Project Description – Accounts Receivable

ABC IT Services Inc.

Broad Problem Statement

The Finance department at ABC IT Services Inc. needs to improve its cash flows. The department has noticed issues in its accounts receivable (AR) operations. AR cycle time is measured as the time between completion of an order (i.e. installation of IT infrastructure, system configuration and acceptance by the client) up to the receipt of payment from the client. Firm's current average AR cycle time is 30 days. According the Finance Manager, there seems to be a high variability in the process which needs to be calculated by the Lean Six Sigma (LSS) project team of the company. Finance department also wants the LSS team to explore ways to reduce the average cycle time and process variability.

Industry Average

The typical AR cycle time in the industry is about 25 days with a standard deviation of 4 days.

Data Collection

You, as the Lean Six Sigma Team Lead, have been requested to analyze data and interpret results. You assign the task of data collection to your team which is comprised of two members who hold Lean Six Sigma Yellow Belt. As per your directions, these members focus on quantitative data and select a stratified random sample of 30 observations reflective of all geographic regions. Data obtained from this sample is given in Appendix 'A'.

Accounts Receivable Process

You focus your efforts on the qualitative aspects and arrange meetings with the stakeholders to understand the process in depth. You decide to use the lean tools to develop an understanding of the process, its pain points, bottlenecks, etc. Your discussion with various stakeholders gives you insights into the overall process as well as the tiny details of it. The input from various stakeholders during your conversations is as follows:

Amanda Sheffield – Sales Manager

"My engagement with a potential client begins with the receipt of an RFQ from them. I prepare a quote in consultation with Ronald, the Operations Manager. Ron is a busy guy and is out in the field most of the time but sales is the priority that neither of us can afford to put aside, so he delegates whatever he is doing and is kind enough to make time to help me with preparation of the quote. I then send this quote to the client along with a detailed breakdown of services to be provided and the cost of each line item. Once the client accepts the quote and places an order, I send a copy of the accepted quote to Claire, the AR Coordinator. Now, I would like to highlight that although the sale has finalized upon placement of the order by the client but we do not ask for payments until the service delivery is finalized and we have the acceptance form signed off by the client."

Ronald Ruddhaul – Operations Manager

"After an order is placed, the operations team starts working on the order and arranges for procurement of the required hardware; you know, we are a Lean organization and don't keep piles of inventory, rather we go for just-in-time delivery of materials. The hardware infrastructure is then installed at the client's location on the agreed date and the engineers complete the system configuration, have the client try the system and get the acceptance form signed by the client's IT representative. The hardware procurement, installation and acceptance process usually takes about a week but can take way longer if there are issues with the technical prowess of the client. But you shouldn't worry about variation in execution timeframe as you are concerned with the AR cycle time, right? That should begin with the completion of order, I mean the formal sign-off by the client. But you can have a chat with Claire, she can get you the details of the administrative steps in the process she deals with."

Claire Wong - AR Coordinator

"I am involved in the process right from the beginning. As soon as a client places an order, Amanda sends me a copy of the quote accepted and signed by the client. Then I receive the acceptance form from the operations team once they complete the installation at the client's location. I double check that the form is singed by the client and fulfills all regulatory requirements. I keep the form in a folder at my desk and each Friday, I file the hard copies of all the acceptance documents in the relevant geographical region's records. The Records Clerk is not available in his office after 2 pm on Fridays as he has to pick his kids from school. My desk is on the 1st floor of the office building and the record office is located at the 4th floor; it's not easy to climb so many stairs and it takes even longer to wait for the elevator due to COVID related restrictions on number of people in an elevator at a given time. So, in an extremely rare case when I am not able to file the documents before 2 pm, I keep them with me until next Friday and file them together with the forms that I receive in the coming week. After acceptance documents are filed, I obtain a signed acknowledgement from the Records Clerk. After filing this copy in my own records, I create an invoice based on the information of the accepted quote filed at the time of placement of order. Then I send the invoice to Ronald who must review it to make sure there were no changes in the services provided to the client during the installation phase. Ronald is mostly not in his office as he is working on client sites. He is able to review the invoices on every second Friday after 4:30 pm when he must be in his office to clear administrative backlog, email correspondence, performance reviews, etc. After reviewing the invoices, he sends them to the Amanda who double checks if the price on the invoice matches with the quote and that the prices have not been revised in the meantime.

After both Ronald and Amanda have signed the verification forms, I dispatch the invoice to the client via email, who sends in their payments within 7 days. I record the receipt of payment in the ledger and mark the account as 'Paid'."

Project Requirements

- Create a process map to identify each step in the current process.
- Calculate the current process variability using an appropriate measure. Does the process reflect a higher variability than that in the industry, as suggested by the Finance Manager?
- Determine if the company's average AR cycle time is statistically different from the industry average. Use a confidence level of 95%.
- Suggest process improvement measures using Lean principles if and where applicable.
- Develop a new process map reflecting changes in the process.
- Indicate the improved cycle time after the implementation of the suggested measures.

Appendix 'A'

Zone	Cycle Time (in days)	Zone	Cycle Time (in days)	Zone	Cycle Time (in days)
A	29	C	25	E	29
	33		29		30
	34		30		27
	31		29		32
	30		32		30
B	28	D	31	F	28
	29		31		31
	27		30		32
	33		31		30
	28		30		28