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### **Improving Performance through Quality Control**

*Black Belt can be of immense benefit in optimizing process performance.*

#### **Key Learnings:**

- Quality control measures like Black Belt can be of immense benefit in enhancing process performance
- Online banking was one of the first sectors to make use of Black Belt to enhance process productivity

Dot-com companies were ruling the roost during the latter half of the last decade. Any idea or concept that was linked to the ability to transact online got huge amounts as venture capital immediately. As a result, organizations took major decisions without supporting data.

Expectedly, a majority of these decisions were wrong, but in hindsight, could Six Sigma have made a positive impact? We shall now study how Black Belt operated in a dot-com transactional business and evaluated a process and process performance.

#### **Black Belt in online banking**

Black Belt had its maiden application in an online bank for a project focusing on how deposits were made. Being an online or 'virtual' bank, customers could not access any branches. As a result, deposits were mailed with the aid of the United States Postal Service (USPS). Savings due to fewer branches and tellers were enjoyed by customers as higher rates, free services and so on.

Customer focus groups and surveys indicate an average customer attaches a lot of importance to the process of depositing money. For a customer, making a deposit involves signing a check, filling a deposit slip and mailing them to the bank.

Deposits accounted for the second highest number of inquiries to the customer call center (13% of all calls). Customers were badly affected by mailing delays and long timeframes taken by banks to credit money to their account.

#### **Analyzing the process**

The bank's primary objective was to accept deposits as quickly as possible and commence the deposit and check clearing cycle. When the bank commenced its operations, it set up 'local' deposit locations around the United States. These local deposit locations accepted the deposits and Overnight Express transferred them to a central processing location daily. The local receipt and express transfer to a central location were conducted on account of the following:

1. A deposit being sent to a local location would require less time than mailing to a centralized, national location.



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2. Customer input revealed that mailing within a state or to a neighboring state would put the customers at ease. This was not so with mailing to a centralized, national location from anywhere in the United States.

### **The Project Charter**

Once the Black Belt was implemented, a project charter was developed to understand the entire process. The business case was noted down, the problem statement drafted and the scope of the project outlined. The team to handle the project was identified and put in the analysis phase. Data regarding the deposits was generated and the analysis phase yielded a stunning outcome.

The top management established a system to gather deposits locally for quick reshipment to a centralized, national location for processing. The system was based on heuristics and data generated from the activities highlighted the following shortcomings:

- The express reshipment process was not automated. Manual processes that are not practiced daily and do not have the requisite control measures are susceptible to flaws. This was particularly true in the case of local deposit locations
- Express reshipment process was normal in the case of deposits on working days. However, express reshipment did not happen on weekends. As a result, deposits arriving on Saturday were not reshipped till Monday evening.
- Certain deposit mailings to 'local' deposit locations required as much as three days on account of USPS processes. A weekend stay for the reshipment resulted in a long delay for mailed deposits to reach the bank. A deposit mailed to a 'local' deposit location might take more than five days to reach the bank.

The study also analyzed deposits dispatched to a 'local' deposit location with rapid reshipment to a national location. The rapid reshipment was done through direct mailing to a centralized, national location. The following pointers were observed in the process:

- The 'local' process functions at a 2.1 sigma level, while the centralized, national process functions at a 2.5 sigma.
- A two-sample t-test revealed a statistically significant difference between the two process means ( $p=0.0013$ ).
- The centralized, national process is more rapid (2.6 average days) than the local express reshipment process (4.6 average days).
- An analysis of focus groups revealed the deposit mailing location is not an important factor for most of the respondents.
- A benchmarking analysis of direct competitors revealed that all companies implemented a centralized, national deposit process.

### **Endpoint**



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On the basis of the above study, the top management of the business decided to alter the deposit process. It opted for a centralized, national process. The approach enabled companies to gain significant cost savings due to printing one address envelopes (instead of numerous local addresses).

Minimal overhead costs associated with processing, fewer customer inquiry calls and investigations, and a more stable process added to savings. Statistically, the approach enabled savings worth four million dollars per annum. Indeed, it was a significant benefit from a six-month Black Belt project.