange model, people and organizations tend to interact in order to maximize rewards as well as minimize costs (Salam et al., 1998). Although the SET theory has addressed many issues (see Table 1), the theory has been fully examined in the context of intention to use agent banking mechanisms (or systems).

As human behavior is driven by attaining economic rewards (Deci, 1975), agent banking serves as a medium of attaining rewards or access to rewards. According to studies on the SET theory, knowledge sharing can provide benefits (i.e., financial history and credit assessment) to foster mutual benefits (i.e., clients and agents). This study thus focuses on the knowledge-sharing factors (i.e., reciprocity, reputation and trust) to explain the factors that determine intention to use agent banking; which are likely to provide rewards (to both clients and agents alike).

Table 1: Selected Studies on Social Exchange Theory (SET)

Study	Purpose
Young-Ybarra and Wiersema (1999)	Using transaction cost economics and social exchange theory, the paper addresses the elements in strategic alliance (i.e., flexibility to modify and flexibility to exit)
Pappas and Flaherty (2008)	The study examines strategy of customer contact personnel participation
Flaherty and Pappas (2009)	This study highlights salesperson participation in strategic communication activities
Fu, Bolander, and Jones (2009)	The study applies organizational commitment measures managers can use to increase salesperson efforts

RECIPROCITY, REPUTATION AND TRUST

Reciprocity is defined as "the exchange of information and knowledge, which is mutual and fair" (Tamjidyamcholo et al., 2013, p. 225) and explains interpersonal behavior (and relationship) is exhibited through social exchange (Homans, 1958; Pervan et al., 2009). Furthermore, these exchanges do not have immediate returns but achieved over time (Homans, 1958). Literature also states how reciprocity addresses the "degree to which individuals believe they can obtain mutual benefits through knowledge sharing" (Hsu & Lin, 2008).

On the other hand, as reputation is a social product, a person who believes that social interaction can enhance their personal reputation while adding intangible assets (i.e., status, positive feeling) is more likely to share knowledge in a community (Wasko & Faraj, 2005), thereby increasing reputation.

Trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis & Schoorman, 1995, p. 712). Trust has a dynamic role in human behavior, especially in adapting new technology and lack of it is commonly highlighted as a barrier for e-commerce (Chang et al., 2005). Literature has also indicated that trust can minimize perceived reluctance while revealing personal information (Metzger, 2004).

INTENTION TO USE

The theory of reasoned action (TRA) is long standing and is an established theory, which affirms beliefs influence attitudes, which ultimately influence intentions (Fishbein & Ajzen, 1975). The theory establishes the notion that individual's beliefs are key factors which influence attitude of a person toward an object and guides the intentions of the individual's behavior toward a subject (Fishbein & Ajzen, 1975). In context of the SET theory, knowledge sharing is influenced by either expectation or anticipations, where egoistic and altruistic (Deci, 1975) are the primary motives. While the altruistic perspective assumes that individuals are willing to increase the welfare of others without personal returns, egoistic perspective assumes that humans are driven by economic rewards (Deci, 1975). As the study focuses on mutual benefits attained by all parties (i.e., customers, banks and agents), the study omits altruistic perspective and focuses on reciprocity, reputation and trust in using agent banking.

## RESEARCH METHODOLOGY AND HYPOTHESES

Sample and Procedure

The researchers selected individuals residing in selected outskirts regions of Dhaka, Bangladesh (i.e., Tongi). The location was selected as Tongi has multiple bank branches and a high number of agency banking institutors. As the location was in the outskirts, many individuals did not have bank accounts, but had operational and disposal income. Out of 110 distributed, 88 respondents' response were used in this study; the remaining responses were omitted due to missing answers to the constructs items. Demographic variables revealed that 70% of the respondents were male and 30% were female. The questionnaire had four parts, namely, reciprocity, reputation, image and personal background (i.e. gender, age and length of work experience

at present, etc.). The questions were collected via the use of a five-point Likert scale (from 1 - strongly disagree to 5 - strongly agree). All constructs were measured by using existing tested scales. The wording of the items was adapted to the context of the local environment. This study adopts the five items for reciprocity (Kankanhalli et al., 2005), five items of reputation (Hsu & Lin, 2008), three items for trust (Kankanhalli et al., 2005) and three items for intentions (Shimp & Kavas, 1994).

OBJECTIVE OF THE STUDY

- To identify the impact of reciprocity, reputation and trust on the intention to adopt agent banking.
- To identify the strongest factor among the three under-consideration impacting adoption of agent banking.

The Conceptual Framework for the Statistical Analysis
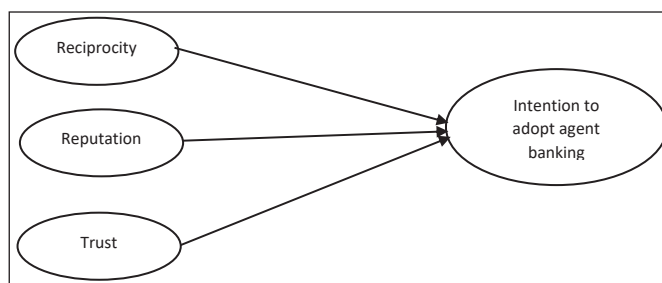
Fig. 1: Conceptual Model

The statistical process involved in the study is multiple regression using all the three factors, which influence the consumer to adopt agent banking, as considered in the study, as the predictor variables and the influence factor as well as intention to adopt agent banking as response variable individually. Thus, the regression equation has been attempted to be constructed as under:

Intention to adopt agent banking = f(Reciprocity, Reputation, Trust)

i.e. Intention to adopt agent banking = $\alpha + \beta_1$* Reciprocity + β_2* Reputation + β_3* Trust

The values of the predictor and respondent variables were on ordinal scale.

The efficiency of the regression equation has been tested on the basis of the following parameters:

- Adjusted R^2.
- Statistical significance of the F-statistic of ANOVA tested at 5% Level of Significance.

- Statistical significance of the t-statistic of the regression coefficients of each of the predictor variables tested at 5% Level of Significance.
- Durbin-Watson statistic for checking the problem of autocorrelation, if any.
- Variance Inflation factor (VIF) of each of the predictor variables to test any probable problem of multicollinearity.

The dependent variables *i.e.* Intention to adopt agent banking, has been regressed using all 3 predictor variables *i.e.* Reciprocity, Reputation and Trust, simultaneously.

While constructing the regression equation, the coefficients of the predictor variables have been tested for their statistical significance by framing the following hypothesis:

H_0: The coefficient of the predictor variable is not statistically significant.

H_1: The coefficient of the predictor variable is statistically significant.

The robustness of the final regression equation thus formed for the dependent variable has been tested by framing the following hypothesis:

H_0: The regression equation is not statistically robust.

H_1: The regression equation is statistically robust.

Using the SET theory, this study proposes that reciprocity, reputation and trust drive intention towards using (availing) agent banking systems. Fig. 1 shows the proposed model.

Prior discussion illustrates reciprocity as a key factor in the SET theory where knowledge sharing can lead to feeling positive mutual exchanges using online systems (Hsu & Lin, 2008). As agent banking relies heavily on ICT and information sharing, we hypothesize that:

H1: Consumer reciprocity is positively associated with intention to use agent banking services.

Reputation is another factor that influences consumer attitude. Studies have shown that reputation is an important factor for knowledge sharing (Hsu & Lin, 2008) and satisfaction (Helm, 2007; 2011), thus we hypothesize:

H2: Consumer reputation is positively associated with intention to use agent banking services.

While studies have shown a relationship between trust and purchasing intention (Gefen et al., 2003; Kim, Kim, & Shin, 2009), thus we hypothesize:

H3: Consumer trust is positively associated with intention use agent banking.

The null hypothesis is rejected at al p-values of less than 0.05.

RESULTS AND FINDINGS

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.600[a]	.360	.337	.53882	1.702

a. Predictors: (Constant), Reputation, Reciprocity, TRUST
b. Dependent Variable: INTENTION

The regression equation has considered to be free from the problem of autocorrelation if the Durbin-Watson statistic have been found to lies between 1.6 and 2.20.

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.733	3	4.578	15.767	.000[a]
	Residual	24.387	84	.290		
	Total	38.120	87			

a. Predictors: (Constant), Reputation, Reciprocity, TRUST
b. Dependent Variable: INTENTION

From the ANOVA table it was found that the regression model is significant.

Proof of H1: Consumer reciprocity is positively associated with intention to use agent banking services.

Coefficients[a]									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.456	.429		3.395	.001		
	TRUST	.020	.100	.020	.197	.845	.775	1.290
	Reciprocity	.653	.112	.579	5.849	.000	.778	1.285
	Reputation	.020	.046	.040	.429	.669	.884	1.131

a. Dependent Variable: INTENTION

The regression equation has been considered to be free from the effects of multicollinearity if the values of the VIF (Variance Inflation Factor) statistic of the predictor variables in the final regression equation has been found to be below 2.50.

Proof of H2: Consumer reputation is positively associated with intention to use agent banking services.

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.0257	4.8629	4.1326	.39730	88
Residual	-1.68837	1.20795	.00000	.52945	88
Std. Predicted Value	-2.786	1.838	.000	1.000	88
Std. Residual	-3.133	2.242	.000	.983	88

a. Dependent Variable: INTENTION

Ultimately, the distribution of the residuals of the regression equation has been tested whether they follow a normal distribution. The greater degree of conformity of the distribution of residuals bears to a normal distribution, the more robust the regression equation is deemed to be.

It was found that no regression equation could be formed for regressing Reciprocity on the predictor variable. The adjusted R^2 value was at 0.337 as well as 33.70%. This indicated that 33.70% of the variations in Intention to adopt agent banking could be explained by the predictor variable of Reciprocity.

The equation was found to be robust with rejection of the null hypothesis. The equation was found to not suffer from the problem of autocorrelation and multicollinearity as has been evident from the Durbin-Watson statistic lying between 1.60 and 2.20 and the VIF for the predictor variables were around 2.

Proof of H3: Consumer trust is positively associated with intention use agent banking.

Synopsis of regression equation shows that the results do not vary much. A synopsis of the dependent variable and the concerned statistically significant predictor variables is given below:

Dependent Variable	Predictor Variables		
	Reciprocity	Reputation	Trust
Intention adopt agent banking	√		

It has been observed that Reciprocity influences Intention to adopt agent banking.

The distributions of the residuals of the regression equation are given below, which represent that though the adjusted R^2 is low, the regression equation is more or less robust.
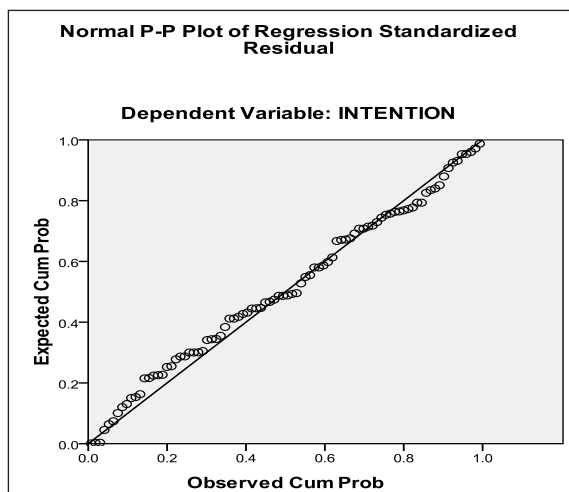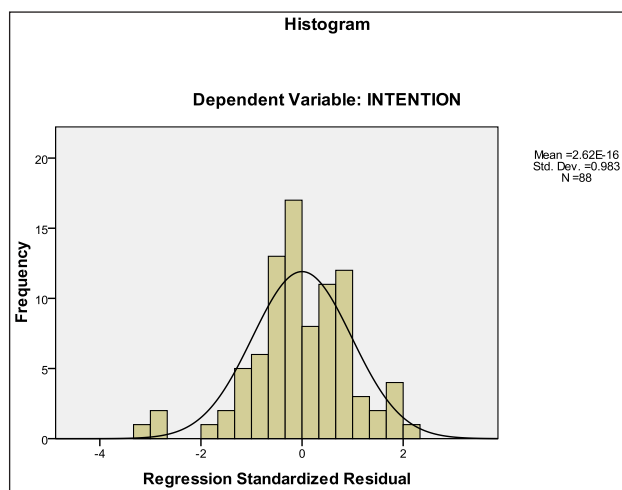
DISCUSSION AND LIMITATIONS

By adopting the SET, we observed that Reciprocity was significant in predicting intention to use agent banking, while trust and reputation did not yield significant and positive co-relation among the results. This could be the result of limited sample size of the study or even the location of the study. It may be noted that the adjusted-R square value is very low, which indicates that other factors have not been considered in this study.

Moreover, consumer selections vary among types of products (i.e., high vs. involvement) and change consumer decisions (Liebermann & Flint-Goor, 1996). Future research should test whether different services affect intention and how additional variables (latent) can affect invention to adapt agent banking or conduct factor analysis among the constructs. For example, future research should investigate factors that facilitate the adoption of agent banking by reducing cognitive load.

CONCLUSION

The findings of the study reveal that the agent-based banking services must focus on consumer reciprocity and this variable has emerged as the significant predictor in finding the intention to use banking services among the respondents. The two other variables under study – that of reputation and trust – were not found to have a positive correlation with the intention to use banking services. In developing the channel strategy, the marketers can focus on the underlying variables of consumer reciprocity like gratitude both affective and behavioral as significant factors to be focused on while building a relationship-marketing premise.

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