

# IMPROVING BANK CALL CENTER OPERATIONS

Project on the Lean Six Sigma Green Belt course

# Contents

| ntroduction                  | 2 |
|------------------------------|---|
|                              |   |
| Data tables                  | 4 |
|                              |   |
| Exercises and time estimates | 6 |

## Introduction

First Wealth Bank had outsourced its customer interactive services operations to Customer Calling Services (CCS) about 5 years ago. First Wealth Bank guaranteed minimum volume of 300,000 calls per year with the rate of \$4.50 USD. Over the last two years, the service performance of CCS has deteriorated to such an extent that First Wealth Bank is considering cancelling the contract. CCS has been collecting the data on the duration the representatives were available to answer the calls and the hold time. The data for the last few months is shown in Table 1. The performance measures that were of interest to First Wealth Bank were:

- 1. Provide first call resolution to at least 75% of calls
- 2. Resolve minimum 90% of inquiries within 5 days

Furthermore, First Wealth Bank was monitoring the data on number of people who were unable to get answers from CCS.

The Quality Assurance (QA) department conducts regular inspections of recorded conversations between the callers and representatives. A rating based on the scale of 1-5 is assigned to the calls based on friendliness, accuracy, and suitable advice given to the callers. The table below shows the description of ratings:

| Ratings | Definition        |  |  |  |
|---------|-------------------|--|--|--|
| 1       | Perfect response  |  |  |  |
| 2       | Good response     |  |  |  |
| 3       | Average response  |  |  |  |
| 4       | Poor response     |  |  |  |
| 5       | Very bad response |  |  |  |

It has been observed that the quality check results of the two QA analysts, John and Miranda, vary sometimes. Therefore data for 20 voice recordings was

collected to verify the repeatability and reproducibility of QA activities. Table 2 shows the results of their assessments for each voice recording.

A couple of other problems with CCS are their inability to hold on to the experienced workforce and the time it takes to hire experienced individuals. CCS decides to hire an expert on Six Sigma methodology to help them improve the call center operations and to improve the performance to a level that is acceptable to the client. CCS also wants to ensure that the Average Handle Time (AHT) is maintained during the course of this project. CCS has 6-8 months to turn around the performance of the company or potentially lose contract.

# **Data Tables**

# Table 1

| HISTORICAL BASELINE DATA (Table 1) |                |                 |      |                        |                  |       |       |  |
|------------------------------------|----------------|-----------------|------|------------------------|------------------|-------|-------|--|
| Month                              | Number of Reps | Number of Calls | AHT  | First Calls Resolution | 5 Day Resolution | FCR % | 5DR % |  |
| Jan-14                             | 20             | 22,858          | 4.17 | 16,458                 | 15,822           | 72.0% | 69.2% |  |
| Feb-14                             | 20             | 28,963          | 3.40 | 22,910                 | 22,092           | 79.1% | 76.3% |  |
| Mar-14                             | 20             | 23,070          | 4.91 | 15,826                 | 16,697           | 68.6% | 72.4% |  |
| Apr-14                             | 19             | 29,933          | 2.46 | 26,375                 | 21,454           | 88.1% | 71.7% |  |
| May-14                             | 19             | 26,633          | 4.49 | 15,554                 | 19,663           | 58.4% | 73.8% |  |
| Jun-14                             | 19             | 27,638          | 3.97 | 21,266                 | 20,788           | 76.9% | 75.2% |  |
| Jul-14                             | 19             | 24,553          | 2.93 | 23,167                 | 20,136           | 94.4% | 82.0% |  |
| Aug-14                             | 20             | 29,897          | 3.27 | 19,913                 | 22,544           | 66.6% | 75.4% |  |
| Sep-14                             | 20             | 23,418          | 4.05 | 16,346                 | 18,788           | 69.8% | 80.2% |  |
| Oct-14                             | 21             | 22,901          | 3.89 | 18,756                 | 14,910           | 81.9% | 65.1% |  |
| Nov-14                             | 20             | 22,250          | 5.59 | 15,308                 | 15,301           | 68.8% | 68.8% |  |
| Dec-14                             | 20             | 27,482          | 4.02 | 16,324                 | 22,585           | 59.4% | 82.2% |  |
| Jan-15                             | 20             | 24,599          | 4.67 | 20,366                 | 17,138           | 82.8% | 69.7% |  |
| Feb-15                             | 20             | 26,413          | 3.14 | 25,281                 | 15,187           | 95.7% | 57.5% |  |
| Mar-15                             | 19             | 24,840          | 4.87 | 16,221                 | 17,691           | 65.3% | 71.2% |  |
| Apr-15                             | 19             | 27,011          | 3.43 | 17,368                 | 17,708           | 64.3% | 65.6% |  |
| May-15                             | 18             | 21,166          | 4.85 | 17,400                 | 14,749           | 82.2% | 69.7% |  |
| Jun-15                             | 18             | 28,871          | 3.62 | 26,417                 | 21,618           | 91.5% | 74.9% |  |
| Jul-15                             | 17             | 24,515          | 4.19 | 21,003                 | 19,949           | 85.7% | 81.4% |  |
| Aug-15                             | 19             | 21,244          | 3.73 | 14,573                 | 14,191           | 68.6% | 66.8% |  |
| Sep-15                             | 20             | 29,950          | 4.02 | 23,766                 | 22,833           | 79.4% | 76.2% |  |
| Oct-15                             | 20             | 21,387          | 6.08 | 14,950                 | 14,990           | 69.9% | 70.1% |  |
| Nov-15                             | 20             | 23,906          | 3.57 | 18,848                 | 19,047           | 78.8% | 79.7% |  |
| Dec-15                             | 20             | 27,199          | 4.03 | 24,115                 | 24,258           | 88.7% | 89.2% |  |

Table 2

| Table 2      |                  |              |              |                 |                 |  |  |  |  |
|--------------|------------------|--------------|--------------|-----------------|-----------------|--|--|--|--|
| Voice Sample | Master Appraiser | John Trial 1 | John Trial 2 | Miranda Trial 1 | Miranda Trial 2 |  |  |  |  |
| 1            | 3                | 3            | 2            | 3               | 3               |  |  |  |  |
| 2            | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 3            | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 4            | 4                | 4            | 3            | 4               | 4               |  |  |  |  |
| 5            | 2                | 1            | 1            | 1               | 1               |  |  |  |  |
| 6            | 5                | 5            | 4            | 5               | 5               |  |  |  |  |
| 7            | 4                | 4            | 4            | 5               | 4               |  |  |  |  |
| 8            | 3                | 3            | 2            | 3               | 3               |  |  |  |  |
| 9            | 3                | 3            | 3            | 3               | 3               |  |  |  |  |
| 10           | 4                | 4            | 5            | 4               | 4               |  |  |  |  |
| 11           | 2                | 2            | 1            | 2               | 2               |  |  |  |  |
| 12           | 3                | 3            | 3            | 3               | 3               |  |  |  |  |
| 13           | 5                | 5            | 4            | 5               | 5               |  |  |  |  |
| 14           | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 15           | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 16           | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 17           | 2                | 2            | 2            | 2               | 2               |  |  |  |  |
| 18           | 4                | 4            | 3            | 4               | 3               |  |  |  |  |
| 19           | 3                | 3            | 3            | 3               | 3               |  |  |  |  |
| 20           | 2                | 2            | 2            | 2               | 2               |  |  |  |  |

## **Exercises**

## Read case study then answer the following questions

#### **Exercise 1**

#### **Process capability Indices**

Using the data given in Table 1, determine the process capability indices for performance metric. Provide the appropriate interpretation for the process capability indices drawn, based on the available data.

- A. 'First Call Resolution'. The specification limits for the FCR are; LSL=75% and USL=100%.
- B. '5 Day Resolution'. The specification limits for the 5DR are; LSL=90% and USL=100%.

#### **Exercise 2**

- A. What kind of data is shown in Table 2? Which method would you use for measurement system analysis (MSA) to verify the repeatability and reproducibility of QA results? Conduct the appropriate MSA.
- B. Determine the potential causes why CCS fails to meet First Call Resolution targets consistently.
- C. Brainstorm and propose solutions for elimination of causes for failure to meet FCR targets.

#### **Exercise 3**

#### **FMEA**

Identify potential failure modes and their effects for the solutions proposed in Exercise 2 using learning on FMEA.

This Project is a part of your assessment. Good Luck!