

**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH  
TECHNOLOGY****GROWTH AND PERFORMANCE OF DATA MINING IN BANKING INDUSTRY****Mrs. Yuvika Priyadarshini\***

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DOI: 10.5281/zenodo.827862

**ABSTRACT**

Since banking sector reflects a sophisticated structure of people, operations, procedures and information systems; Data mining management (DMM) in banks can be utilized as strategic tool to expand the banks' capabilities in order to effectively resolve, adjust and develop a package of solutions to proactively deal with changing business environment. However, the focal point of this research is to explore how DMM practices including Data creation, Data storage and Data sharing can affect employees brand commitment in banks operation. In conclusion, Data is the key resource needed if an organization intends to operate at a level that is equal to no other. The study therefore recommends that an effective system should be put in place to ensure that relevant Data that will boost performance is identified. And also that Data acquisition is not only about acquiring mere data but mindfully managing data acquisition activities in order to tap into different kinds of data.

**KEYWORDS:** Data mining management , Effective growth and performance of Banking.**I. INTRODUCTION**

Data Mining (DM) is a process which seeks to determine the data that affect business operations and thus eliminating these threats. Essentially, the process identifies any type of situation that could result in damage to any tangible or intangible resource within the possession of the company, including personnel, then takes steps to correct factors that are highly likely to result in that damage. DM addresses not only data which are involved in insurance, but also business data related from a competitive threat, poor product quality and customer attrition (loss of customers). One of the tools which can support DM into minimizing the data of losing customers and to manage customer retention is Data mining (DM). With the help of DM banks can manage risks for credit approval, issuing credit cards, determine customer behavior and whether or not customers are reliable and thus should be retained or customers present the risk of defaulting their accounts (The Chartered Accountant, 2006).

DM is a tool which creates models to find patterns in large collections of data. By using these models the end user extracts data to analyze and predict customer behavior while gaining competitive advantage, reduce risks of losing customers and identifying what attracts customers. According to "data mining is defined as the process of extracting previously unknown, valid, and actionable information from large databases and then using the information to make crucial business decisions." DM in banking industry supports not only customer retention, but also customer acquisition (The Chartered Accountant, 2006). This is an important matter for banks since competition is high and customers have so many options to choose where to do their business. Hence, this demands from executive management to give full attention to their customers. DM helps the banks to discover purchasing patterns of behavior which in return sustain the banks in offering incentives that are individually designed to fulfill the customer needs,.

Due to the fact that the competition is increasing rapidly, the commercial banks need to adopt new strategies and tools such as DM to remain competitive. The banks can develop methods and analysis in DM to determine fraud detection, failure analysis, demand forecasting and assess risk management

**II. DATA MINING MANAGEMENT IN BANKING**

The first initiative of the bank towards the Data Mining is floating the idea of data management as a simple routine activity but not as a project. This is created by providing the staff facility of intranet through which they can participate in collaborative activities and shares their data with discussions and contributing towards data repository. In 2002 the bank had a reverse merger with its parent organization with bank. Then the data

management team has restructured its strategy to suit for the new corporate. The initial issues for the data management team in bank were: bring interaction and collaboration among the vast pool of employees, sharing of business information related to clients deals and ideas among the employees, change management through effective communication channels, addressing the problem of data pool iteration and training and skill development of employees towards data management. These issues were well tackled by creating zeal among staff towards acquiring, sharing and disseminating data. The creation of the data management culture has educated and made the employees to think positively and professionally towards external competitive challenges of the business and to stimulate for getting new thoughts, ideas and ways of working.

The bank has developed the wise guy in the data management intranet portal which was easily accessible from the main staff portal for capturing and disseminating knowledge of its employees. To develop the wise guy a group of people from different departments such as HR, technology research and knowledge management were put together and given the responsibility. Eventually it became a part of bank's intranet. All interested people were given login ids, passwords by the system administrator. To generate the awareness of wise guy mails were sent to all the employees and banners were put on the intranet site. It was introduced to create the culture of data sharing and provided a frame work to bring together the virtual team.

The importance of scalability of the Data management portal cannot be under estimated. It recorded one million logins in 2004, just in 2 years after the site was redesigned. The number of staff using the data management portal has increased abnormally on an average about 10,000 users visit the site daily. More than 50 divisions in bank contribute and publish their data in the data management portal. There are more than 25,000 individual items and about 1,500 daily searches for information. There are about 10,000 interacts to posting in the portal. These interactive sections include discussion forums, book reviews and query boards, the rewards and recognition schemes, single point lessons, etc.

The data management program in the bank was not taken up as a top management directive but it is a culture of employees working with the data management program. The employees associated with the data management program realized the value and benefits they get and proud to become a DM associate in the bank. The personnel associated with data management are thinking that their work place is not mere physical location, but it is a place for data improvement and professional development. The satisfied users of DM support the system through system handling behavior such as data sharing, self-help, and collaboration.

In addition to the data portal the bank had initiated several other DM practices. They are wise Wednesday, brown bag, daily dose, learning matrices and the corporate information bank. As some of the senior people were hesitant to share their data through the web portal, the DM team has invited those people to share their facet data through an informed manner. These people were given importance and made them to share their experiences and ideas through informal gatherings. This initiative has helped the bank to popularize data management

### III. EFFECTIVE GROWTH AND PERFORMANCE OF BANK

The growth and performance of a bank is highly influenced by the best methodologies and practices adopted. Since inception, the economic policies of the bank are sound. There is a significant growth in all operational parameters of the bank during the last decade. The adoption of internet banking, tele banking, etc., has provided ample opportunity for the bank to improve its performance. After the liberalization policy in early 1990, the government of India has licensed private sector banks. During that period the bank was established as Tech – savvy bank. The rapid growth in the economy of India up to 2006 – 07 has revitalized the banking sector in India and the bank has a strong contribution for Indian commercial banking sector.

The culture in the bank has changed and it became a key to encourage the employee participation for knowledge capital. The employees are well rewarded and recognized in the bank and are provided with K- points for their contribution in data through writing the articles, uploading the documents, posting the queries, responding the queries, initiating the discussions, rating the discussions etc.,. The people who spoke in the knowledge leader series are given certificates signed by the CEO of their bank.

To understand the growth and trends of bank the data on the performance parameters such as deposits, current deposits, savings bank deposits, deposits, share of percentage, advances, investments, working funds, total expenses, interest expenses, staff expenses, other expenses, total income, interest income, other income, gross profit, provisions and contingences, net profit, gross NPA, net NPA, staff strength, number of branches, the ratio



of non – interest of income to total income, the ratio of spread to average working fund, the ratio of establishment expenses to average working fund, the ratio of other expenses to average working fund, the ratio of gross profit to average working fund, return on assets, return on average assets, total business, business per employee, business per branch, net profit per employee, gross profit per employee, gross profit per branch, net profit per branch is collected from annual reports, RBI reports from the year 2002 to 2012 along with their annual compound growth rates

#### IV. CONCLUSION

This paper deals with the DM initiatives adopted during the last decade in a private sector bank namely, bank and its performance and growth. The data management is basically meant for utilizing the data within the organization through acquiring, storing, and sharing for problem solving strategic planning and integrating with effective decision making. Realizing the importance of DM the bank has started implementing it since 2002.

The various strategies of integrating IT and ICT with data acquisition and sharing made the bank to provide a successful story for other commercial banks to follow

The implementation of DM strategy at bank is providing lot of insights for other commercial banks to deviate from their traditional methods of face to face data sharing and documentation systems. It is a prominent consideration now for all commercial banks to adapt effective and efficient Data management in order to improve a customer satisfaction and to sustain in the present day competitive banking environment

#### V. REFERENCES

- [1] Bhogaraju G. (2005), knowledge management: Why do we need IT for Corporates, Malaysian Journal of Library & Information Science, Vol.10, Issue. 2, Pp: 37-50.
- [2] Chanda Kochhar (2008), “Whenever there’s a challenge, I see an Opportunity”, (<http://knowledge.wharton.upenn.edu/article/icicis-chanda-kochhar-when-ever-theres-a-challenge-i-see-an-opportunity>).
- [3] Chaminda ChiranJayasundara (2008), “Knowledge Management in Banking Industries: uses and opportunities” Journal of University Librarians Association of Sri Lanka, Vol.12, Pp: 68-84.
- [4] Rita Yi Man Li (2012), knowledge management, sharing and creation in developing countries banking industries, advanced in Network and Communications (ANC), Vol.1, Issue 1, Pp: 13-26.
- [5] Samir Baruah (2008), “Managing knowledge in banks: An introduction based on Experience”, CAB Calling, October-December, Pp: 30 -33.
- [6] Suvarchala M.B. (2013) “Knowledge management in commercial banks-A study of the State Bank of India” International Journal in Multidisciplinary and Academic Research (SSIJMAR), May-June, Vol.2, No.3, Pp: 1-14.
- [7] Sudharani D., Vijay Kumar P, Rama Mohana Rao K (2013), “Studies on growth and performance of Indian Commercial banks during global economic recession (IJCEM), Vol.16, Issue 6, Pp: 39-48.
- [8] Yogeswaran G and Selvaraju V.M (2011), knowledge centric human resource management practices-A comparative study between SBI and ICICI, International Journal of research in Commerce and Management, Vol.2, Issue.9, Pp:71-81.
- [9] Commens Pierce Dictionary, n.d.Abduction. [Online] Available at: <http://www.helsinki.fi/science/commens/terms/abduction.html> [Accessed March 2012].
- [10] Bank for International Settlements, 1999. Principles of the Management of Credit Risk. [Online] Available at: <http://www.bis.org/publ/bcbs54.htm> [Accessed March 2012].
- [11] Basak, S. & Shapiro, A., 2001. Value-at-Risk-Based Risk Management: Optimal Policies and Asset Prices. The Review of Financial Studies, Volume doi: 10.1093/rfs/14.2.371

#### CITE AN ARTICLE

**Priyadarshini, Yuvika , Mrs. "GROWTH AND PERFORMANCE OF DATA MINING IN BANKING INDUSTRY." *INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY* 6.7 (2017): 382-84. Web. 15 July 2017.**