

EXECUTIVE SUMMARY

Waffle Boy is a start-up organization which produces waffle-based products such as waffle cones used with ice-cream products, waffle tubs and tartlets. The report provided an introduction to the project including background, significance of the project, methodology and limitations. The target market of the organization is large scale ice-cream manufacturers, hotels and restaurants who are using waffle tubs and tartlets to serve fruit salads and finger foods. The manufacturing facility of Waffle Boy is located in Mirihana, Nugegoda. As a small-scale organization, Waffle Boy strives to achieve manufacturing excellence through maximum utilization of scarce resources. However, it was noticed that the factory has not met its expected level of production capacity during the past few years owing to various reasons. Hence, this project is conducted to identify the real operational problem behind that and propose solutions. It is very significant for Waffle Boy to maintain its optimum level of the capacity to meet the increasing demand in the market despite the challenges of world pandemics. The author has collected both qualitative and quantitative data from the organization and industry to identify the problem and root causes. However, there were some limitations to the project mainly the inconsistencies and inadequacy of data provided by the employees.

The organization analysis and problem identification are discussed subsequently. Organization was analyzed using SWOT. Major strengths were identified as innovativeness and own production facility and knowledge of the leadership. Further, advantages of being a small-scale organization such as strong relationships with employees and government support for business developments are also identified as strengths. Major weakness is the over-dependency on the CEO for decision making. Waffle Boy has the opportunity to franchise with its innovative product range. Also, risk of outdated technology for manufacturing and high competition in the market identified as major threats. Moreover, key issues were identified with relating to the organization to arrive at the analysis of the problem. Cause and Effect Analysis (CEA) is carried out to identify the root cause of the major problem of low-capacity utilization. Accordingly low capacity utilization was identified as the main problem. Issues in layout planning, quality control, human resource management and process improvements were the areas in which main causes were identified.

Literature reviews for major areas identified under problem analysis were carried out. Accordingly, literature from 2007 to 2021 has analyzed in detail. It has covered the theoretical background of capacity utilization, Layout Planning (LP), quality control and human resource management. Similarly, the chapter extended to present the study framework illustrating the project components and the outcome. Furthermore, techniques used for the problem analysis were also discussed under this chapter.

Further, the report described the project objectives including the main project objective, sub objectives addressed under each project component. Further, this chapter included the solutions proposed by the author to address the root causes identified with the problem analysis. As such, the main project objective is to increase the capacity utilization of the waffle cone making section from 44% to 75% after 12 months of implementation. Further, it provided a link between the current situation and how the current problems are addressed through solutions under each component. Moreover, resource allocation and cost estimates for implementation of proposed solutions were enclosed in this chapter.

Findings of the project are discussed including benefit-cost analysis followed by project output and outcomes. The net incremental benefit from the project is expected as LKR 4.47 Mn with a cost benefit ratio of more than two. This shows the feasibility of solutions provided by the project. Moreover, project outputs and outcomes show the significance of the project and its solutions for Waffle Boy when achieving its broad objective of higher manufacturing capacity utilization.

Further, at the end of the report, it has presented the discussion of findings, recommendations and conclusions. Validity of the solutions were discussed under the areas of capacity improvement together with layout planning, quality control and human resource management with reference to previous studies. Further, the conclusion provides an overall summary and gains from the project by the author.