**Case Study Report Template**

* The following template provides guidelines for preparing a Lean Six Sigma project report. Your report should be the same in organization and contain the same headings and subheadings. The length of each section will vary based on your findings and writing style.
* The information in your report should follow the DMAIC Six-Sigma Problem Solving Methodology. This includes a description of the project, key points in the problem-solving process, and detailed support for your conclusions and any recommendations. **The report should be at least 4 pages.**
* Please use the headings in this report template in your written report. In addition, some general guidelines for grammar and format are provided for reference.
* **Remove all red text from the final report submitted**
* I recognize some information contained in this template is repetitive across sections. However, since different audiences will read your report to various degrees of depth, we believe it is essential to repeat certain information. Ultimately, we want you to produce a high quality, professionally-presented report that has sufficient detail. Do not copy and paste the diagrams and plots from the case study into the report. Discuss the tools but do not include them in the report.

**STUDENT NAME: NOAH HENDRICKS DATE: 4/26/2021**

**CASE STUDY TITLE: INDIA-BASED LIFE INSURER IMPROVES CUSTOMER RETENTION THROUGH SIX SIGMA, QUALITY TOOLS**

**EXECUTIVE SUMMARY**

The India-based life insurance company, Max Life, is experiencing a loss of revenue due to clients not renewing their policy. The insurance agents are too focused on gaining new customers instead of renewing the policy with returning clients. Therefore, the company is losing possible revenue.

Max Life is failing to gain millions of dollars each year because customers are not renewing their life insurance. The insurance agents are too focused on gaining new customers instead of renewing the policy with returning clients. The leaders at Max Life initiated an improvement project that targeted their lapse recovery and called it Project Unnati. Project Unnati began in early October 2010. Max Life identified more than 1.5 million individuals whose policies had lapsed, and thus were at risk of being lost as customers. The project team had the goal of increasing the collection rate from .90% to 1.50%.

The team used a Pareto chart to gain a focus on where the team should make improvements.

Once the focus on lapse recovery was identified, they began to use a SIPOC diagram, fishbone diagram, cause and effect matrix, series of tables, project charter, and a critical to quality tree to assess and solve the problem. The team used data from a course of three months that helped identify the root causes of clients not renewing their policy. The root causes were brainstormed in a fishbone diagram and then were narrowed down into a cause and effect matrix which identified 7 main root causes. The main causes consisted of premium amount, single and multiple policy, agent type, policy tenure, diversified geography, disposition codes, and low agent engagement.

Next, the team produced possible solutions to the causes. The critical to quality tree tested the 23 possible solutions by rating the solution 1-10 in certain selections of criteria. The team was able to narrow the solutions down to 15. The team then created a table that explained the purpose of each solution and how it would directly solve the cause. To solve the premium cause, the company should send complete lapsed data to authorities, send text messages to the client, and send their data to the agents. To solve the agent type cause, the company should provide agents with certifications, host contests, have a performance board, and host engagement programs. Also, there are solutions generated for the remaining 5 root causes. The solutions mostly targeted the revision of scripts, initiated more contests among the insurance agents, have better communication between the company and its clients, and encourage more engagement from the agent as well as the policyholder. Max Life should begin making these modifications and additions to their new procedure and process of renewal.

All in all, the project team made a big impact for Max Life Insurance company by improving the rate from .90% to 2.54%. Max Life also broke its own records by generating more than $8.6 million in revenue via Project Unnati.

**1.0 IMPROVEMENT OPPORTUNITY: DEFINE PHASE**

The India-based life insurance company, Max Life, is experiencing a loss of revenue because of customers not renewing their policy with the company. Max Life is failing to gain millions of dollars each year because customers are not renewing their life insurance. The agents of Max Life became too invested in attracting new customers instead of keeping old ones. The company leaders initiated a year-long project to identify why customers were not renewing, and how to regain their business.

**1.1 Problem Statement/Discussion of the process being examined**

The India-based life insurance company, Max Life, is experiencing a loss of revenue due to clients not renewing their policy. The insurance agents are too focused on gaining new customers instead of renewing the policy with returning clients. Therefore, the company is losing possible revenue.

The project team used factors to identify the areas that needed improvement. The team used customer and distributor satisfaction survey data and Max Life’s six strategic pillars. The Pillars listed the goals and possible areas of improvement. The quality tools that helped produce data and possible outcomes were SIPOC, process mapping, SWOT analysis, critical to quality trees (CTQ), and a pareto analysis. Before starting the project, the team used the pareto analysis to gain a focus. They identified that lapse recovery would give the company the best possible improvement for the project. The team leaders decided to label this focus and goal Project Unnati. The team then decided they need to focus on the pillar, “Improve persistency, because they connect the pillar with customer retention.

The potential performance issues are categorized as the potential stakeholders who could be affected by changes made to improve customer retention. The stakeholders that could be affected include the Executive committee, renewals, distribution partners, policyholders, quality and business excellence. To avoid performance issues, the project participants used an impact matrix to rate the ramifications experienced.

**1.2 Identification of Target Performance Levels or Project Goals**

The insurance company was retaining less than 1% of all lapsed policyholders prior to the project. The project took a year long. The team focused on regaining their customers business and continuing to renew policies. The team created a project charter that outlined their goal of increasing the average collection rate of active agents from .90 % to 1.50%. In 2008, renewals made up 45% of annual revenues. By 2011, renewals made up 73% of annual revenues. The Max Life insurance company was only retaining 70 out of every 100 customers and they strive for 100 renewals out of every 100 customers.

**1.3 Identification of key metrics used to evaluate the success of Case Study project**

The team needs to consider their data in the metrics of count, percentages, renewals, and cumulative averages. The team used a tool, critical to quality trees (CTQ), to produce helpful data. In this table, the time, cost, count, and Solution Selection Priority Number (SSPN) were the metrics that helped to team test solutions. The CTQ tool used data collected over three months.

**2.0 CURRENT STATE OF THE PROCESS: MEASURE PHASE**

**2.1 Current Process Performance Level**

In the measure phase, the team wanted to identify the potential area of struggle so they could have a direction to take while completing the improvement project for the insurance company. The team used a Pareto chart to identify the project’s focus. The team used SIPOC to list and understand the details within the entire process flow. This data was collected over a time period of 3 months.

* 1. **Quality Tools Used To Assess Current State Process Performance**

To assess the current performance level, the team used the pareto analysis, which they called Project Unnati, and considered all of the potential struggle areas. Furthermore, these areas included lapse recovery, E2E TAT, mission clear, streamlining POS, GO input quality, service to sales, employee engagement, axis line, quality of resolution, surrender retention, and other. Each potential project was measured in count, percentage and cumulative percentage.

The project team used SIPOC (suppliers, inputs, processes, outputs, and customers), a top-down chart, and a functional deployment chart to understand the process flow. These tools were effective in displaying the insurance company’s process and its components.

The team wanted to identify the possible stakeholders who would be affected by the changes made after the project. So, the team created a chart that listed the possible stakeholders including executive committee, policyholder, and distribution partners.

**2.2 Results of the Measure Phase:**

The results of SIPOC identified the suppliers, customers, input, output, and involvement of cross-functional units. The Pareto analysis chart let the team know that they should use lapse recovery as their focus on improving. The team identified lapse recovery as having the greatest impact towards the problem. The analysis chart showed that lapse recovery had a 71-point impact.

**3.0 ANALYZE PHASE**

**3.1 Quality Tools Used to find the Root Cause:**

The team used a Six Sigma process improvement method to identify the root causes. Using a Fishbone (cause and effect) diagram, the team brainstormed 57 possible root causes for high lapse data. The potential root causes included data quality, low agent engagement, poor incentives, and service issues. The data was collected from a sample size of 500 customers. Then the project team used quality tools like a Pareto chart, a fishbone diagram, and a cause and effect matrix to narrow down the root causes. With these root causes identified, the team was able to generate 23 possible solutions.

The team used a fishbone diagram. The fishbone diagram was used as a brainstorming tool that generated the possible 57 root causes. The root causes were then categorized into five subheadings including policy holder data, business partner, CRE, people, and process along with their relating issues. The information in the diagram were phrases and words that related to the insurance renewal process and its components with a resulting effect of low collection.

The team then used a cause and effect matrix which narrowed down the root causes to seven main ones. The team used this tool by pairing down the lengthy list to seven causes. The seven root causes included premium amount, single and multiple policy, diversified geography, agent type, low agent engagement, policy tenure, and disposition codes. Finally, through the use of brainstorming and benchmarking, the team had many site visitations within the industry to grasp the result of 23 solutions.

**3.2 Results of the Analyze Phase**

After the team found 57 possible root causes for the high-lapse data, they wanted a narrower focus. So, the team used their tools and found seven final root causes. Again, the final root causes were premium amount, diversified geography, policy tenure, single and multiple policy, agent type, disposition codes, and low agent engagement. Through the techniques of brainstorming and benchmarking, the team found 23 possible solutions. To test these solutions, they used CTQ. The CTQ would be able to produce the necessary solutions.

1. **IMPROVE PHASE**
   1. **Quality Tools Used To Find The Solution**

In the improve phase, the team used a CTQ tool which is a critical to quality tree. The tool is a way that the team can test possible solutions and evaluate if they meet their criteria. The team already produced 23 possible solutions but now it was time to test which solution is best. The tool had four selection criteria that each solution was going to be measured in which included CTQ impact (mandatory), cost impact (mandatory), time (optional), and ease (optional). The CTQ tool also tracked ORG goal and SSPN for each final solution as well, so scores that were higher than a 550 could be selected for implementation. The team scored each solution from 1-10 for each criteria. If a solution failed to meet a mandatory criteria, it was immediately discarded. Moreover, the team concluded 15 final solutions.

The team then used a different table to explain each of the final solutions in correspondence to the cause. The table labeled the root cause, the solution, and gave a brief explanation of the solution. For example, solution 6.5 (agent engagement program) led to the creation of the agent engagement drive, “Get Your Customers Back to Life.” Throughout the drive, agents were encouraged to revive their existing customer-lapsed base. All in all, this table thoroughly described each final solution to its’ cause.

Next, the team created another table to store data for their stakeholder resistance action plan. This table held the following for their five categorized stakeholders (Executive committee, Head-renewals and retention, Distribution partners, Quality and business excellence, and Policyholders): type of stakeholder, resistance reason, action taken, and why that action was taken. To help remedy the solution, the met with distributers and created a value stream map of their entire process to eliminate or combine 36 percent of their work steps. All in all, it was a win-win situation, for the partners agreed to the recommendations with no additional costs.

Finally, the team constructed a table filled with Project Unnati’s results that included only positive improvements. This table stored corresponding data for each particular tangible benefit including project CTQ, revenue enhancement, call quality score, reduction in cost per policy, and survey scores. These tangible benefits were measured by their correlating metrics, baseline, and achieved data results. The team surpassed expectations by improving the rate from 0.90 percent to 2.54 percent. Furthermore, Max Life Insurance broke its own records by generating more than 8.6 million dollars in revenue. Also, they became the best in industry with a conservation ratio of 84 percent.

* 1. **Results of the Improve Phase**

The team observed the CTQ table and concluded 15 final solutions. The solutions that scored higher than 550 on the Solution Selection Priority Number scale were selected for implementation.

The team was able to generate 15 final solutions that directly corrected the seven root causes. The team created a table that explained the purpose of each solution for improvement. For example, to solve the root cause of premium, the company should send complete lapsed data to MDRT. To solve the root cause of agent type, the company should create contests and other agent engagement programs. To solve the root cause of disposition codes, the company should have their scripts revision. These are just come examples of the final solutions. Each identified root cause has at least 2 solutions that can be used as alternative solutions.

The results of the Improve phase included Max Life Insurance achieving all of their internal targets. Project Unnati generated more than $8.6 million, increased customer satisfaction score from 46 to 51, won multiple accolades including the Project of the Year Award in 2012, received national recognition, and won the League of Honor Award.

**4.3 Alternative Solutions Considered Recommended Solution**

For alternative solutions, the company wanted to consider the impact that stakeholders would have during this change. The project team and the company leaders anticipated resistance of change from stakeholders. To minimize this resistance, the project team created a table that included solutions for each stakeholder and possible reasons for resistance. For example, the project team created a value stream map of their entire process to eliminate or combine 365 of their work steps. By minimizing the work steps, the stakeholders found the transition of change a lot easier. Some other alternative solutions included team engagement and building exercises, communication plan, and calling strategies.

**5.0 MONITORING AND CONTROL: THE CONTROL PHASE**

The project team decided to produce methods of control that the insurance company should add to their procedures and their insurance agents should follow. One method for the insurance company is periodic meetings where the agents share achievements of renewing customers. Another method is the company will have steering committee reviews and tall gate reviews which will keep the agents engaged. All agents should have a better communication plan with their policyholders to remain connected with their customers. As of December 2021, more than a year after the improvement project ended, Max Life maintained a high collection percentage of 2.14%. All in all, Max Life Insurance now takes a proactive approach and engagement with the customer by always meeting their current customer’s expectations rather than making a prioritized effort of selling to a prospective customer.

**6.0 SUMMARY/CONCLUSION/RECOMMENDATIONS**

The life insurance company, Max Life, was experiencing a loss of possible revenue. Their existing policyholders were not renewing their policy, which is a loss of revenue. The company leaders decided to initiate an improvement project. The project had a huge focus on lapse recovery and identifying the root causes of clients not renewing their policy. The team narrowed down all of the potential causes to just seven main causes. Then the team generated all possible solutions. In essence, the project team used CTQ tool to find the best 15 solutions that should be included in the new insurance company procedures.

The 15 solutions directly corrected the seven main root causes. The team created a table to explain each solution and how the solution will be added into the company’s procedures and process. The solutions targeted agent’s communication and engagement skills with their clients. Also, the solutions created meetings and conferences that shared achievements of an agent’s success in renewal. The solutions also gave prioritization regarding the policies of renewal for premium members. These solutions increased the revenue for returning clients. Also, the solutions created a better and more convenient way of the renewing process. The agents and company had a better system of communication and engagement. The team surpassed the expectations for improvement on the Max Life Insurance company renewal revenue by improving the rate from .90% to 2.54%. Max Life generated more than 8.6 million dollars in revenue and won may national awards while also becoming the best in the industry with a conservation ratio of 84%. Overall, the project team for Max Life Insurance Co. Ltd. was a major success.