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   RESULTS & DISCUSSION

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ANALYTICS CUSTOMER RELATIONSHIP MANAGEMENT PROGRAMS AND TECHNOLOGIES: ISSUES AND TRENDS IN BANKING SECTOR

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ABSTRACT
Executing Customer Relationship Management (CRM) for the financial and banking industry involves many issues, including the use of unique solutions. To be successful with CRM, financial and banking organizations must define and develop a business strategy as well as a supporting infrastructure for that strategy. The market dynamics facing financial services companies have never been more fluid and complex. In the midst of these trends is your customer. Any CRM solution invested in must be implemented with the clear goals of improving the Customer satisfaction and loyalty; Customer insight; Speed-to-market for products and service; and Customer security. All this must be done in a manner that generates measurable increases in revenue and reduces overall costs of service. May seem daunting, but one has to keep on looking for appropriate CRM solutions to have long-lasting and profitable relationships with customers. Under this study, management in a bank is data mining tasks such as dependency analysis, cluster profile analysis, concept description, deviation detection, and data visualization. The model developed here answers what the different customer segments are, who more likely to respond given offer is, which customers are the bank likely to lose, which most likely to default on credit cards is, what the risk associated with this loan applicant is. Finally, a cluster profile analysis is used for revealing the distinct characteristics of each cluster, and for modeling product propensity, which should be implemented in order to increase the sales.

KEYWORDS
CRM, Banking Technology, Baking Sector.

1. INTRODUCTION
The changes after liberalization and globalization process initiated since 1991 in India have a profound and significant impact on the operational environment of the banking sector. The challenges and pressure of the newfound environment have been intense. Today, many businesses such as banks, insurance companies, and service providers realize the importance of Customer Relationship Management (CRM) and its potential to help them retain existing ones and maximize their lifetime value. At this point, close relationship with customers will require a strong coordination between IT and marketing departments to provide a long-term retention of selected customers. This paper deals with the analytics of Customer Relationship Management in banking sector and the need for Customer Relationship Management to increase customer value by using some analytical methods in CRM applications.CRM is a sound business strategy to identify the bank's most profitable customers and prospects, and devotes time and attention to expanding account relationships customers through individualized marketing, reprising, discretionary decision-making, and customized service-all delivered the various sales channels that the bank uses.

2. ROLE OF CRM
- Customer relationship Management is vast concept in the present market. Every bank wants to maintain the relations with their customer.
- Customer's relationship Management is, when customer comes to you for a transaction or for service, you should be able to identify that customer. Know what transaction that customer problem has had in the post, and ideally make some suggestions of what you could do for that customer that may be of help.
- CRM is an intergraded framework or a business strategy and putting it into place will require a set of integrated applications that is liked with every aspect of business function and customer.
- Customer is less willing to make the compromise or trade off in productive and service quality. So the following statement is true. Customer are the only true source of revenue and hence profit.

3. TYPES OF CRM
Generally, three types of CRM are adopted by banks:
- **Operation CRM**-In this, CRM software packages are used to track and efficiently organize inbound and outbound interactions with customers including the management of customer relationships.
- **Marketing campaigns and call centers**- Operational CRM supports frontline processes in sales, marketing and customer service, automating communications and interactions with the customers.

- **Analytical CRM**–– It is about analyzing customer information to better address marketing and customer service objectives and deliver the right message to the right customer at the right time through the right channel. It involves the use of data analysis to extract knowledge for optimizing customer relationships.
- **Collaborative CRM**- These involve systems facilitating customers to perform services on their own through a variety of communication and interactive channels.

4. BENEFITS FOR CUSTOMERS

- Coordinated and professional approach to customer contact.
- Up-to-date customer information, Banks can offer more personalized services.
- Customers feel empowered if they have greater access to products and services. For example 24 hours banking.
- Targeted product and service offerings can be timed to coincide with customer events and requirements e.g., Education Loans and Tourism Loans.
- Develop better communication channels.
- Collect vital data, like customer details and order histories.
- Create detailed profiles such as customer preferences.
- Deliver instant, company-wide access to customer histories.
- Identify new selling opportunities.

4.1. BENEFITS FOR EMPLOYEES

- Employees are empowered with the information to deliver high quality service and meet customer expectations. Employees have more time to serve customers.
- Employees have higher satisfaction ratings.

4.2. BENEFITS FOR BANKS

- Managers are empowered with information that can help them manage customer relationships and make better decisions.
- Optimum use of bank resources.
- Customer satisfaction and increased loyalty.
- CRM permits businesses to leverage information from their databases to achieve customer retention and to cross-sell new products and services to existing customers
- It helps in capitalizing on short windows of opportunities in the market.
- Significant reduction in and limitation of operational costs through system automation and standardization.

5. THE CRM SOLUTION FOR FINANCE INDUSTRY IS FOCUSED TO OFFER INDUSTRIAL SOLUTIONS TO:

- Bankers
- Financial Brokers
- Insurers
- Portfolio/Wealth Managers
- Financial Manager

6. WHAT FINANCIAL INSTITUTIONS AIM TO ACHIEVE THROUGH CRM

The main aim is to offer focused customer services and to acquire new businesses simultaneously. A comprehensive customer service automation tool for financial institutes aims at offering. Holistic analysis of primary investors based on their risk profile to find opportunities for up-selling and cross-selling Lowering process expenses with better understanding of customer requirements to offer personalized portfolio services.

6.1. CUSTOMER ACQUISITION SUPPORT TO INCREASE THE CUSTOMER BASE

Improving revenue share by becoming the one-stop financial solution destination for customers. Improving compliance and audit standards to optimize resource use and minimize wastage .Reducing effects of sales force attrition by creating a unified interaction platform for the entire product line. Improving performance of franchisee by gaining better visibility across their operation process to prevent revenue leakage.

6.2. WHAT A CRM FOR FINANCIAL SECTOR OFFERS

A comprehensive CRM solution for finance industry must offer an analytical sales performance review to the user to help him offer focused and customized financial solutions to his clients.

A 360^{o} view of customer's financial performance and risk sensitivity to help create targeted offers Smart contact management solution that facilitates compiling and tracking customer interaction at one place Graphical and analytical sales performance as well as portfolio performance report Real-time market analysis report to determine performance of a particular financial tool Chat facilities within the CRM to connect to colleagues and industry experts Sales task automation for better management of appointments and meetings to optimize core competence Risk analysis through integration with key systems of the bank to manage market exposure.

7. BENEFITS OF A CRM PROCESS

- Ability to retain loyal and profitable customer and channel for rapid growth of the business project.
- Acquiring the right customers, based on known characteristics, which drives growth and increased profit margins.
- Increasing individual customer margins, while offering the right products at the right time.

8. TECHNOLOGY IN BANKING

Every day banks have to take many accurate decisions. In order to decrease the risk associated with them, they need to have reliable information. For that purpose they mostly use data warehouses, in which they store all data necessary for conducting business. For many banks, there exists serious problem of information quality. The main reason for that is the low quality of transactional systems, mainly lack of enough care about data accuracy. However since the size of information is growing, it takes more and more time for analytics to analyze them. That is why there is urgent need for good IT software that could solve those problems. 10 years ago, very popular in banks were easy to introduce, departmental systems. In the moment when the banks started growing, it often turned out that each department has different system for risk management and information about customers was not uniform. Nowadays after the period of centralized solutions, new requirements for IT systems appear, such as open architecture, which arise from the business need of introduction specialized solutions, for example for credits or selling systems, and also the need for integration of systems among given financial group. Main attention in banking sector is put to the systems which enable better usage of customer information and preparing the best offer for them. According to many specialists, the most popular are systems using Business Intelligence, such as CRM systems or decision assistance.

9. OBJECTIVES

- To study the Analytics Customer Relationship Management Programs and Technologies.
- To analyze the Issues and Trends in banking sector.

- To evaluate the performance of good CRM in banking sector.

10. METHODOLOGY

This section presents the concept of financial development, trade openness and economic growth and discusses the econometrics methodology that is employed in this papers including time series stationrity, CRM Banking sectors.

11. ISSUES AND TRENDS IN THE BANKING SECTOR

The banking sector is rife with change and uncertainty. How will changes in banking laws and regulations affect profitability? What should be the framework of stress scenarios, including specific regulatory scenarios and guidelines? What is needed to correctly measure each business line's different risk characteristics (e.g. loans, CDO securities, structured products, derivatives)? Where can we more effectively apply better customer models to reduce losses and focus growth? These questions are fraught with ambiguity and there are no easy answers. It is difficult to understand the current complex environment, much less to predict the future with any degree of confidence. Banks need more in depth information to answer these and identify additional

To effectively manage risk and drive risk-performance. Lever analytics may help turn data into information that can provide answers. Three business drivers increase the importance of analytics within the banking industry.

- Regulatory Reform – Major legislation such as Dodd-Frank, the CARD Act, FATCA (Foreign Account Tax Compliance Act) and Basel III have changed the business environment for banks. Given the focus on systemic risk, regulators are pushing banks to demonstrate better understanding of data they possess, turn data into information that supports business decisions and manage risk more effectively. Each request has major ramifications on data collection, governance and reporting. Over the next several years, regulators will finalize details in the recently passed legislation. However, banks should start transforming their business models today to comply with a radically different regulatory environment.
- Customer Profitability – Personalized offerings are expected to play a big role in attracting and the banking sector is rife with change and uncertainty. How will changes in banking laws and regulations affect profitability? What should be the framework of stress scenarios, including specific regulatory scenarios and guidelines? What is needed to correctly measure each business line's different risk (e.g. loans, CDO securities, structured products, derivatives)? Where can we more effectively apply better customer models to reduce losses and focus growth? These questions are fraught with ambiguity and there are no easy answers. It is difficult to understand the current complex environment, much less to predict the future with any degree of confidence. Banks need more in depth information to answer these and identify additional questions to effectively manage risk and drive risk-adjusted performance. Leveraging business analytics may help turn data into information that can provide these answers. Three business drivers increase the importance of analytics within the banking industry.
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11.1. CUSTOMER ANALYTICS

As soon as the economy shows signs of stabilization, banks may quickly focus on growth. While some banks are already looking at growth opportunities, they are also aware that revenues are likely to remain under significant pressure for the foreseeable future. These banks are likely to experiment with a variety of growth strategies, such as attempting to enhance customer profitability by deploying more sophisticated analytics. Some of the specific goals are to increase cross-selling opportunities, create better targeted offerings, develop more effective relationship pricing and leverage bundled pricing to create more compelling customer experiences. Indeed, with many formerly innovative banking products now often viewed by customers as commodities, many banks have shifted focus to concentrate on enriched customer service as a primary differentiator.

11.2. CUSTOMER BEHAVIOR ANALYTICS

To more effectively serve their customers and drive profitability, banks can use advanced predictive analytic techniques to parse credit card databases, mortgage data, deposit data and even social networks to find subtle cues to help analyze, categorize and anticipate customer patterns. This capability can help improve marketing and risk management practices. It can also help create products aimed at a traditionally overlooked customer segment – e.g. credit cards and loans that help first-time defaulters rebuild their credit history. Analysts can also make finer distinctions in customer behavior patterns that allow them to more quickly detect

Deviations from normal behavior – e.g., widespread shifts in credit card spending habits from upscale to value-priced retailers. This analytics capability can help banks more effectively tailor their customer service offerings and develop an enhanced customer service portfolio that serves as an effective differentiator.

11.3. INTELLIGENT CUSTOMER SEGMENTATION

In the past few years, only a few leading institutions have established programs to transition from product-to-customer-centric strategies to bolster their growth, although many have talked about it. The implementation of these strategies requires more sophisticated customer segmentation capabilities-and only few banks have them. Most retail banks can benefit from enhanced insight into current and potential customer profitably, preferences, and needs. This innovative way of segmenting customers uses multiple internal and external data sources including account, billing, demographical, and psycho graphical information. Advanced analytics solutions can provide banks with tools and templates to more effectively segment their customer base to acquire, service, cross-sell, retain and expand personal and small business relationships.

11.4. CUSTOMER RELATIONSHIP ANALYTICS

Advanced analytics solutions can help banks in their efforts to develop more effective cross-selling and up-selling methods. For example, with scenario modeling algorithms, banks can identify "the next best" banking product or service most likely to be purchased by a particular customer or segment. Banks can also leverage analytics techniques like affinity grouping to identify those products that would be the most profitable additions to a customer's existing portfolio. Many banks - especially larger, national banks, have invested heavily in marketing and the development of non-branch distribution channels i.e., ATMs, Internet banking sites, call centers, and wireless technologies. However, these multichannel marketing actions and infrastructures typically require a significant investment, as well as the development of a broad implementation strategy. Thus, implementation of multichannel marketing has led to increased customer service cost. To mitigate these costs, many banks are considering rationalizing their distribution channels and reducing marketing spend to better align with individual customer segments and payment preferences. Analytics can help in this rationalization process by providing more in-depth insight, and by providing increased visibility into the drivers of financial purchases and/or transactions by channel. This visibility can help banks design more effective distribution channel models, based on the nature of customer segments served and costs incurred. It can also help banks quantify the return on investment from marketing investments such as media buying and promotional activity and better facilitate the allocation of the marketing budget.

11.5. OPERATIONS ANALYTICS

The pressures on banks' information technology budgets will likely continue as institutions look to execute broad cost-reduction programs to preserve capital and improve profitability. CIOs have been asked not only to cut discretionary spending, but to drive additional savings out of their baseline technology operational run rates as well. One way of attaining operational savings is to make the supply-chain function more efficient. Supplier and Procurement Analytics Analytics solutions have been demonstrated to provide banks with the ability to better track back-end processing to more effectively support front-end delivery to their customers. Analytics has also been shown to provide banks with more visibility into their external-vendors' performance in order to facilitate more timely and cost-effective management and discover opportunities to achieve greater cost and process efficiency.

11.6. EXPENSE ANALYTICS

Increased regulatory and tax requirements have led many banks to find ways to reduce their compliance-related expenses. One way to reduce these expenses is to leverage analytics to more effectively analyze tax and litigation spending to help reduce known costs, and to identify hidden costs. Further, banks can reduce costs by leveraging commonalities across different areas, through enabling shared services.

11.7. WORKFORCE ANALYTICS

Banks continue to closely monitor headcount, and they understand that the current skills gap will continue to grow in critical workforce segments. Anticipating workforce demand and maintaining high retention rates while effectively recruiting new employees and properly allocating them will likely continue to be a challenge for many banks.

12. CONCLUSION

Analytics can help banks in their efforts to analyze, model, and more efficiently manage their workforce. Banks can leverage advanced analytics solutions to improve people management decisions and control workforce costs and productivity. Analytics can also be used in a wide variety of other workforce management activities, such as workforce planning to improve staffing utilization, recruitment analysis to predict the probability of success in a particular job family, emergent leader analysis to identify and train future leaders for next level management roles, and organizational alignment to “right size” with more effective management layers and control structure.

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