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# SIX SIGMA IN BANKING

## A CASE STUDY OF LOAN PROCESSING

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## Introduction

Six Sigma is world-wide renowned quality improvement methodology that mainly works on removing defects from the products, services and the processes across the sectors.

It was invented in 1980's at Motorola company. In its initial application, Six Sigma was limited to Manufacturing & Production industries however with its increasing popularity, it spread to all other sectors.

Today, Six Sigma is considered one of the prominent methods for Quality Management and being used by over 90% of Fortune 500 companies. Almost all National and Multi-National companies use Six Sigma in some or the other way.

Six Sigma has 4 key levels of expertise identified as-

- Six Sigma Yellow Belt
- Six Sigma Green Belt
- Six Sigma Black Belt
- Six Sigma Master Black Belt

Every level of expertise has its own roles & responsibilities in Six Sigma Project Implementation and generally lead by a Master Black Belt.

When integrated with Lean, which is, in simple words, a waste removal method, Six Sigma becomes Lean Six Sigma.

### **e-Six Sigma** ([www.esixsigma.in](http://www.esixsigma.in))

e-Six Sigma is a cloud-based Six Sigma Training & Certification Platform accredited by 'Council for Six Sigma Certification (USA)'. CSSC operates in over 165 countries across the world.

It has won a National Award for 'Best Online Six Sigma Training & Certification Platform in India 2017' by India Education Awards.

e-Six Sigma is being loved for its unique value of providing 'practical knowledge' through AWYL i.e. 'Apply What You Learn' activities which are meant to free your hands on the key topics being taught in the chapter (the curriculum for Six Sigma Green Belt is divided into 14 distinct chapters).

It is a brand of sAvh Quality Solutions, a sister concern of sAvh Technologies Pvt Ltd, an ISO 9001-2008 certified company based in Pune. sAvh is a venture by IIM-Alumnus & Ex-Infosys Employee.

sAvh has trained over 1800 students and professionals for Six Sigma Training.

## Six Sigma and Banking

Every business has functions that are less efficient than desirable, driving up costs and resulting in missed opportunities.

Operating profits in the banking industry vary a lot by the slightest of the changes in the operating efficiency percentages. This is because of the obvious reason that the scale of operations is huge. Banks thus should strive to keep the operating costs at the minimum by increasing efficiency in their processes. All the different processes have some costs which are common to all. Some costs are process specific.

One methodology or approach which can be used to reduce cost is Lean Six Sigma. Once the processes are made to filter through this methodology, there is a significant increase in the operational efficiency.

Using Six Sigma as a basis for re-engineering banking processes enables banks to move from being at full capacity to being at optimal productivity, which is by far the more profitable position. Some experts, in fact, say banks report these efforts have rendered savings of between 20% and 40%, and sometimes higher.

Lean methodology helps in getting rid of waste derived out of non-necessary analysis. Six sigma approach helps in getting rid of variations in set processes. Combination of lean methodology and six sigma approach is Lean Six Sigma and it focuses on reducing the inefficiencies by reducing redundancies, errors, underutilized resources and unnecessary approvals. In the present scenario of cut throat competition in the banking industry, efficiency is the key. Banks which are not efficient have a higher risk of facing financial crunch and being left behind in the race to the top.

SunTrust Bank, Citigroup and JPMorgan Chase & Co. are few examples of initial Six Sigma success in banks. JPMorgan Chase & Co is the second largest bank in the US. With Six Sigma, it has generated wonderful results through expense reduction, revenue increase and enhanced customer satisfaction.

American Express began with Six Sigma in 1998. It has benefited with billions of dollars of benefits since then. Bank of America started with Six Sigma in 2001 and has announced huge savings through increased savings, increased revenue and enhanced customer satisfaction.

Amongst Indian Banks, ICICI, HDFC, AXIS, etc have started using Six Sigma tools & technique to increase their operative & overall efficiencies by improving varied processes.

## Loan Processing and NPL

Loan is one of the core products & prominent source of revenues for any bank and thus the processing of Loans must be carried with high efficiency and productivity, which is often turned out to be problem, especially for the past few years.

NPL i.e. Non-Performing Loans are the loans in jeopardy i.e. the borrower is not making any interest payments or repaying any principal amount.

Generally, NPL can be an output of defects in 'Credit Evaluation Process'. It is a process of calculating the ability and willingness of a borrower to honour its financial obligations. The calculations is generally being done using a number of financial tools

Every bank has its own method of evaluation aligned with the government norms. A loan is approved as per the Credit Score of an individual or a business.

One of the techniques used is- Five C's of Credit where the banks gauge the creditworthiness of the potential borrowers. The system weighs five characteristics of the borrower and conditions of the loan, attempting to estimate the chance of default. The five C's of credit are character, capacity, capital, collateral and conditions.

Also, depending upon the loan type, the loan process has different phases. For an instance, Mortgage Loan Process has 6 phases as- Pre-Approval, House Shopping, Mortgage Application, Loan Processing, Under-writing and Closure.

Any loop-hole or error in the evaluation process can lead it to be turned out as NPL. Higher the NPLs, Lower is the Bank's performance. The defects reduce the efficiency of the banks.

Six Sigma helps to identify the potential threats for a loan process using DMAIC methodology that stands for- Define-Measure-Analyze-Improve-Control.

To get rid of the inefficiencies banks must realize the presence of inefficiencies in loan processing. The time taken for the processing of each loan should be recorded and compared with every next loan processed. If the dispersion in time taken for every loan processed is on a higher side, then it is a clear sign that there are inefficiencies. The primary reason for this dispersion in time taken for every loan processed is, not following a set process. The loan processing can be defined and set using Six Sigma to ensure minimum dispersion and maximum efficiency.

Employee leaves, client documentation delays or a particular period in the year being busy affect loan processing. These instances also indicate that there are inefficiencies. With the implementation of lean six sigma all these delaying factors are taken care of. This involves pooling in additional resources, and reducing unnecessary documentation. Collecting only relevant information will help to make documentation easier and faster. Moreover, it will be convenient for the prospective clients as well. Cross functional training should be done to make additional resources available for loan processing. This will avoid the delays caused due to excessive load on the resources allocated to loan processing.

Time taken for every loan processed should be in a direct correlation to the complexity and risk involved. The riskiest and the most complex of the loans should take the maximum time. If it is in correlation to the size of the loan instead, it is a clear indication of the presence of inefficiencies in loan processing. Lean Six Sigma sets and defines the loan processing so that the time taken does not increase with the size of the credit.

One of the biggest issues with loan processing is the practice of treating all loans the same. Better aligning the effort with the risk inherent to the loan is a key solution. By not treating all loans the same, or according to size versus risk, other common process issues will be cured. Streamlining processes and correlating risk and effort can yield as much as 25% savings in processing time and costs.

Poor performance of loan processing of a particular bank as compared to its peers is also an evident indication of the presence of inefficiencies. Implementation of lean six sigma methodology in loan processing commands a better efficiency. Overall it results in reduced cost and time. All these call for an undeniable place among the tops in the industry.

## **Application of Six Sigma in Banking**

Below are some of the areas where Six Sigma can be effectively applied driving results:

### **Loan Process:**

- To reduce a Cycle Time to Process a Loan Application
- To identify requirement gaps & Streamline the Credit Evaluation System
- To improve Productivity of Loan Processing Agents
- To reduce NPL from 15% to 5% in one year (Example)

### **Account Opening:**

- To reduce Cycle Time for Account Opening Process
- To reduce re-work in processing account opening applications

### **Retail Banking Services:**

- To improve Accuracy, Timelines and Completeness of Customer Communication
- To improve Customer Satisfaction Level
- To increase Market Share of a specific product in a certain geographical region
- To increase number of customers by driving awareness campaign for new product

These are few examples of Six Sigma Application in Banking. One can identify more problems/ issues seeking improvement.

## Training & Mentoring by e-Six Sigma

e-Six Sigma offers Six Sigma Training & Certification Programs accredited by 'Council for Six Sigma Certification (USA)'. It is one of the renowned Accreditation Providers across the world that operates in over 165 countries.

e-Six Sigma is a venture by IIM-Alumnus & Ex-Infosys Employee that won a National Award in Feb 2017 by India Education Awards.

It provides state-of-the-art Virtual Infrastructure and Curriculum to learn Six Sigma at your convenience & pace to earn Globally Trusted Certification with life-time validity and Cross-Industry Applicability.

The main reason why our learners chose 'e-Six Sigma' over others, is that, we offer Practical Exposure through our Mandatory AWYL i.e. Apply What You Learn Activities and use of Real-life Examples for easy understanding.

With an extensive knowledge & experience of almost a decade in Training & Consulting, we partner with Academic Institutes, Corporates, Government Bodies & Individuals to gratify their respective Goals by empowering the way they perform.

You can learn more about its Training & Mentoring Programs at- [www.eSixSigma.in](http://www.eSixSigma.in).

For any queries, you can call on +91 866 911 32 99 or write to [info@esixsigma.in](mailto:info@esixsigma.in).

