



INFORMATION TECHNOLOGY USAGE BY INDIAN BANKS IN MARKETING OPERATIONS

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Abstract

Since the time of privatization, liberalization and globalization of banks in India, the Indian banking sector has been developing constantly taking into consideration the requirements of different segments of the society. In the present era, the banks have changed their approach from Conventional Banking to Convenience Banking. Use of information technology in banking industry is the most important element in Convenience banking. Today, the banks are consistently engaged in technological innovation of product and process to provide services to their customers in the more efficient manner. The present paper attempts to study the use of information technology by the Indian private sector and public sector banks in marketing of their products.



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Introduction

Banking can be seen as the lifeline of any nation and its people. Banks are the financial institutions that accept deposits and allow credit to the business persons or general public. Banking is the basic premise of financial, industrial and agricultural improvement of an economy. The most important function of banking is to provide services to the depositors and

borrowers (**Bell and Murphy, 1968**). In the current scenario of economic planning, agriculture, industry and trade, advancement of the banks and the banking framework is viewed as a pivotal need. All business and industrial activities are all around sewed with the bankers. Banks assume an imperative part in initiating the economic development of the nation.

The Indian banking sector had experienced a noteworthy strategy shifts at the outset of the 1990s. The period from 1992 to 1997 set the foundations for reform in the banking system (**Rangarajan, 1998**). The new model of financial reforms is commonly known as the Liberalisation, Privatisation and Globalisation policy. The main idea behind the introduction of this model was to make the Indian economy the fastest growing economy in the world with the potential that would facilitate it to match up with the leading economies of the world. The series of reforms that took place with regard to financial service industries aimed at stimulating the economy of the country to a more proficient level.

The new private sector banks first made their emergence after the regulations permitting them were issued in January 1993. These banks had access to the state-of-the-art technology, which in turn helped them to save on workforce cost and provide better services to the customers. Introduction of technology in the operations of banking sector has also affected the employees' productivity in a positive manner, (**B. Janki, 2002**). The public sector banks in India faced new challenges because of gradual up-gradation of skills, technology, restructuring and re-engineering processes attempted by the foreign and private sector banks. It was becoming extremely difficult for the public sector banks to compete with the new private sector banks and the foreign banks. The slow-moving public sector banks were forced to adopt a fast track approach in order to satisfy its customers. These banks were constrained to acquire the financial muscles to compete with the private sector and foreign banks. The competition created by the new private sector banks by the innovation with the technology, new business practices and the new products had undoubtedly re-energized the Indian banking sector as a whole (**Mohan, 2004**).

Advancement in technology is set to cause a major move in the working of banks (**Avasthi & Sharma, 2000-01**). It has not only offered them some help in acquiring updates with their internal working but also engaged them to give better customer services. Front workplaces in bank branches have gone into considerable and across the board change with introduction of ATMs. Customers no more need to visit branches for their everyday banking transactions like

cash deposits, withdrawals, cheque collection, balance enquiry etc. Internet banking and e-banking have opened new pathway in “Convenience Banking” i.e. easy access banking. Further more, internet banking has prompted lessening in transaction costs for banks. Technological course of action has also made the flow of information much speedier and more exact.

Now-a-days, the use of Information technology is persistent in marketing of their products by the banks. For many simple transactions like withdrawal of money, checking balance in accounts and on-line purchasing etc., the use of information technology has become a custom. Many banks have expanded their internet presence with the improved websites that mark the facilities to open new accounts, download forms and process loan applications etc.. With the availability of internet, customer service is provided around the clock by the banks. The customers can obtain any required information through the web-site of the banks. They feel more comfortable using the Internet to seek advice and gather the product related information rather than physically visiting the branch for the same.

Emerging Technological Trends in Banking

In the current scenario, the banks are employing the latest technology in making available the services to their customers and providing information to them without any loss of time. To compete effectively with the competitors, Indian banks are undertaking various technology driven innovative activities. The following are the emerging trends in the use of information technology by Indian banks for marketing of their products:

- Internet banking
- Mobile banking
- Social networking
- Blogging
- Search engine links
- Pay per click marketing and
- Use of other techniques of internet marketing.

Review of Literature

Singh (1985) opined that the banks need to improve the technical and functional quality of service. While the technical quality can be improved by adopting updated and innovative technology, the functional quality can be improved by adopting customer oriented business policies such as style of customer handling.

Morris, et. al. (1994) investigated the increasing role of marketing in the firm in the present era of changing customer-organisation relationship. He observed that in the present scenario, the change in technology also has an impact on the marketing strategy interface. The use of technology in marketing was found to be important for bringing the customer close to the company.

Quinn, J.B. (1996) identified that there is a positive correlation between the use of information technology to simplify the work and customer satisfaction. In the service sector, technology is being used to homogenize services by reducing the interaction of customers with the employees. The banks are encouraging the use of modern technologies to add to the services they offer and to increase customer loyalty and market share. The use of information technology results in cost reduction which ultimately leads to customer satisfaction by way of price reduction.

Srirojanant and Thirkell (1998) studied the nature of relationship marketing in Indian Banking Sector through technology. They stated that internet is a tool which is extensively used and it satisfies the needs of the customers in a more effective and efficient manner than the traditional marketing tools. Internet is far reaching and it connects the customers at different places with an organization. It results in a higher degree of interaction and promote better relations with the customers.

Kandampully (2002) studied the part of technology, innovation, network and knowledge in the growth of services. Technology encourages and support the upkeep of networks with customers and accomplices inside and outside the firm. The network of relationships renders the firms' capability "indistinct" in nature. This amorphous knowledge represents the genuine resources in a service firm which ultimately provides the creative potential for innovation which is additionally called center competency.

Mohan and Ray (2004) expressed that following the reforms in 1992, competition in the Indian banking sector has increased manifold. The private sector banks have re-energized the Indian banking sector as a whole. The new products are being introduced persistently and there has likewise been the improvement in consumer service. The effect of innovation, new technology, better technical know-how resulting upon foreign collaboration and focused product targeting dovetailed to specific segments have contributed towards significant development of Indian financial sector.

Uppal R. K. (2008) stated that in the post liberalization, privatization and globalization era, transformation in Indian banks is taking place because the banks are stepping towards e-banking from traditional banking. The paper analyzed the quality of e-banking services in the changing environment and it was concluded that most of the customers of e-banks are satisfied with the different e-channels and their services.

Padhy and Swar (2009) contemplated the service quality and customer satisfaction among Private, Public and foreign banks with respect to five variables of service quality viz. tangibility, reliability, responsiveness, assurance and empathy in the state of Orissa. He found that foreign banks are at the top followed by private sector banks and public sector banks. He expressed that technology, innovation has an impact in differentiating the three groups of banks as far as the consumer perception of service quality are concerned.

Jain Yogesh (2013) stated that the use of technology in India has undergone swift revolution. The last two decades have seen a variety of changes in the method of services offered by banks. He identified that the banks are using information technology mainly under two different avenues. These avenues are communication and connectivity and the business process. Today, banks have adopted technology to offer services to their customers in a more effective manner. This enables the banks to maintain more personal and intimate relationship with customers.

Vimala (2015) opined that the banking is becoming more complex and banks which do not use technology to provide services to the customers and tap the potential customers will face loses. At the end, technology is the pivot element and differentiator in providing the competitive edge to a bank. There is a tremendous scope for introducing the innovation with the aid of technology. Accordingly, the banks have introduced web-based services i.e. internet banking for marketing of products in a better way.

Significance of the Study

The use of Information Technology in all spheres of financial and banking sectors is increasing consistently. The revolution in information technology has enabled the banking sector to go beyond its traditional role. The banks are increasingly interconnecting their computer systems not only across branches in a city but also to other geographic locations. The customers have become more techno- adroit. They have high expectations and have become additionally demanding now. They insist on instant, anything and anywhere banking services. Though

Reserve Bank of India has formulated many policies on adoption of information technology in the overall working of the commercial banks in India, yet there is a great need to focus more on this aspect. The present study will help to know the use of technology by Indian public sector and private sector banks in marketing of their loan products

Objectives of the Study

The objective of the paper is to study the use of information technology such as mobile banking, internet banking and sms banking in marketing of loan products by the selected private and public banks.

Research Methodology

The universe of the study is the banks operating in the states of Punjab, Haryana and Union Territory of Chandigarh. The study include 10 leading banks out of which 5 are from public sector (SBI, PNB, OBC, UCO Bank and Corporation Bank), and 5 from private sector (ICICI Bank Ltd., HDFC Bank Ltd., AXIS Bank, The Federal Bank Ltd. and ING Vysya Bank Ltd). The officials of 10 leading banks were contacted for the purpose of the study.

A sample of 500 officials were selected from the above banks. The sample scheme comprised of 250 officials from each sector bank. The data collection was be done from respondents who are presently handling banking services through structured questionnaire. An effort was made to make the sample more representative. Chi-square statistic is used to test the various hypothesis.

Hypothesis

The following null hypothesis have been framed for the purpose of the study:

Ho1: There is no statistical significant difference in the use of information technology in marketing of loan products by the public sector banks.

Ho2: There is no statistical significant difference in the use of information technology in marketing of loan products by the private sector banks.

Ho3: There is no statistical significant difference in the use of information technology in marketing of loan products by the public sector and private sector banks.

Discussion and Analysis

A questionnaire containing a number of statements was developed to know the impact of information technology on the marketing of loan products by the private sector and public sector banks. The respondents were asked to express their level of agreement/disagreement with these

statements on five-point Likert scale. Since the data is non-parametric in nature, chi-square test is applied to test the null hypothesis. The test has been applied to check the level of significance at assumed p-value of 0.01. The null hypothesis is rejected for the statements with less than 0.01 p-value and are accepted for statements with more than 0.01 p-value.

The analysis of the data gave the following findings:

Table 1 Chi-square table for use of information technology in marketing among public sector banks

	PNB		SBI		OBC		UCO		Cooperative Bank		F value	P value
	Mea n	SD	Mea n	SD	Mea n	SD	Mea n	SD	Mea n	DS		
Internet or mobile banking is useful in marketing bank products.	3.94	0.24	3.82	0.39	2.54	0.86	3.28	0.97	2.28	0.64	60.19	0.00*
Your bank has a facebook account to stay in touch with the customers.	2.08	0.27	2.20	0.40	2.08	0.27	2.32	0.74	3.52	0.79	63.07	0.00*
You send regular updates of new products and schemes on the e-mail addresses of your customers.	4.66	0.63	3.82	0.44	2.52	0.84	3.32	0.96	2.20	0.61	95.76	0.00*
You use pay per click marketing for getting your offer in front of potential new clients.	4.70	0.58	3.84	0.42	3.94	0.24	3.68	0.74	2.36	0.78	104.20	0.00*
More detailed contents is	4.70	0.58	3.84	0.42	3.94	0.24	3.68	0.74	2.46	0.79	93.75	0.00*

provided to search engines by your bank than competitors.												
You advertise your product by networking with influential bloggers.	4.88	0.48	4.60	0.81	4.18	0.56	3.82	0.87	2.58	1.01	67.33	0.00*
You have built links for your website through the search engines.	3.76	0.43	3.08	0.27	3.66	0.48	3.14	0.35	3.18	0.39	33.48	0.00*
You send regular updates regarding new products and offers on the mobile of the customer.	3.94	0.65	3.48	0.50	3.50	0.51	3.58	0.54	3.84	0.65	6.64	0.00*

** p<0.01 level of significance

Table 1 depicts that the p value in all the above factors related to use of information technology in marketing of loan product by the above 5 banks is less than 0.01 i.e. the level of significance, so our null hypothesis (Ho1) is not accepted. Thus there is a significant difference in the information technology used by the above 5 public sector banks in terms of mobile banking, social networking, blogging, search engine links and use of other techniques of internet marketing. Among the public sector banks, Punjab National Bank is leading in terms of marketing of loans through internet banking, mobile banking and other techniques of internet marketing. SBI is also a pioneer in marketing through social networking. OBC, UCO Bank and Co-operative Banks are doing averagely well in use of information technology for marketing but still they are lagging behind PNB and SBI which are the market leaders not only in terms of profit and sales volume but also in terms of market share.

Table 2 Chi-square table for use of information technology in marketing among public sector banks

	ICICI		HDFC		AXIX		ING Vyasa		Federal Bank		F value	P value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Internet or mobile banking is useful in marketing bank products.	4.82	0.56	4.88	0.33	1.32	0.84	3.88	0.33	3.88	0.33	387.34	0.00**
Your bank has a facebook account to stay in touch with the customers.	4.06	0.42	4.10	0.30	2.30	0.65	2.14	0.35	3.86	0.40	248.05	0.00**
You send regular updates of new products and schemes on the e-mail addresses of your customers.	4.92	0.27	4.88	0.33	2.24	0.59	3.88	0.33	3.90	0.30	404.49	0.00**
You use pay per click marketing for getting your offer in front of potential new clients.	4.98	0.14	4.12	0.33	1.80	1.36	3.84	0.37	3.74	0.63	136.04	0.00**
More detailed contents is provided to search engines by your bank than competitors.	4.92	0.27	4.90	0.30	1.60	1.16	3.82	0.39	3.80	0.61	224.69	0.00**
You advertise your product by networking with influential bloggers.	4.94	0.24	4.02	0.32	2.14	0.45	4.84	0.37	4.70	0.65	371.07	0.00**
You have built links for your website through the search engines.	4.06	0.31	4.04	0.35	2.54	0.97	3.02	0.43	3.84	0.37	78.72	0.00**
You send regular updates regarding new products and offers on the mobile of the customer.	2.42	0.93	2.54	1.03	2.62	1.05	2.58	0.81	2.12	0.33	2.69	0.03*

** p<0.01 level of significance

Table 2 depicts that the p value in all the above factors related to use of information technology in marketing of loan product by the above 5 banks is less than 0.01 i.e. the level of significance, so our null hypothesis (H02) is not accepted. Thus, there is a significant difference in the information technology used by the 5 selected private sector banks in terms of mobile banking, social networking, blogging, search engine links and use of other techniques of internet marketing.

Among the private sector banks, HDFC bank is leading in terms of marketing of loans through internet banking, mobile banking and social networking. ICICI bank is a leader in sending regular updates of its new products to the potential customers through e-mails. This bank is also adopting the other techniques of internet marketing like blogging, search engine links and pay per click marketing etc. more efficiently than its competitors. Though AXIS Bank, Federal Bank and ING Vyasa banks are also using information technology innovatively for marketing of their products but they have not reached upto the optimum level of its usage.

Table 3 Comparison of private sector and public sector banks for use of information technology in marketing

	Public Mean	SD	Private Mean	SD	t value	df	P value
Internet or mobile banking is useful in marketing bank products.	3.17	0.95	3.76	1.39	-5.48	498	0.00**
Your bank has a facebook account to stay in touch with the customers.	2.44	0.77	3.29	0.99	-10.77	498	0.00**
You send regular updates of new products and schemes on the e-mail addresses of your customers.	3.30	1.14	3.96	1.05	-6.75	498	0.00**
You use pay per click marketing for getting your offer in front of potential new clients.	3.70	0.96	3.70	1.26	0.08	498	0.94
More detailed contents is provided to search engines by your bank than competitors.	3.72	0.93	3.81	1.37	-0.80	498	0.42
You advertise your product by networking with influential bloggers.	4.01	1.11	4.13	1.13	-1.16	498	0.25
You have built links for your website through the search	3.36	0.48	3.50	0.82	-2.27	498	0.02*

engines.

You send regular updates regarding new products and offers on the mobile of the customer.

3.67	0.60	2.46	0.88	17.96	498	0.00**
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** p<0.01 level of significance

From the above table, we can conclude that there is a significant difference in the use of internet and mobile banking by the selected private and public sector banks. Private sector banks are more internet savvy and like to keep their customers and employees updated through the use of information technology. On the contrary for the factors like per click marketing, blogging and use of search engines, there is no significant difference between the public and private sector banks.

Conclusion

The paper has analyzed theoretically as well as empirically the use of information technology in marketing of loan products by banks. From the results driven by applying chi-square test, it was found that both the private sector and public sector banks are intensively using the modern technology for the purpose of marketing of their products. However, it can be said that the private sector banks are taking a lead in adopting information technology for marketing and public sector banks are following them. In the times to come, technology will cross all limitations and energize world-wide banking business. The banks would need to embrace the best technique to make a client - driven operation model.

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