

**FACTORS AFFECTING BANKER'S PERSPECTIVE ON MOBILE BANKING**

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**ABSTRACT**

Mobile banking is considered as potentially one of the most value added and important mobile services available. The technological changes in mobile networks, mobile devices, and the innovative attributes of mobile internet, advances in the theoretical framework of innovation in services allowed to develop a customer centric analysis of m-banking value proposition. The critical factors in the diffusion/penetration of m-Banking, reasons for failure, and further prospects of success depends on various factors and are different for different countries. This paper analyze the significance of mobile business activity in terms of their usability, opportunities, and challenges in financial sector with special emphasis on banking activities, to identify the gap between mobile communication technology innovations, and its penetration in banking industry as a new distribution channel. The strategy of adapting information technology and hence online banking services by Indian banks is studied by applying "Diniz Model" in terms of informational, transactional and customer relationship functional areas. The results of the study on Indian bankers perspectives on introducing mobile banking as new distribution channel and evaluation of banks strategy to provide and to maintain this new channel, Factors determining the adoption of mobile banking by financial services institutions are presented and discussed.

Keywords: Online banking, mobile banking, Diniz Model, Bankers perspective on e-banking, Customer Equity Approach Model.

**Introduction:**

The convergence of the Internet and mobile networks has created new opportunities and applications. Considering mobile business only as an extension of the traditional internet can lead to missing out on unique and differentiable qualities for new value added opportunities. Mobile banking is considered as potentially one of the most value added and important mobile services available. The technological changes in mobile networks, mobile devices, and the innovative attributes of mobile internet, advances in the theoretical framework of innovation in services allowed to develop a customer centric analysis of m-banking value proposition. The critical factors in the diffusion/penetration of m-Banking, reasons for failure, and further prospects of success depends on various factors and are different for different countries. Recently, some of the Indian banks started online mobile banking channel as new distribution channel, but the acceptance of mobile banking services by the customers is not encouraging. It is necessary to find the reason for slow penetration of this value added financial service in India.

The objectives of this study are to analyze the significance of mobile business activity in terms of their usability, opportunities, and challenges in financial sector with special emphasis on banking activities, to identify the gap between mobile communication technology innovations, their penetration in banking industry as a new distribution channel. The strategy of adapting information technology and hence online banking services by Indian banks is studied by applying “Diniz Model” in terms of informational, transactional and customer relationship functional areas. The results of the study on Indian bankers perspectives on introducing mobile banking as new distribution channel and evaluation of banks strategy to provide and to maintain this new channel, Factors determining the adoption of mobile banking by financial services institutions are presented and discussed.

**Responsibility of Banks:**

Deploying online banking as a component of a customer equity-building strategy of present Indian banks may be the best way to succeed. The customer equity approach model (Fig 1) proposed in this work is based on a long-term strategy of acquiring, retaining and selling additional services to the desired customer and online banking capabilities could help banks to improve their efforts in acquisition and retention of the customers. An integrated online and offline channels can be effectively used by the banks to acquire new customers. Websites that provide helpful information could attract prospective customers to investigate further products and services offered by the bank. These prospects can then use their preferred channels (online, telephone or a branch) to open a new account or apply for a loan. Online capabilities could be extremely helpful in retaining customers. By facilitating interaction and two-way communications, banks can learn about problems and opportunities before it becomes too late or costly to recover. Retention of individual customers can be enhanced as well as the ability to identify emerging service trends that may affect many customers. The last phase of a customer

equity approach calls for increasing sales of additional products and services to existing customers. Additional sales contribute to increased profitability as well as to cementing the relationship with individual customers. The opportunities to use online capabilities to increase sales are enormous; most banks have not even scratched the surface of what is possible. Most sales efforts to date have been product-centric with little attention to the needs of individual customers. The online world allows banks to move proactively into customer-based marketing efforts. By developing meaningful databases, monitoring consumer needs and behavior, and experimenting with different tactics, new revenue streams are likely to materialize.

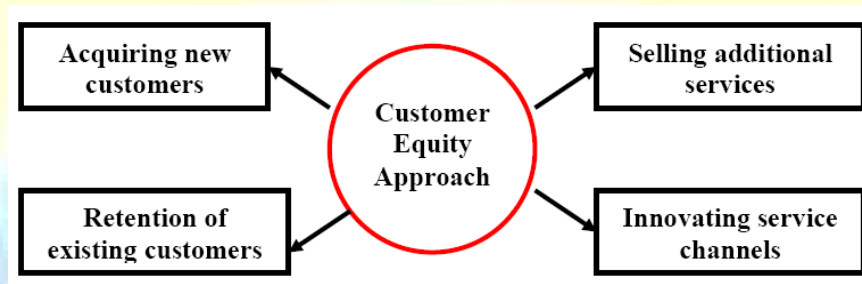


Figure 1 : Modified Customer Equity Approach Model.

In sum, a new goal of using online capabilities to acquire, retain and sell additional services to desirable customers is very feasible. To be able to get there, however, banks still face the challenge of convincing more customers to bank online. Thus, both for cost reduction and customer equity goals, banks need to find ways to accelerate the rate of consumer adoption of online banking. Only by pushing forward banks can hope to derive the benefit from the opportunities outlined above. Yet, for most banks, the efforts to date have not been very successful.

#### **Evaluation of Banks Strategy to Attract Online Banking Customers:**

The specific areas investigated here are based on the strategy of Indian banks on a framework of consumers' perceived benefits vs costs during the time period 2003 to 2007. The first issue to be examined is the bank's strategy to communicate online the benefits of the service. The second aspect of the investigation focuses on cost issues, specifically price and incentives. The third area examines a non-monetary cost issue relating to the registration process and available customer service. The final area examines the Indian banks strategy to guide the customers through demonstration and training to use the online features. Taken together, these four strategies help to assess the banks' responsiveness to prospective customer concerns (Fig 2).

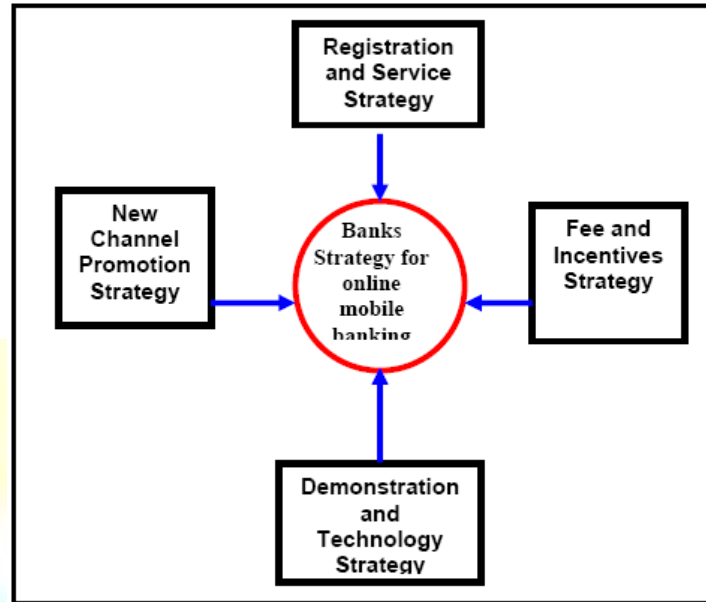


Figure 2 : Strategies adopted by banks for online mobile banking.

### 1. New Channel Promotion Strategy :

Given the fact that most prospects are not really convinced about the value of online mobile banking, it is important for banks to communicate the benefits to prospects. Banks are expected to entice customers and provide them with reasons to consider this new channel. Table 1 reports on the nature of the information to which customers are exposed upon reaching the front page of the websites of 18 Indian banks which provides mobile banking facility. The table distinguishes between 'list of functions', 'benefits', and 'links only'. Functions are lists of capabilities (eg check balances, transfer money) whereas benefits are defined here as outcomes (time savings, control, saving money etc). 'Links only' implies that no information about the online mobile banking service is provided on the front page; instead, only a link to a different page is available. Surprisingly, in 2004, all the banks provided 'links only' with no additional information on the front page. No banks provided benefit descriptions or incentives to consider the service on the front page. In 2006 the information provided on the front page had not changed materially. Benefits are still used in one banks website. There has been a slight increase in the list of functions and an increase in 'links only'. Clearly, the majority of banks still do not believe it is important to highlight the benefits. Almost all banks, at some point (in linked pages), provided a list of capabilities or benefits. During the year 2007, the number of banks providing mobile banking service with 'link only' connection at first page of website improved substantially.

**Table 1** : Front page message (out of 18 banks)

Year	List of functions	Benefits	Links only	Total
2004	0	0	03	04
2006	01	01	09	11
2007	02	02	14	18

Table 2 examines the positioning of three key attributes on those lists provided in linked pages. A higher positioning logically reflects a bank's belief about the importance of an attribute to the consumers. A lower positioning is likely to get less attention. Table 2 reports that in 2004, balance check is mentioned in the 'top three' attributes in 75 per cent of the cases. Clearly, the bill payment is not recognized as a very important attribute that ought to be communicated early. In 2006 and 2007, the situation is quite similar with even a slightly lower emphasis on bill payment. In fact, 75 per cent of banks did not mention it at all. In consumer study it is found that the bill payment is the most useful benefit among active users.

**Table 2** : Ranking of key displayed benefits

Year	Balance Check	Bill payment	Security	Total banks
2004	3, high	1, low	02	04
2006	8, high	03, low	03	11
2007	11, high	Low, 04	07	18

The final area to be examined in this table is security. In 2004, security is mentioned in the 'top three' in two banks out of four and later in 2007 it is in 07 banks. Tables 1 and Table 2 tend to suggest that banks do not feel compelled to try to convince the customers. Most sites seem to be geared towards the favourably predisposed or even previously committed consumers, simply listing capabilities. Very little attempt to explain the benefits of mobile banking are observed. Interestingly, there has been very little change in the 3 years period reviewed here. The large majority of banks have not changed their online communication emphasis.

## 2. Fee and Incentives Strategy :

Access to basic mobile banking is offered free of charge in all banks. Significant differences, however, are observed in terms of pricing of bill payment services. Table 3 reports the fee structures in 2004, 2006 and 2007. The first part reports on the normal fee structure. The second part reports on the promotional fee-waiving tactics. The normal fee structure in 2004 indicates that 50 percent of all banks charge all of their customers for the bill payment service. A mixed pricing strategy of offering a no-fee bill payment to some of the customers is reported by 25 per cent of banks. This free service is provided to higher value customers. These are the customers

who kept higher balances or had other loan and/or investment relationships with the bank. The pricing strategy reflects banks' belief that it is a costly service to provide.

Thus, those customers who want it should be asked to pay for it. In three out of four cases in 2004, bill payment is marketed as an additional, almost separate feature that is available to customers, often at a fee. The free bill payment is normally an indication of the service being a fully integrated feature of online banking, not a separate function. In those cases, every customer who registered for online banking has access to bill payment capabilities. The results in 2006 and 2007 are quite interesting. A few more banks have finally realized the wisdom of offering free bill payment to all. However, the majority of the banks are still charging all customers for this service.

**Table 3 :** Bill payment fee and incentives

Mobile banking fees	2004	2006	2007
Free for all	2 out of 4	6 out of 11	10 out of 18
Free for some	1 out of 4	1 out of 11	4 out of 18
Not Free	1 out of 4	4 out of 11	4 out of 18
Total	4	11	18
<b>Introductory Fee waived :</b>			
Yes	3	6	8
No	1	5	10
Total	4	11	18

In other words, most banks have not changed their strategy. Interestingly, a further examination of the data reveals that the banks that appear on the list for the first time have all adopted a fee structure for bill payment services. Table 4 reports on the promotional incentives among those banks who charged for bill payment services. As an inducement, some banks realized that it might be beneficial to waive the fees for bill payment for a trial period. The study reports similar results in 2004 and 2006. Approximately 30 per cent of the banks who charge for bill payment are offering fee waivers for a trial period. In other words, almost 70 percent of the banks that charge for bill payment do not offer any fee waivers even for a short trial period. Apparently, those banks believed that no incentives are necessary. While it is in the banks' interest to convert their customers, their marketing reflects the view that those consumers who want the service should pay for it.

In addition to waiving the fees for bill payment service, few banks provided customers with additional incentives. These incentives are designed to encourage customers to make an effort to try bill payment. Two types of incentives are found in the study. The first focuses on an initial financial incentive for customers who activated their online bill payment service. The second type of financial incentive is designed to ensure continuous use of the bill payment service.

Customers received financial rewards after using the service multiple times. In 2004 only one bank out of four banks in the study employed such incentives. Interestingly, the bank used both the initial incentive and the continuation incentive. In 2006, there is a very slight improvement. The data indicate that 25 per cent are used incentives to get customers to try. More striking is the fact that 80 per cent do not provide any monetary incentive to get customers to try the bill payment service.

**Table 4 :** Incentives to try and use bill payment

Incentives availability	Incentives to try (per cent)		Incentives to continue (per cent)	
	2004	2006	2004	2006
Available	01	04	01	02
Unavailable	03	07	03	09
Total	04	11	04	11

### 3. Registration and Service Strategy :

The another area investigated here focused on online registration capabilities and live customer support in the event that customers had questions. Table 5 reports the key findings in these areas.

**Table 5 :** Online Registration and live customer service availability

Online registration	2004 (per cent)	2007(per cent)
Available to existing customers only	25	30
Available for new and existing customers	25	40
Not available	50	30
Total	100	100
Live customer service		
Prominently displayed	50	30
Displayed elsewhere	25	30
Not displayed	25	40
Total	100	100

The first part of the table examines the online registration capabilities. In 2004, 50 per cent of the cases, online registration is feasible. However, most sites are not geared for new customers. In fact 25 per cent of the banks allow only existing customers to register. Those who are not currently customers of the bank would have had to use other channels to open an online account. Only 25 per cent of the sites allowed both existing and new bank customers to register online. Clearly, such systems are not very helpful for a prospective new customer. In 2007, the situation improved somewhat. Online registration is not available in 30 per cent of the cases and available to all in 40 per cent of banks. Again, the increment has been mainly due to the competition from new banks that are pursuing the more innovative banking strategies.

The second part of Table 5 reports on the availability and promotion of live customer service. The good news is that almost all banks do have live customer service, at least during some parts of the day. In 2004, however, 50 per cent prominently displayed the phone numbers on pages that relate to online registration or service description. The situation reported in 2007 is somewhat worst. 30 per cent of the banks prominently displayed the phone number, and 40 percent did not display it at all. It is very clear that banks are not making it easy for customers to find and call customer service as they would prefer customers to e-mail or SMS them rather than call. Such a strategy is not conducive to convincing uncertain consumers to register for online service. The findings of this study indicate that banks do not appreciate consumer requirements and are not providing the necessary information to convert these prospects on their websites. For the most part the results in 2007 indicated a worsening in the marketing efforts to be helpful to consumers. A few selected banks have realized the need to become more consumer friendly. The majority, however, still deploys a cost-plus approach to pricing with little regard or understanding of customer requirements.

#### 4. Demonstration and Secured Technology Strategy :

**Table 6 :** Online demonstration and secured technology strategy

	2004 (per cent)	2006 (per cent)	2007 (per cent)
Online demonstration	100	80	70
Additional security	50	30	30

Technological progress is giving a boost to existing online mobile banking services and devices. Their quality is improving. Ever faster and more powerful chips and the widespread use of broadband mobile communication technology make online banking more comfortable for more and more people without necessarily triggering the emergence of completely new devices and inventions.

#### Diniz Model Applied to Indian Mobile Banking Sector:

The role of informational technology in the success of banking is well documented (Pollais, 1994; Martin, 1998; Chatzky, 1998; and Van Aswegen, 1993). However, the acceptance of mobile banking service has been mixed. In an attempt to explain such conclusion, the Diniz (1998) model has been used to analyze the content of bank websites in the middle-east and Islamic countries (e.g., Guru et al., 2000; Jasimuddin, 2001; and Awamleh et al., 2003).



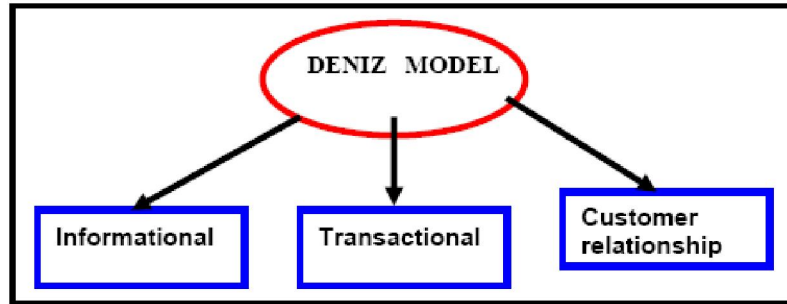


Figure 3 : Diniz model for online banking website.

Table 7 : Study of Mobile banking strategy of Indian Banks based on Deniz Model (2007)

S.No.	Deniz Feature	Public Sector Banks (6)	Private Sector Banks (8)	Foreign sector Banks (5)
1.	Basic Informational	100 %	100 %	100 %
2.	Intermediate Informational	More than 80 %	100 %	100 %
3.	Advanced Informational	Less than 20 %	50 %	30-40 %
4.	Basic Transactional	100 %	100 %	100 %
5.	Intermediate Transactional	Less than 40 %	Less than 60 %	Less than 80 %
6.	Advanced Transactional	30 - 40 %	50 %	30 - 35 %
7.	Basic Customer Relationship	More than 80 %	More than 80 %	More than 80 %
8.	Intermediate Customer Relationship	30 - 40 %	50 %	30 - 35 %
9.	Advanced Customer Relationship	Less than 20 %	50 %	Less than 20 %

The Diniz model delineates three functional areas and three levels of activity:

**1. Informational:**

Basic: – providing contact, electronic brochures and special events.

Intermediate: – search engines, report downloads, economic information.

Advanced: – subscriptions, interface customization and advertisements.

## 2. Transactional:

Basic : – opening accounts, check book requests, card requests.

Intermediate : – balance enquiry, bill payments, fund transfers.

Advanced : – electronic cash, electronic signature, electronic cheques.

## 3. Customer relationship :

Basic – electronic mail, suggestions and complaints forms, feedback forms.

Intermediate – advising tools, what-if calculations, and calculators.

Advanced – video conferences and service developments.

The adoption of mobile banking services is to a large extent dependent on the value added services they can offer. Diniz (1998) surveyed banks in the United States and reported that most of them offer basic and intermediate services at the transactional and informational levels. Awamleh et al. (2003) surveyed Jordanian banks and found limited evidence of web usage at the intermediate level while the basic level usage is dominant. Guru et al. (2000) found that overall bank website evaluation ratings are clearly related to the three functional and interactivity levels. There is evidence to suggest that banks are seeking to slowly move out of branch banking and into multichannel banking, primarily internet banking through PC or mobile phone, to attain cost advantages (Kurtas, 2000) and to improve customer service (Polatoglu and Ekin, 2001). Some of the Indian banks have adopted online banking to take advantage of opportunities in providing market information, delivering banking products, and improving customer relationship. The table 7 provides our study on Indian Banks in terms of Deniz feature.

## Conclusion:

The study contains an elaborative discussion on responsibility of banks while deploying online banking as new distribution channel through our new “modified customer equity approach model”. Through this model another new model for evaluation of banks strategy for online banking is developed in terms of new channel promotion strategy, Fee and incentives strategy, registration and service strategy and a comparative study is made on adoption of such strategy by Indian banks. The strategy of adapting information technology and hence online banking services by Indian banks is studied by applying “Diniz Model” in terms of informational, transactional and customer relationship functional areas.

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