

## Impact of Information Technology on Strategy Formulation in Banking Sector of Pakistan

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### Abstract:

*Information technology has become an important part for organizations in every field. Now organizations can't imagine their working without it. This paper discusses role of IT in strategy making in banking sector of Pakistan. Now banks can't think of formulating their strategies without considering IT as it has become backbone for today's era and it is very much necessary for attracting customers. Banks are communicating through information technology with their customers and offering several services such as ATM, i-net, tele-banking, plastic cards etc. IT has great impact on strategy formulation, significant relationship exists between IT and management's strategy making processes as alignment between information technology and strategy formulation will leads towards organization's success. Usage of IT produces accurate, relevant and timely information and has increased productivity. Strategies are formulated for achieving long term successes, if right strategy is formulated and implemented at right time then it will result in gaining competitive advantage.*

**Key words:** Information technology, strategy, banking sector, strategy formulation, IT

## **1. INTRODUCTION:**

Information technology has become an essential part of organizational life (Huber, 1990). IT is computer and telecommunication application which is used to store, transmit, send, retrieve and process data. IT has become life blood for any organization's success. Now organizations can't achieve competitive advantage without using information technology. With the evolution of IT lot of time and money is saved. Furthermore it also ensures security of data. Data collection, storage and organization was very difficult for organizations before widespread use of computers. With the advancement in computer and information technology it has become possible for managers to select relevant information they need without wasting their time. So most of the organizations are now dependent on information technology (Reddy, Srinivasu, Rikkula, & Rao, 2009). IT has become source of efficient work.

### **Information technology in strategy formulation:**

Information technology plays a very important and crucial role for any organization's strategy formulation process. It is one of the most important key factor for any organization's success. Strategic planners and senior executives are continuously paying attention to their firms by improving their utilization of information technology abilities to achieve competitive advantage (Bakos & Treacy, 1986). Now-a-days only those organizations succeed rapidly which uses information technology. According to Keen (1981) information technology has become the backbone for organizations and organizations will develop through their telecommunication systems (Porter & Kramer, 2002).

### **Importance of Research:**

This research is conducted to investigate impact of information technology on strategy formulation which is one of the most important topic now-a-days. Organizations succeed due to implementing information technology in their processes to achieve competitive advantage. IT has now become backbone for every organization and without implementing IT in organizations it is almost impossible to achieve success. Now importance of information technology can't be neglected. IT plays an important and crucial role in any organization's strategy formulation process. Organizations should use IT in strategy formulation processes to gain competitiveness.

### **Research Problem:**

Research problem for this study is impact of information technology on strategy formulation. IT has now become necessity of our life, we can't imagine our life without information technology. Today's global era is very much dependent on IT in almost every field of life. Even organizations have become so much dependent on IT that no business can grow without implementing IT. Once strategies were only formulated by large organizations but now even small organizations formulate strategies to achieve competitive advantage because of changing environmental conditions. Strategies should align with organizational objectives. This research aims to emphasize use of information technology on strategy formulation.

### **Research Objectives:**

Research objectives for this study are

1. To analyze the impact of information technology on strategy formulation
2. To evaluate importance of information technology and strategy formulation for any organizational success

3. To investigate the problems faced in formulating strategies
4. To analyze importance of IT for achieving competitive advantage

## **2. THEORETICAL PERSPECTIVE:**

Information technology is computer base information system. IT is set of technologies which creates, communicates, acquires, analyzes, saves and transmits information and data (Breznik, 2012). Information technology has become an essential part for any organization's success in today's globalized era.

Information technology is required for any organizations success in today's world to gain competitive advantage (Hemmatfar, Salehi, & Bayat, 2010). There is hardly any aspect of life which remains unaffected by information technology now-a-days. Now businesses are carried out in global environment only because of IT and presently businesses could not be served without information technology.

### **Factors considered in strategy formulation in IT:**

Strategies provide directions to organizations. They are the ways to achieve organizational objectives. Strategies play an important role for any organization's success. Today's era is an information technology era where an organization can't achieve success without implementing IT. So while formulating strategies special attention is given to information technology. Information technology helps organizations to achieve their goals more efficiently. Implementing this information technology strategy in organizations has increased organizations productivity and consumer benefits (Hu, Zhang, Brake, & Nickels, n.d.).

Information technology continuously provides information flow which should be used while formulating

different strategies. Implementation of information technology has now become more vital for organizations than before (Porter & Kramer, 2002). It is one of the most important strategy to achieve goals successfully. Once strategy formulations were only done by large organizations but today every organization has to do strategic planning for its survival and growth.

Businesses are carried out in global marketplace now-a-days. Information technology has diminished distance and time. Now managers have to formulate strategies in advance to cope up with future changes (Lawlor, 2010). Without proper strategic planning organizations only react to environmental pressures without thinking. Those organizations fail who don't plan well in anticipation as compare to those organizations who plan very well and successfully implement their strategies. Strategic plan is the base for all activities. If correct strategy is implemented than it results in achievement of organization's success otherwise it results in organization's failure (Rajasekar, 2014).

Information technology helps organizations in capturing and analyzing data. The ubiquitous use of IT has led to frequent use of computer as compare to human brains (Hu & Kettinger, 2008) which reduces chances of error. Now decision makers are more busy dealing with their computers instead of other employees (Attewell & Rule, 1984), so it's a very good strategy which reduces chances of human arguments, misunderstandings, disagreements etc. which reduces employees efficiency and effectiveness. According to Simon (1987) employees routines are mechanized as emotions, aspirations and intuitions are reduced.

Information is very necessary for decision making process and it is a crucial asset for any organization's success. IT helps in reducing uncertainty in decision making. Many authors (Lucey, 2005; Ward, Griffiths, & Whitmore, 2002)

highlighted the importance of information technology in strategy formulation and decision making. They agree to this point that information technology is playing an increasingly important role in any type of organizations irrespective of their sizes. Organizations use information technology from all sources in strategy formulation (Kovacheva, 2008).

Teo & Too (2000) suggested that besides traditional systems, information technology provides competitive advantage for organizations. Information technology is especially important to lower level managers because mostly they have to deal with computers and IT. Advancement in IT has made data access more easy and quick which has helped in strategy formulation process which in turns lead towards more effective and efficient decision making process (Berisha-Namani, 2010).

### **Information technology in banking sector:**

Providing better quality and customer services to customers is not enough now. In order to gain competitive advantage over its competitor's, organizations need to be more innovative, fast and flexible. In short organizations need to be more strategic. They should devise more ways to communicate with their customers which is only possible through information technology.

IT has become an important element in strategy formulation process. Internet has become an integral part of our lives we can't imagine our life without it. Its usage has become globally widespread in every field of life. Online banking and purchasing have become its by-products. Banking sector has taken competitive advantage by using e-banking which is one of the top IT applications (Oluwatolani, Joshua, & Philip, 2011). IT and e-banking is increasing efficiency which leads towards more competitiveness. Now customers have become smarter, their preferences are changing day by day and

they don't accept average services, instead they demand for excellent services.

As we know that customer is the king of market. Banks have to retain their customers by providing them with outstanding services so that customers remain loyal with them. Banks are not only satisfying their customers but instead they are delighting them. Bankers have to formulate new strategies so that customers receive more than they deserve and become surprised by receiving more than their expectations and imaginations. Use of information technology has become need of hour for its survival in this global era (Uppal, 2011).

### **Impact of IT in banks:**

E-banking is carrying out banking transactions on electronic devices. E-banking increases efficiency, speeds up delivery timings, made transactions easier, smooth flow of information, checks fraudulent, immediate responses, reduces errors, provides better quality services etc. (Oluwatolani et al., 2011).

### **ATM:**

ATM is an electronic banking outlet which enables customers to dispense cash at any point of time regardless of traditional banking hours. ATM provides 24 hours services to customers 7 weeks a day. It provides several other services like transfer of funds, payment of utility bills, mini statements and change of pin code etc.

### **Online Banking:**

Information technology has also provided online banking services to customers so that they can perform all their transactions electronically without any complication. It allows customers to make payments of their bills online and also offers other types of services to their customers without any direct contact with physical cash.

### **Funds Transfer:**

After the advent of IT transfer of funds have become so easy and efficient. Now customers can easily transfer funds nationwide and across the world. Before the advent of information technology transfer of funds takes long delays but now electronic transfer of funds are delivered without any problem.

### **I-Net Banking:**

With the help of IT, banks has provided i-net banking (internet banking) services to customers so that they can perform all their transactions electronically by staying at home and offices. Now customers can perform several functions online without physically going to banks. Customers can pay their bills, transfer funds, check balance statements and perform online transactions electronically only because of IT.

### **E-mail:**

Electronic mail is one of the most important and efficient blessing provided by information technology. It has solved problems of communication between banks, customers, organizations and other parties across boundaries.

### **Telephone Banking:**

Tele-banking allows customers to transact their banking services over telephone. It is an alternative of traditional banking in which customers' self-presence is compulsory in banks. It is also one of the blessing of information technology.

### **Plastic Cards:**

Plastic cards are also invention of information technology. It is a source of electric payment. Customers can interact with the machine through these plastic cards such as credit or debit cards.



### **Automated Services:**

Different machines used in banks are all information technology innovations which have made work really easy. For example cash counting machine which automatically counts cash and magnetic ink character reader which processes cheques.

Large number of customers agree to this point that information technology in banking sector has facilitated faster services, accurate records, convenient banking hours etc.

### **3. FINDINGS:**

The main objective of this research is to examine impact of information technology on strategy formulation in banking sector of Pakistan. Data was collected on impact of information technology on strategy formulation processes by conducting interviews. Some of the findings are as following.

Today's modern banking is based on information technology and all strategies are formulated by keeping in mind the importance of IT. It's all fruit of information technology that manual system has been changed to softwares. Previously all work was done manually but now computer software has taken all the responsibilities. Even large number of files are not needed now for book keeping instead computer softwares do all the works.

Banks now communicate with each other and with customers through information technology. All the networking are done through IT as PCs are linked point to point through fiber optics from main server. Banks can share customers' data through IT. In fact information technology has now become backbone for banking sector. All working of banks are now dependent on information technology as whole banking is now done on computer softwares. Importance of IT can't be

neglected. So all the strategies are formulated keeping in mind importance of IT.

IT produces meaningful and useful information which is used in making effective decisions. Information technology also fulfills several management needs like problem solving and decision making. IT also helps in processing faster paper works and performing calculations efficiently than traditional manual systems.

IT has great impact on strategy formulation. Significant relationship exists between IT and management's strategy making processes as alignment between information technology and strategy formulation will leads towards organization's success. Usage of IT produces accurate, relevant and timely information and has increased productivity.

Some of the advantages of information technology in banking sectors are work minimization, efficiency, reduction in wastage of time, accuracy, more production, more security of customers, easy account maintenance, more customer satisfaction etc.

Few years ago it was possible to ignore computer and information technology but today it can't be ignored at all. Ignorance towards information technology will leads to organizational suicide. IT has led towards convenient banking hours, faster services, accuracy of records and possibility of home banking (Ioin Agboola, n.d.).

#### **4. CONCLUSION:**

This paper explores use of information technology in strategy formulation in banking sector. The conclusions drawn from this research shows that most of the banks are using information technology for operational level activities. IT ensures efficiency and effectiveness in strategy formulation processes. (Cakmak & Tas, 2012).

No doubt that banks have taken advantage of information technology. Today almost every bank have their own website on internet to provide services to customers (Ugwu, Oyebisi, Ilori, & Adagunodo, 2000). Now banks have been transformed from traditional banks to online solution providers only because of information technology.

Information technology plays an important strategic role in organizations. Effective use and implementation of information technology in strategy formulation brings competitive advantage in organizations. Information technology's usage has great impact on organizational performance as it is continuous source of growth. IT increases efficiency and reduces cost (Apulu & Latham, 2011).

Strategy formulation is one of the most crucial and important function for any organization's success. Strategies need to enhance quality services. Information technology helps in better strategy formulation according to current demands to achieve competitive advantage. It is particularly designed to support management's better decision making activities (Berisha-Namani, 2010).

Now-a-days no organization can survive without information technology. World is changing day by day, most of the strategies adopted today no longer remains strategic tomorrow because of rapidly changing environment. Strategies are formulated for achieving long term successes, if right strategy is formulated and implemented at right time.

Strategies need to be aligned with information technology applications to achieve success through continuous improvement. Certain factors to be taken in consideration when formulating strategies like serviceability, reliability, performance, perceived quality, features, durability etc. Information technology need to be well aligned with businesses. IT has enabled various organizations to strategically adapt to changes in business environments (Madadipouya, 2015).

Information technology plays a critical and important role in strategy formulation and decision making processes (Breznik, 2012). Usage of IT in strategy formulation leads towards success. According to Andersen (2001) usage of information technology has increased organizational performance, innovation and profitability. IT has also become source of achieving competitive advantage.

## **5. RECOMMENDATIONS:**

Some of the recommendations based on this research are as following.

### **Strategy based on E-banking:**

Information technology has totally changed the perception of traditional banks. Adoption of information technology has now become need of hour for its survival. Now customers are preferring e-banks instead of traditional banks because of efficient delivery processes, smooth flow of information, better performances, easier transactions and economic service providers. So new strategies should be formulated by keeping in mind the impact of information technology.

### **Employees relating strategies:**

Such type of strategies should be formulated which improves personal efficiency and behavior of employees so that they can attract more customers in banks. Staff training should be conducted according to need of hour by keeping in mind impact of information technology (Uppal, 2011).

### **Strategy formulation for customers:**

Special attention should be given to customer's education so they also become aware of latest information technology in banking sector and can perform online transactions by staying

at home. Customers can also take benefit of flexible working hours and adopt latest technology.

**Strategy formulation for IT equipment:**

Banks should formulate strategies to emphasize more on effective utilization of information technology equipment like electronic cards, ATMs, online banking, i-net banking, mobile banking etc. More campaigning and orientation needs to be done among customers so that they become more aware and take benefits of information technology (Muhammad et al., 2013).

**Strategy formulation for Employees:**

Banks should formulate new strategies to hire fresh employees with creative mind sets so that they are well aware about information technology and better implements IT in strategy formulation which become helpful in achieving organization's success. Strategies relating to old employee's training should also be formulated so that old employees also become aware about IT and they also play their role in achieving organization's success.

**REFERENCES:**

1. Andersen, T. J. (2001). Information technology, strategic decision making approaches and organizational performance in different industrial settings. *The Journal of Strategic Information Systems*, 10(2), 101–119.
2. Apulu, I., & Latham, A. (2011). An evaluation of the impact of Information and Communication Technologies: Two case study examples. *International Business Research*, 4(3), p3.

3. Attewell, P., & Rule, J. (1984). Computing and organizations: What we know and what we don't know. *Communications of the ACM*, 27(12), 1184–1192.
4. Bakos, J. Y., & Treacy, M. E. (1986). Information technology and corporate strategy: a research perspective. *MIS Quarterly*, 107–119.
5. Berisha-Namani, M. (2010). The role of information systems in management decision making-an theoretical approach. *Manager Journal*, 12(1), 109–116.
6. BreznIK, Li. (2012). Can information technology be a source of competitive advantage? *Economic and Business Review*, 14(3), 251–269.
7. Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford university press. [https://books.google.com.pk/books?hl=en&lr=&id=l7u6BwAAQBAJ&oi=fnd&pg=PP1&dq=Bryman,+A.,+and+E.+Bell,\(2011\).+Business+Research+Methods+3e.+Oxford+university+press.+Retrieved&ots=AvOiBbGVRk&sig=XFf38ck1uTpT8tNsMyZPCu3X3E4](https://books.google.com.pk/books?hl=en&lr=&id=l7u6BwAAQBAJ&oi=fnd&pg=PP1&dq=Bryman,+A.,+and+E.+Bell,(2011).+Business+Research+Methods+3e.+Oxford+university+press.+Retrieved&ots=AvOiBbGVRk&sig=XFf38ck1uTpT8tNsMyZPCu3X3E4)
8. Cakmak, P. I., & Tas, E. (2012). The Use of Information Technology on Gaining Competitive Advantage in Turkish Contractor Firms. *World Applied Sciences Journal*, 18(2), 274–285.
9. Hemmatfar, M., Salehi, M., & Bayat, M. (2010). Competitive advantages and strategic information systems. *International Journal of Business and Management*, 5(7), p158.
10. Huber, G. P. (1990). A theory of the effects of advanced information technologies on organizational design, intelligence, and decision making. *Academy of Management Review*, 15(1), 47–71.
11. Hu, T., & Kettinger, W. J. (2008). Why people continue to use social networking services: Developing a comprehensive model. *ICIS 2008 Proceedings*, 89.

12. Hu, T., Zhang, X., Brake, K. V., & Nickels, D. W. (n.d.). Understanding the impact of information technology on strategic management: a power asymmetry view. retrieved from [http://iacis.org/iis/2011/151-158\\_al2011\\_1648.pdf](http://iacis.org/iis/2011/151-158_al2011_1648.pdf)
13. Keen, P. G. (1981). Information systems and organizational change. *Communications of the ACM*, 24(1), 24–33.
14. Kovacheva, T. (2008). Information technologies for strategic management. Retrieved from <http://scis-gems.math.bas.bg/jspui/handle/10525/1056>
15. Lawlor, J. E. (2010). The importance of strategic planning. *London: Observatory on Borderless Higher Education Long Range Planning*, 21(1), 73–81.
16. Loin Agboola, A. A. (n.d.). Impact of Electronic Banking on Customer Services in Lagos, Nigeria. Retrieved from <http://www.krepublishers.com/02-Journals/JSS/JSS-07-0-000-000-2003-Web/JSS-07-1-001-03-Abst-PDF/JSS-07-1-027-03.pdf>
17. Lucey, T. (2005). *Management information systems*. Cengage Learning EMEA. Retrieved from <https://books.google.com.pk/books?hl=en&lr=&id=A0bu30rNgJsC&oi=fnd&pg=PR14&dq=management+information+systems+lucey+9th+edition&ots=0z05dmQ1dT&sig=X006yWJvrzkU8qHDGi5ZGHFQTck>
18. Madadipouya, K. (2015). A Review On The Strategic Use Of IT Applications In Achieving And Sustaining Competitive Advantage. *arXiv Preprint arXiv:1507.01233*. Retrieved from <http://arxiv.org/abs/1507.01233>
19. Muhammad, A., Gatawa, N. M., & Kebbi, H. S. B. (2013). Impact of information and communication technology on bank performance: a study of selected commercial banks in Nigeria (2001–2011). *European*

- Scientific Journal*, 9(7). Retrieved from <http://www.eujournal.org/index.php/esj/article/view/866>
20. Oluwatolani, O., Joshua, A., & Philip, A. (2011). The Impact of Information Technology in Nigeria's Banking Industry. *arXiv Preprint arXiv:1108.1153*. Retrieved from <http://arxiv.org/abs/1108.1153>
  21. Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56–68.
  22. Rajasekar, J. (2014). Factors affecting Effective Strategy Implementation in a Service Industry: A Study of Electricity Distribution Companies in the Sultanate of Oman. *International Journal of Business and Social Science*, 5(9). Retrieved from [http://ijbssnet.com/journals/Vol\\_5\\_No\\_9\\_1\\_August\\_2014/15.pdf](http://ijbssnet.com/journals/Vol_5_No_9_1_August_2014/15.pdf)
  23. Reddy, G. S., Srinivasu, R., Rikkula, S. R., & Rao, V. S. (2009). Management information system to help managers for providing decision making in an organization. *International Journal of Reviews in Computing*, 1–6.
  24. Simon, H. A. (1987). Making management decisions: The role of intuition and emotion. *The Academy of Management Executive (1987-1989)*, 57–64.
  25. Teo, T. S., & Too, B. L. (2000). Information systems orientation and business use of the Internet: An empirical study. *International Journal of Electronic Commerce*, 105–130.
  26. Ugwu, L. O., Oyebisi, T. O., Ilori, M. O., & Adagunodo, E. R. (2000). Organisational impact of information technology on the banking and insurance sector in Nigeria. *Technovation*, 20(12), 711–721.
  27. Uppal, D. R. (2011). Customer Delight—A milestone for the banks. *Journal of Arts, Science & Commerce*, 2(4).



Retrieved from  
[http://www.researchersworld.com/vol2/issue4/Paper\\_2.pdf](http://www.researchersworld.com/vol2/issue4/Paper_2.pdf)

28. Ward, J., Griffiths, P. M., & Whitmore, P. (2002). *Strategic planning for information systems* (Vol. 28). J. Wiley. Retrieved from [http://ocw.up.edu.ps/upinar/file.php/605/SMOI\\_2002\\_Sa\\_menvatting\\_Peppard.pdf](http://ocw.up.edu.ps/upinar/file.php/605/SMOI_2002_Sa_menvatting_Peppard.pdf)