ABSTRACT

UltraMed, a small distribution company located in the United Arab Emirates, faces high operations cost due to inefficiency in methods and concepts implemented in their business. Through the use of basic Industrial Engineering techniques, UltraMed and other small businesses can succeed in reducing their operational costs through the implementation of three major concepts of Industrial Engineering: Operations Research, Database Management, and Engineering Economic Modeling.

To succeed in implementing the design, it is important to have the right data and a cohesive foundation for the design; else, the results generated by the techniques will be invalid and could cause further complications to the operations of the small business. Therefore, it is essential for the small business manager, and examiners, to first identify what elements in the business needs to be improved, and later, once the needs are identified, implement the concepts that can be beneficial in reducing their costs. The model is configurable and changeable as it provides room for managers to use any platform as long it can support the techniques used, reduce training time, and reduce additional cost derived from purchasing expensive and complicated software.

The outcome of the implementation of the model displayed a significant potential of growth – represented by the profits generated by UltraMed. The factors contributed to the increase in profits were the combination of effective utilization of the model and marketing momentum to sustain an efficient, and growing, business environment.