

Current Scenario related to Decision Making – Business Intelligence in Cooperative Banking Sector

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Abstract

The Business Intelligence and Data warehousing (BI & DW) is a proven methodology which has now getting stabilized in the large corporates. However BI is not only meant for large organizations/corporates but is needed for all organizations. Banking is one of the most important sectors in India and even in booming economy Cooperative banking is struggling in their decision making patterns¹. If proper measures are not taken even this sector might cease to exist² and hence this paper explains about the need for “DESIGNING METHODOLOGY FOR INITIATION, EVOLUTION and STABILISATION OF DECISION SUPPORT SYSTEMS using BUSINESS INTELLIGENCE in COOPERATIVE BANKING SECTOR”

Keywords: Business Intelligence, Banking, Decision Support

I. INTRODUCTION

During few visits³ to banks while doing Preliminary study of Decision Making process in Co-operative banking sector it was found that there were no structured Decision Support Systems⁴ in place when strategy was formulated. This is impacting on the decision making ability of the management and unlike past now it is

¹ Based on the findings from in person meetings over at-least 8 co-operative banks in Maharashtra

² Reference on trades which might not exist – <http://www.entrepreneur.com/article/184288>

³ Visits were done to banks from Pune, Kolhapur, Mumbai, etc. districts in Maharashtra

⁴ Based on the findings from interviews with various management personnel of Co-operative banks in Maharashtra

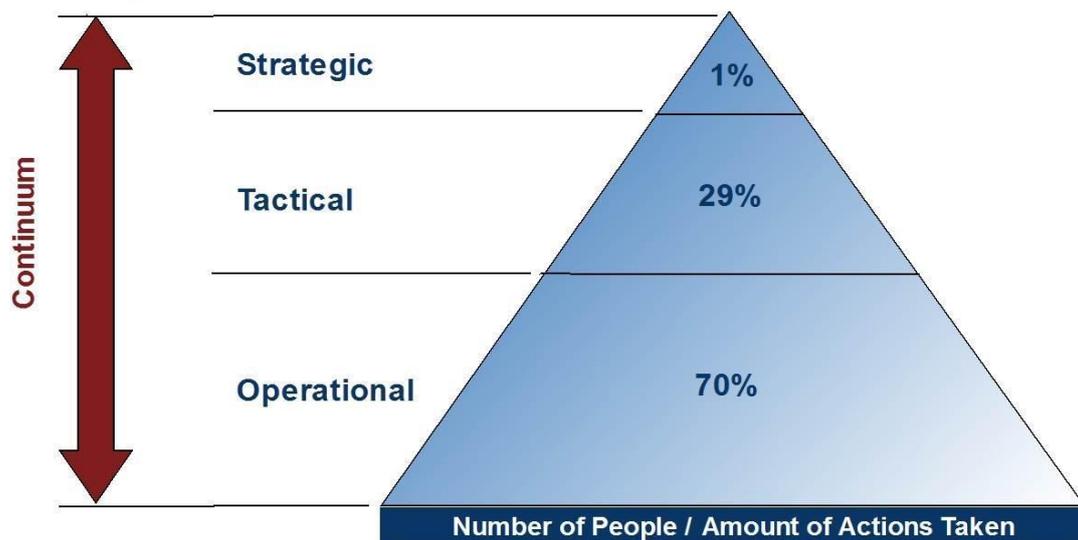
data/information/knowledge driven against the intuition and experience alone which had limited scope in globalised world.

Business Intelligence is basically taking the right decision at the right time and giving it to the right person and that too fast.

Mostly Organization is like a pyramid⁵. From Bottom up the layers can be defined as

Diagram as per reference below

Operational, Tactical and Strategic Work Levels



Banks are also no exception to this formation.

These days Reserve Bank of India (RBI) has mandated that Banks need to have Core Banking Software (CBS) Software⁶. However CBS is only solving the challenge of not having an Online Transactional system (OLTP) system. The primary reason for having OLTP applications is to record all transactions in a bank which shall help achieve statutory compliance mandated by RBI. It is observed that many small - mid scale organizations do not have any decision support system to decide strategy. The Strategic team largely takes decision using their vast experience. However using such method is like taking decision using instincts rather than taking data-driven decisions. This is where we propose that Strategic team needs Online Line Analytical processing

⁵ Leadership Styles and Organization Structural Configurations Dr. Sea-Shon Chen, Associate professor of Dahan Institute of Technology <http://www.hraljournal.com/Page/6%20Sea-Shon%20Chen.pdf>

⁶ RBI Notification - Implementation of Core Banking Solutions by UCBs <https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=7888&Mode=0>

(OLAP) which shall help take better decision for maximizing the profit and minimizing the losses.

In banking some of the areas covered are as namely - Movement in CASA, Deposits, Analysis of usage of ATMs, Reporting for RBI compliance, Non-Performing Assets Reports, Analysis of Demand & Term Loans, Priority / Weaker Section Exposure, Branch-wise Product Sales, Customer segmentation and risks, Top Depositors report, Default probability report, Report on Loan to Asset Value Ratio Inter Branch pending Transactions, Ideal cash balance for branches, DD, PO, RTGS, NEFT analysis, Earnings in Insurance Commission, PAN Card Commission, Franking, Employee productivity , etc.

The need of Business Intelligence in every banking business function as mentioned above is growing. As the volume of transactional data goes up, insights hidden into this data can be mined using business intelligence. Banks have huge volumes of transactional data gathered over a period of time. The trends and patterns of the transactions can throw up many new perspectives and foster a data driven decision making. Business Intelligence in banking can be unveiled by asking these four questions:

1. What business requirements?
2. Which challenges to solve?
3. Who champions the cause? And
4. How to do BI – the approach?

OBJECTIVES

To solve Business Questions from gathering business requirements to applying the technology, there is unwavering focus on answering business questions, not delivering the reports. Application of BI Methodology to get answers is the focus.

Answers to questions giving clarity about Why, What, Who, Where, When and How

RESEARCH METHODOLOGY

This paper follows Qualitative Case Study method and exploratory method. Insights obtained from the interviews and experiences are also used in this research paper. A combination of these is used, decision making methodology is being studied and it is mapped to banking industry. Exploring various documents helped understand the methodology of Business Intelligence process. Context based case study approach is helpful in studying Why and How in different scenarios decision is taken.

Hence a combination of exploratory and case study method was used for this paper.

SCOPE

This paper focuses on the methodology used in decision making. It also studies the overall decision making process in Co-operative Banking Sector in Maharashtra

state in India. The research paper focuses on the identifying the Gap in decision making process.

DISCUSSIONS

While exploring the existence of decision support systems in Cooperative sector it was found that primitive method of analysis were in use. Primarily documents were prepared just before Board of Directors (BOD) meetings. This is no doubt important but the advantage from daily analysis is not achieved when only statutory reports are prepared.

In Cooperative Banks it was observed that this sector exists because of the high banking knowledge of few senior executives and mainly they have to take difficult calls using their experience and instincts. It was felt necessary that this primitive decision making process might hamper the organization to get into losses or even at times ending up into losing licenses giving by RBI on stringent guidelines.

CASES

Let us take few business scenarios in cooperative banks which shall get immense help because of Decision Support Systems

Bank & Area of Analysis	Facts	Observations	Challenges for the Management
Cooperative bank in Southern Maharashtra - Deposits with a focus on Term Deposits	Year on year a phenomenal growth could be observed at a bank level. An exercise of doing further analysis was undertaken with the help of BI-DW techniques. A very unique trend was observed in the branches located in Kolhapur Region. The region, being a sugar belt, saw an abnormal rise in the term deposits around October-November every year. The farmers do get payments from sugar factories and was the main reason behind the said abnormal rise. On further analysis, the following was observed – Bulk Deposits were significantly higher than Normal and Abnormal deposits Bulk Deposits are those which are high value deposits but	Tried to ascertain reasons behind sudden withdrawals from so called ‘abnormal deposits’. The customers used to withdraw their deposits, majorly, for marriages. The region under consideration was very sensitive about the spending on marriages and it was a question of pride for most of the depositors. While there was no control on the withdrawals of such deposits from bank’s perspective, it started impacting its Asset Liability Management (ALM). The management was made aware of the fact that funds coming from such ‘abnormal deposits’ cannot be used for Long Term Lending to which the management agreed.	To continue/dis-continue accepting such deposits If accepted, how to reduce costs to the Bank What are the options available with the Bank to maximise its income on such deposits – lending v/s investment

	<p>generally have a short life. Abnormal Deposits are those which made by farmers out of their income from sugarcane cultivation as explained above. Normal Deposits are those which are made by large number of customers with small/low ticket size but have a medium/long life.</p>		
<p>Co-operative bank in Pune Business Zone - Loans with a focus on Cash Credit Accounts</p>	<p>The branch that was selected for analysis was a leader in lending in the form of Cash Credit facilities. The branch was based out in Market Yard area and as such was very busy serving its CC customers through-out. A comparative analysis of income generated by the CC accounts vis-à-vis average utilization CC limits. The average lending rate during the period under analysis was 14% across all accounts. Surprisingly, the average return on assets (CC accounts) worked out to far below than the lending rate. Contribution of CC borrowers in total Loan Portfolio (Number) – 50% approx. Contribution of CC borrowers in total Loan Portfolio (Amount) – 10 % approx. Average Return on CC Accounts (Avg. PLR 14%) – 9% approx.</p>	<p>A close analysis of CC accounts revealed that large amounts were being withdrawn by the borrowers in the morning at the start of the business. Towards the end of the day, the same borrowers used to deposit almost the same amount withdrawn by them in the morning. As such, although the entire amount was used by the borrowers through-out the day there was no interest charged on the same as the amount was returned before the ‘system day end’. The system charges interest on the day-end balance and since there was ‘technically’ no amount used by the borrowers, interest charging mechanism failed.</p>	<p>Should bank continue to market its CC product aggressively in & around the said branch</p> <p>Should there be any charge like Cash Handling fees to generate income on the funds</p> <p>Measure impact of high cash balances at the branch with reference to CRR, ALM, safety etc.</p>
<p>Pune based Co-op Bank Ltd – Cash Management</p>	<p>There was a continuous remark in the Audit Reports submitted by Concurrent Auditors that the branches are retaining higher cash balances than the prescribed limits. The retention limits were fixed based on their NDTL with due consideration of CCOD accounts. The said limits were fixed a few years back without any revision thereafter.</p>	<p>Calculation of NDTL for individual branches on day-to-day basis for past 12 months showed a great amount of deviation than the one used for calculation of retention limits by the bank. It was further observed that the amount of NDTL was, generally, on a higher side in the branches where number of salary accounts was high. A behavioural pattern was seen in cash withdrawals from savings accounts in the said salary</p>	<p>How to address request for abnormal withdrawals in the latter part of the month</p> <p>Will more ATM centres address the problem mentioned above</p> <p>Can it engage an efficient Cash Management</p>

		<p>accounts. A good amount of money was being withdrawn on salary getting credited in the account and quantum of withdrawal went on reducing towards the month end. This particular observation ignited a thought of having 'Floating Retention Limit' for a given branch even during the month. Keep higher amounts at the beginning of the month and go on reducing the same till the end of the month, replenish the limit at the start of the month and continue the same cycle. The excess money retained by the branches could be remitted to the Treasury Department, Head Office so as earn some income on the same.</p>	Service Agency
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After going through the need and doing some analysis some inference was made which resulted into strategic decision making.

CONCLUSIONS

Based on some of the cases above it was felt necessary that research needs to be conducted to designing methodology for initiation, evolution and stabilisation of decision support systems using business intelligence in cooperative banking sector

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REFERENCES

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