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Utilization of Banking Products by the Rural Customers

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Abstract

In this study the researchers analyzed the utilization and adoption of new banking products that are offered by the banks in rural milieus. The researchers have framed four objectives in order to know the level of prevalence, factors affecting the adoption and utilization of new banking products, to assess the influence of perceived attributes on satisfaction and the post purchase behaviour of rural customers on new banking products (ATM, Internet banking, Mobile banking, Telebanking and EFT (Electronic Fund Transfer)) offered by the banks in rural milieus. The researchers have found that more or less all the new products have popularity among rural customers except EFT. The theory of innovation adoption was used in this study to know the factors or determinants affecting the rate of adoption of new banking products. The study finds that among the determinants, complexity was the foremost factor affecting the rate of adoption and also influencing satisfaction on new banking products. The study concludes that the rural customers are very much eager to adopt new banking products in future. The banks have to edify the rural customers in the use of every new technology / delivery products to make use of it. So, in the upcoming years the banking industry will flourish dramatically and rural customers can make transactions universally.

Keyword: Innovation adoption theory, Customer satisfaction, Complexity and Technology.

Introduction

Today banks are operating in a highly competitive and rapidly changing environment. In the changing economic scenario, a professional approach for development of business is crucial and the endurance of a banking institution depends on its ability to take up challenges coming up in the environment. Developing business through marketing of bank's services is one of the crucial areas which need attention of the bankers to ensure lucrative survival. The Indian banking system, by nature and tradition, considered deposit growth as the prime business objective and other parameters such as productivity, profitability, customer satisfaction, etc. were considered less important. But in recent days it changed enormously in order to survive and to meet competition the banks introduced several technological products for providing services to increase their productivity, profitability and customers. The new rural finance paradigm is promised on the fact that rural people are bankable (Nagarajan and Meyer, 2005).In India most of the people are living in rural areas and the banks have to ponder on their rural customers in order to meet competition and to enlarge their business and profit. This paper examines the level of prevalence, factors influencing the rate of adoption and utilization of new banking products and post-purchase behaviour of customers on new banking products offered by the banks.

Statement of the Problem

The banking industry like many other financial service industries is facing rapidly changing market, new

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technologies, economic uncertainties, fierce competition and more demanding customers. Banking being a customer-oriented service industry, the customer is the focus and customer service is the differentiating factor. As a result of liberalization of Indian economy, new private banks are competing with other commercial banks for market share. This stresses that importance of branch banking will diminish by information technology-based channels like ATMs, Internet banking, mobile banking, telephone banking and card-based services etc. All the banks are moving towards technology based channels along with their core services. It helps both bankers and customers to make transactions effectively without physical intervention. In India most of the people are from rural areas, thus the banks are providing several technological products and services to rural customers to stay in the hunt. The utilization of those new products is lesser in the rural milieus compare to the urban. The present study attempts to analyze the factors influencing the rate of adoption and post-purchase behaviour of rural customers on new banking products offered by the banks.

Review of Literature

The banks have come to a decision that there is a need to develop a system, of holistic banking with a customer focus; through customer centric relationship. The use of online banking supporting customer service too has been suggested as one of the methods of customer focus(Janet Bigham Bernstein, 2000). Initially a study was carried out regarding the importance of e-banking and the adoption levels of various e-banking technologies in India and Kenya. The study finds that customers in both the countries have developed positive attitudes and they attach much importance to the emergence of e-banking (Richard Nyangosi *etal.*, 2009). Ease of use and relative advantage are the two major factors that influence to adopt virtual banking. ATM and phone banking are the most commonly used virtual banking services by the customers (Shaoyi Liao *etal.*, 1999). Apart from two major factors "secure services" as the most important dimension, followed by convenient location of ATM, efficiency (not need to wait), ability to set up accounts so that the customer can perform transactions immediately, accuracy of records, user friendly, complaint satisfaction, accurate transactions and operation in 24 hours also play a vital role in adoption of banking products. The study also finds that there exists a direct relationship between technology and service quality in the banking industry (Thomas Ogoro Ombati *etal.*, 2010).The Internet banking too plays a pivotal product for banking transactions.An empirical investigation was carried out through customers' survey to scrutinize that which factors are more important in adoption of Internet banking in India. It results that demographic characteristics, Internet access, awareness, customer education, cost effectiveness and service quality were most important factors on adoption of Internet banking (Vijay M. Kumbhar, 2011). Younger and well-educated consumers are more likely to adopt Internet banking. The usage of other banking technologies had a significant impact on Internet adoption and customers who have mainly depended on traditional banking services such as cheques, mail, and phone, have lower probabilities to adopt Internet banking. The banks and other financial companies should focus on customers who have already used other bank technologies to boost usage of Internet Banking (Byoung Minkin *etal.*, 2001). As compared to urban customers,majority of the customers in rural milieus don't have enough knowledge about the several new e-banking products and services provided by their banks.So, the present study focuses on utilization of banking products by the rural customers.

Objectives

The main objectives of the study are:

1. to assess the level of prevalence of rural customers,
2. to analyze the factors that affect the rate of adoption of e-banking products,
3. toanalyse the factors influencing satisfaction of rural customersand
4. to examine the post-purchase behaviourof the rural customers on banking products.

Methodology

The researchersconducted a survey among the rural customers in Coimbatore district. Purposive sampling technique has been employed for the study. The five major e-banking products like ATM, Internet banking, Mobile banking, Telebanking and Electronic Fund Transfer offered by banks were selected for the present study. The Coimbatore district is divided into Taluks (6 Taluks), and further it has been sub-divided into rural areas, semi-urban areas and urban areas. The present

study mainly concentrated on the utilization of rural customers, so the customers from semi-urban and urban areas were excluded. There are 100 bank branches in the selected rural areas. As a sample 150 respondents (rural customers) were taken for the present study by giving equal importance to both public and private sector banks in rural areas, so as to ensure that both sample banks and customers are representatives of the universe. Both primary and secondary data were used for the study. The primary data were collected from rural customers and secondary data were collected from journals, reports, magazines and newspapers.

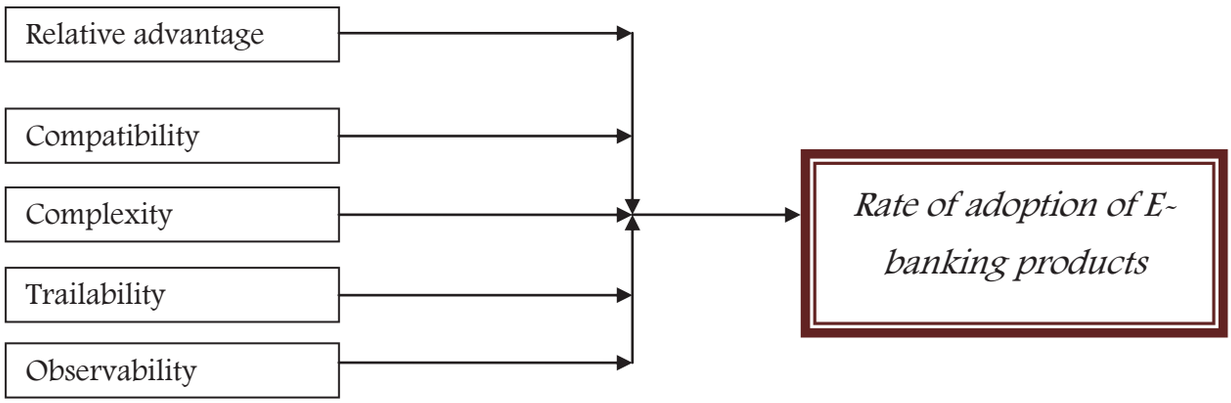
In order to attain the objectives,appropriate statistical toolswere used such as:

1. Kruskal Wallis test which is used to assess the level of prevalence on banking products,
2. Factor Analysis used to know the principal component factor which affect the rate of adoption of banking products,
3. Regression used to analyse the factors which influence the satisfaction of rural customers, and
4. ANOVA used to examine the post-purchase behaviour of rural customers on banking products.

Theoretical Research Framework

In the present study Innovation adoption theory (Rogers, 2003) was employed in order to know the customers' rate of adoption towards new innovative banking products offered by the banks in rural milieus. The term "Innovation" is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. The characteristics of an innovation, as perceived by the members of a social system, determine its rate of adoption. Taylor and Todd (1995) suggest that the different dimensions of attitudinal belief towards an innovation can be measured using five perceived attributes (Relative advantage, Compatibility, Complexity, Observability and Trailability). These attributes, originally proposed in the theory diffusion of innovation (Rogers, 1995).From 49 to 87 percent of the variance in rate of adoption is explained by these five attributes (Rogers, 1983).

Figure 1: Attributes of an Innovation



Results and Discussion

Reliability test

The Cronbach'salpha (α) is a coefficient of reliability used to measure the internal consistency or reliability of a psychometric test score for a sample. Internal consistency is a measure that is based on the correlations between different objects/items on the same test (or the same subscale on a larger test). It evaluates whether several objects/items that put forward to measure the same general construct, generate similar scores. In this study reliability analysis is done in order to tartan the internal consistency for the statements used in the questionnaire. According to commonly accepted rule of thumb for describing internal consistency, using Cronbach's alpha shows that the value of alpha is more than .7 i.e. .897 which is good for the test.

Level of prevalence of rural customers on banking products

In recent days,the banks in rural areas offer different technological products as it offers in urban areas. Creating

awareness and prevalence on e-banking products is thefirst and foremost function of banks to market their products in rural environment. In recent days, all banks of both public and private sector introduced e-banking products in rural areas in order to attain their goals and to cater tonew customers. But most of the customers in rural areas are not well erudite about the e-banking products offered by the banks.

Hypothesis

$H_0$1: There is no significant difference between demographic factors and the level of prevalence on banking products by the rural customers.

Table 1 shows the level of prevalence of new banking products in rural milieus among respondents. The non-parametric Kruskal Wallis test has been employed in the present study in order to test the above hypothesis. The result shows that the null hypothesis is rejected in case of income. So, there is significant difference between demographic factors, income and the level of prevalence on Internet banking, telebanking and EFT. The income has a strong affect on the propensity to use of financial products and services among the rural customers. Education also plays an immense role in the use of financial products and services by the customers. The use of financial products and services is higher with relatively higher level of education (Rama Paland Rupayan Pal, 2012). The result also shows that there is a significant difference between demographic factor education and the level of prevalence on new banking product EFT among the rural customers.

Factors influence the rate of adoption on banking products

The commercial banks have been introducing numerous products and services for their customers in order to make their business valuable. Apart from those, customers' adoption and utilization of thee-banking products and services play an imperative role for making it a precious one. In practical, some problems may occur while adopting the new e-banking products and services. In this study, some factors which affect the adoption and utilization of new e-banking products and services are found using Factor analysis.

Before applying Factor analysis the Kaiser-Meyer-Olkinmeasure of sampling adequacy and Bartlett's test of sphericitywere performed in order to identify whether the variables are used for further analysis. The K-M-O test and Bartlett's test of sphericity found that all extractions value are as per the expected values, therefore all items were used to further analysis. Item communalities are also found good in the data set. Item communalities are considered "high" if they are all .8 or greater (Velicer and Fava, 1998) although this is unlikely to occur in the social sciences therefore low to moderate communalities of more than .50 is acceptable.

In this study K-M-O test is significant because test value is greater than .700 (at .831) and Bartlett's Test of Sphericity also found significant (χ^2 = 833.369 P < .000). Hence, it indicates that the data set was adequate to perform factor analysis and there exists a significant relationship between the factors which affect the adoption of new banking products. In the process of factor analysis of the scale, the Varimax Rotationtechnique was employed to examine the obtained factors and all items with loadings above .50.

Table 2, Rotated solutions shows rescaled factor loadings (correlations) to evaluate which variables load on each factor. Thisindicates that Complexity was the first principal factor consistingof Response to queries, Ethical and Professional queries, Compensate of losses, Cost of acquiring and Cost of net connection (loading .662, .683, .783, .739 and .598)for which α =.794. Relative advantage was the second principal factor consistingof Efficient service, Time saving and security (loading .616, .643 and .811) for which α =.689. Compatibility was the third principal factor consisting of User Friendly Factor, Ease of Performance, Adopt Technology (loading .751, .599 and .803)for which α =.684. Observability was the fourth principal factor which consisted of Range of service offered and Convenient way of doing Business(loading .690 and .697) for which α = 6.33;and Trailability was the fifth principal factor which consisted of Access of service (loading .696).These are the five principal factors which affect the rate of adoption and utilization of new banking products. It is concluded from the factor analysis that Complexity was the foremost factor which affects rural customers to adopt the new banking products and services (i.e. the loss arises, compensation, response getting from bankers etc.). Here, five principal components explain 61.229 % of the total variance and remaining components explains the total variance.

Hypothesis

$H_0$2: Perceived attributes(Relative advantage, Compatibility, Complexity, Observability and Trailability) significantly influence customers'satisfaction.

Table 3, Regression Coefficient result, shows that among the five (explanatory variables) perceived attributes on satisfaction of new banking products, Complexity has significanteffect on the adoption as well as the satisfaction (i.e. the p-value is less than the 5 percent significant level).Lack of response to the ethical and professional queries, compensation of losses due to adoption of new banking products and cost related to new banking products and services offered by the banks etc., influence and lead to 27.4 percent change (variation) in satisfaction. The rural people are not much aware of new innovation, they may not have experienced various technologies and therefore don't have a good foundation of knowledge on how to use the technology. They hesitate to interact with banks to know things related to new banking products and services and feel difficulty in using them. Observability has also significant effect on the adoption and satisfaction to certain extent i.e. the rural customers scrutinize the range of products and services offered by the banks for them as well as the convenient of using that products and services. It leads to 17.4 percent change (variation) in satisfaction. It has the ability to see the positive results like immediate access to transactions anytime and anywhere round the clock. Relative advantages have a significant effect on the adoption of new banking products and services which find the products and services are efficient, time saving and security or safety of it. Compatibility is also found to be the most important determinant to predict new banking products and services adoption. If the rural customers and future customers think that using new products and services are completely compatible and user friendly they tend to adopt it. But both has not influenced much on the satisfaction because the rural customers may not have sound knowledge of the new banking products and services as well as they feel difficulty in utilizing it. Trialability is also found to have an insignificant effect on new banking products and services adoption. The finding is similar to the earlier study(Ibrahim M. Al-Jabri and M. Sadiq Sohail, 2012).Normally in the trial period, rural customers are expected to have full support and awareness about the new banking products and services. Perhaps, banks do not give much attention to the potential rural customers who are willing to use new banking products such as ATM, Internet Banking, Mobile banking and EFT on trial basis. Therefore, rural customers are not likely to be convinced with new banking products as they do not see its benefits in the trial period and also rural consumers may have faith in new banking products and services that they find it useful, and consider it safe and less risky. Hence, they think that there is no need to try it out. Further, R^2 which is 0.424 indicates that 42.4% of new banking products and services adoption is explained by the model. The variance inflation factor (VIF), which indicates the degree to which each predictor (i.e. independent) variable is correlated with other predictor variables, showed that there is no evidence of multicollinearity. A threshold VIF that is less than or equal to 10 (i.e. tolerance > 0.1) suggests that multicollinearity is almost absent.

Post-Purchase Behaviour of rural customers towards banking products

The post-purchase behaviour of customers plays as a vital factor in any industrial sector including banking industry, to survive in their business and to meet fierce competition. The customer's behaviour decides the quality of each product. One-way Analysis of Variance (ANOVA) is applied to analyze the post-perception behaviour of customers' utilization of new banking products in future.

Hypothesis

$H_0$3: There is no significant difference between post-purchase behaviour of rural customers on e-banking products.

Table 4 reveals the post-purchase behaviour of new banking products by the customers. It is evident from the One-way ANOVA table that the p-value (.690) is greater than the 5 percent significant level. Hence, the null hypothesis is accepted. Thus, there is no significant difference in terms of post-purchase behavior among the customers towards new banking products. Even though the rural customers face some complexities on adopting the new banking products and services, they are very much eager to use technology for banking purpose than traditional banking, which reduces the time consumption for making bank transactions. They are interested to recommend the new banking products to others because of easy availability of products and services provided by banks, feasibility, quick services and transactions. They

are well aware that such complexities can be overcome in future with help of good customer relationship management.

Suggestions

In this section, it is suggested some of the activities of the banks are to be strengthened by new approaches that have to be followed by the commercial banks in future. In order to retain the customer forever, the banks should pay special attention to expediency by providing the customers with electronic banking service at points which can be easily accessible as well as to avoid complexity by clarifying their queries related to new banking products and compensate losses arisen by using banking products. The banks can also conduct seminars and conferences monthly on new products which would help the customers to know about the products and services to make use of it. It also helps the banks to scrutinise about the demands of their customers on technology improvements with help of creating good customer relationship. The rural customers are eager to use the new banking products offered by banks in future. So banks have to keep track on major factors affecting the utilization of new banking products to make an effective banking business.

Conclusion

Electronic banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Today, it offers the bank customers services at a much lower cost and also empowers them with unprecedented freedom in choosing vendor for their financial service needs. It also increased the ease of bank transactions and also reduced time of the customers in the banking hall. Among the new delivery channels, Automated Teller Machine (ATMs), are the most widely accepted and highly utilized delivery channel by the rural customers. The rural customers face complexities in using e-banking products, which is a principal component that affects the rate of adoption and it also have a significant effect on their satisfaction towards banking products. Since the rural people are not much aware of new innovation, they may not have experienced various technologies and therefore don't have a good foundation of knowledge on how to use. They hesitate to interact with banks to know things related to new banking products and services. So they observe difficulty in using the new banking products and services. But, the rural customers are very much eager to adopt new banking products and services in future for their banking transactions. So, the banks have to edify the rural customers to use every new technology / delivery products to make use of it without facing complexities.

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Table 1: Level of prevalence on E-banking products by the Rural Customers

	Grouping Varidfgables	*Chi-square*	*Result*
	Age	.741	Accepted
	Gender	2.633	Accepted
	Education	7.137	Accepted
ATM	Income	2.200	Accepted
	Occupation	1.902	Accepted
	Type of deposit	13.882	Rejected
	Age	1.384	Accepted
	Gender	.000	Accepted
	Education	6.742	Accepted
Internet banking	Income	14.911	Rejected
	Occupation	.739	Accepted
	Type of deposit	2.169	Accepted
	Age	9.051	Accepted
	Gender	.002	Accepted
	Education	7.816	Accepted
Mobile Banking	Income	8.968	Accepted
	Occupation	1.412	Accepted
	Type of deposit	4.488	Accepted
	Age	5.774	Accepted
	Gender	3.820	Accepted
	Education	6.444	Accepted
Telebanking	Income	9.732	Rejected
	Occupation	1.119	Accepted
	Type of deposit	3.388	Accepted
	Age	4.827	Accepted
	Gender	1.287	Accepted
	Education	8.734	Rejected
EFT	Income	22.588	Rejected
	Occupation	2.936	Accepted
	Type of deposit	4.088	Accepted

5% significant level – Kruskal Wallis test

Table 2: Factor Analysis Rotated Component Matrix

Variables	*Complexity*	*Relative advantage*	*Compatibility*	*Observability*	*Trail ability*
Response to queries	.662				
Ethical and professional queries	.683				
Compensate of losses	.783				
Cost of acquiring	.739				
Cost of net connection	.598				
Efficient service		.616			
Time saving		.643			
Security		.811			
User Friendly Factor			.751		
Ease of Performance			.599		
Adopt Technology			.803		
Range of service offered				.690	
Convenient way of doing Business				.697	
Access of service					.696
% of Variance	19.130	13.692	12.418	9.841	6.148
Cumulative Variance	19.130	32.822	45.240	55.081	61.229

Extraction method: Principal Component Analysis.
Rotation method: Varimax with Kaiser Normalisation

Table 3: Regression Coefficients analysis of the model

	Unstandardised coefficients		*Standardized coefficients*	*T*	*Sig*	*Collinearity Statistics*	
	B	Std.error	beta			Tolerance	VIF
(Constant)	6.515	.962		6.772	.000		
Complexity	.219	.070	.274	3.125	.002	.742	1.348
Relative Advantage	.075	.123	.057	.612	.541	.661	1.513
Compatibility	.028	.144	.017	.194	.847	.757	1.320
Observability	.352	.183	.174	1.923	.056	.694	1.441
Trailability	.049	.273	.015	.179	.858	.761	1.314

Dependent variable: Satisfaction

Table 4: Post-Purchase Behaviour of the Customers (ANOVA)

Post-Purchase Behaviour	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Between Groups	3.345	4	.836	.563	.690
Within Groups	215.215	145	1.484		
Total	218.560	149			

5% significant level