

Improving the Revenue Collection Processes for the Namibian Local Authorities

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Abstract

Empirical research is necessary to test whether value stream mapping (VSM) and lean thinking concepts can generate improved solutions to enhance the revenue collection processes within the local authorities' sector in Namibia. This study analysed existing revenue collection processes at local authorities within the Oshana region, namely the Ondangwa, Ongwediva and Oshakati town councils. Value stream mapping, a well-known process improvement lean tool, was used to develop improved revenue collection procedures. By identifying bottlenecks, redesigning processes and eliminating wastes, both value-added activities and non-value-added activities have been reduced by 29,64% and 44,04%, respectively.

Problem Statement

Namibian local authorities are experiencing vast challenges of inefficient revenue collection systems which resulted in their budget deficit, as shown through their annual financial reports from the office of the Auditor-General of Namibia. For instance, in the report of the Auditor-General on the accounts of the Ondangwa town council for the financial year which ended on 30 June 2014, the average collection period of trade receivables reported was 132 days lead time, compared to the 138 days of year 2013 (Auditor-General Namibia, 2015). There are many factors that can be associated with inefficiencies in the revenue collection processes, such as account initiation, and maintenance of technical account information. Ideally, local authorities should effectively manage and process all resident accounts in order to effectively collect adequate revenue.

Significance of the study

Research in revenue collection processes will be useful to local authorities, line ministries and central government policymakers, and will assist in decision-making as far as revenue collection is concerned. The study contributes to the body of knowledge in business process re-engineering, specifically in local authorities, and other service-oriented local government and public administration processes.

Objective of the study

To optimize the revenue collection processes for the local authorities in Namibia.

Specific objectives

1. To investigate and map existing different types of revenue collection processes.
2. To evaluate specific processes for efficiency and effectiveness.
3. To apply appropriate business process improvement techniques.

Research questions

1. What is the current state of the key processes in revenue collection?
2. How is the efficiency of the revenue collection procedures and the related bylaws governing process?
3. How may the processes be redesigned and improved using business process improvement techniques?

Methods

Both quantitative and qualitative methods were used. The research involved both numerical data and theoretical analysis. A multistage sampling was preferred, where a combination of cluster and purposive sampling methods was used.

❖ Data collection instruments

Questionnaire consisted of both close and open questions as a means of primary data collection were used.

❖ Data analysis

Data was analysed using descriptive statistics. The processing time of the business process have been calculated by applying the following expression (Stadnicka & Ratnayakem, 2015).

$$T_p = \sum_{i=1}^n T_{Ai} + \sum_{j=1}^m l_p \cdot T_{ARj}$$

Where:

- T_p = Processing time
- T_{Ai} = Performing time of a certain activity or subprocess
- n = total number of activities and subprocesses
- T_{AR} = Performing time of the activity repeated or a subprocess
- l_p = number of repetitions
- m = number of loops

The process cycle efficiency (PCE) was calculated using the following expression:

$$PCE = \frac{\text{Value Added Time}}{\text{Total Lead Time}} \cdot 100\%$$

Results

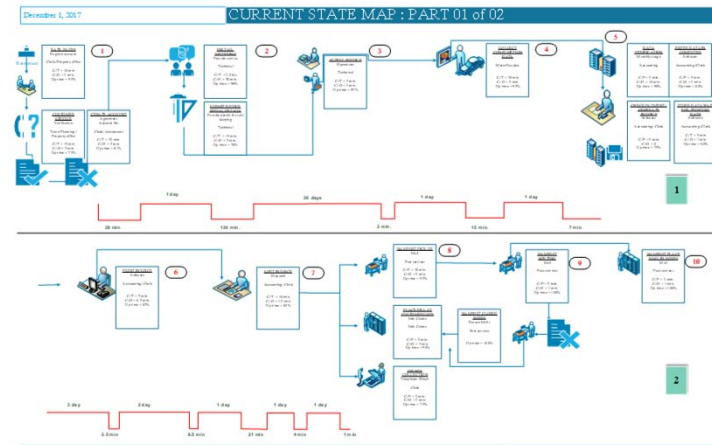


Figure 1: Current State Map

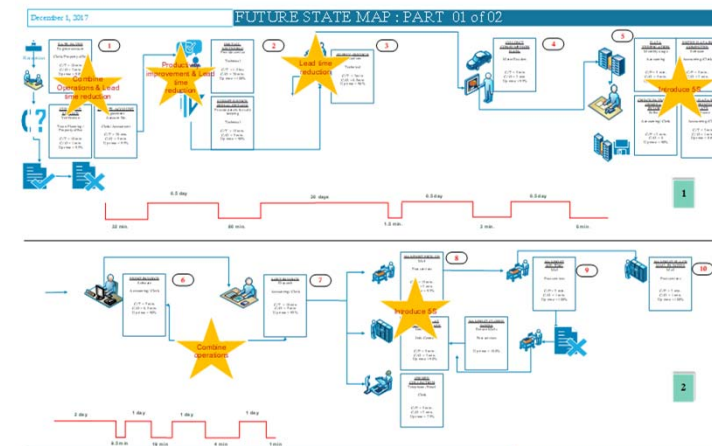


Figure 2: Future State Map

After gathering materials and studying the process flows of the revenue collection procedures, current state maps (CSM) were prepared, depicting the present events as in Figure 1. The study found that the three town councils were mutually homogenous and sharing similar revenue collection processes. The studied revenue collection processes in both town councils consisted of 19 stations of main process lines.

Process bottlenecks were identified at various stations. These were mainly caused by long waiting time, unnecessary queuing, sorting and movement.

On the basis of assessing the CSM, the researcher prepared a future state map (FSM) aimed at removing the bottleneck areas and reducing the cycle time and lead time, based on the analysis of the CSM. Figure 2 depicts the FSM derived from the CSM.

Conclusion

The outlined revenue collection processes within the Oshana region aimed at exploring and proposing a simplified approach for applying VSM in which local authorities can improve their revenue collection processes. In addition, it has shown indicators aimed at investigating the real improvements in the revenue collection processes analysis. In this research, the CSM indicated 77.2 days lead time compared to only 43.2 days for the FSM. It has been verified that the PCE has been improved. Also, both VAI and NVAI have been improved.

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