## Mod1slp production scheduling and control case study example

Business, Customers



The greatest challenge for many business investments is how to maximize profit through improvement of management operations. This assignment will focus on the restaurant operations management through software simulation with the main purpose of maximizing sales per hour hence high profit. The simulation is conducted during both peak and non-peak times in order to get the best analysis of the differences in variations. The analysis is also based on customer service on batch and non-batch modes of processes.

Let us look at the batch mode during peak hours. In this case, customers are programmed to enter in to the bar and later enter the restaurant in groups of eight. Each Benihana restaurant is, therefore, organized in to with a sizable bar and dining room. The simulation process showed the impact of high drinks sold, high average number of customers with revenue summary of \$1470 on the bar usage. The dining room usage showed the highest number of dinners served with the average utilization of 67%. The nightly total profit on the dining room usage is also high at \$787. The batch mode during non-peak hours showed a unusually low throughput with corresponding low revenue of \$2535 on the bar usage. The dining room usage also recorded a drastic drop on the number of dinners served which reads at 233. The average utilization of dining room also dropped to 46% with a final nightly profit of \$26 hence low throughput.

Let us now consider the non-dispatch mode at peak times. In this case, the bar usage recorded a revenue summary of \$3113 with 728 drinks sold. This shows a decrease in bar usage revenue as compared to the case of dispatch mode. The dining room usage records the number of dinners served at 198 with the corresponding profit of only \$80. This indicates poor performance of

the bar during peak time at non-batch mode. The results in non-peak times at non-batch mode also vary. In this case, the number of drinks sold stands at 363 with a revenue summary of \$2418. On the other hand, the dining room usage showed that the number of dinners served is 130 with a nightly profit summary of \$411 which shows an improvement as compared to the case of batch mode at non-peak times. Therefore in order to maximize profit according to this simulation result, the dining room usage at batch mode during peak time together with its usage at non-batch mode during the non-peak time is a better combination of the solution. The nightly profit for non-batch mode at the non-peak time was recorded to be \$411 which is higher than that of non-peak time at batch mode.

This simulation technique can also be used to analyze similar production problems like the number of customers served at enterprises such as supermarket, banks and many others at different times of the day. From my participation in this simulation, I learned that the success of a given operations management is largely dependent on the main resource which is time as well as the mode of serving customers. This is because simulation process indicated extremely high profit at peak times when batch mode is used. In addition, I have learned that software is a better way of automating business operations. This is because the software simulation process reduces the response time for tasks such as serving restaurant customers (Fritzson, 2010).

When thinking about simulation, the idea that comes to me is software engineering, and computer systems development life-cycle. It is because; software for simulating any business function can best be achieved through

system development life cycle which is a disciplined approach towards designing and implementing systems. In general, I now think of computer-based simulation as computer technique used to, concurrently, engage trainees' effective and interactive cognitive processes. Additionally, it is a technical discipline. Practical teaching methodology used to demonstrate business tasks such as stochastic or probabilistic, random and other processes (Sitzmann, 2011, Veganzones et al., 2011).

## References

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