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Professor Pendelberry

MBC 638 - Data Analysis and Decision Making

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Problem Definition Worksheet

**A. Problem statement:** My family’s local laundromat business has operated on extreme hours for almost a decade now. This is recently suspected to be a cause of employee burnout and even increased or unnecessary operational costs. Employee burnout will lead to a lower quality of work and potentially decreased customer satisfaction. We suspect that there are certain hours of operation that are less profitable than others. We need to identify these hours and eliminate them to reduce our operational costs while minimizing losses, and not losing customer satisfaction.

**B. Business impact:** By optimizing our hours of operation, we can reduce operational costs and increase profits. We believe that we can save money every month by eliminating inefficient hours. Success will be measured by tracking our operational costs. The key output is the reduction of operational costs (employee wages, electricity cost, etc.).

**C. Goals**: Our goal is to reduce our hours of operation by x hours per week while maintaining customer satisfaction. The number of hours we reduce will be dependent on the results of the analysis which has yet to be conducted. Providing a specific number is not realistic at this point.

**D. Project scope**: The first step of the process will be to analyze our sales data to identify which hours are the least profitable. The last step will be to implement a new schedule that eliminates these inefficient hours. This can be exclusive to certain days, or timeframes in which an employee is not “needed” as Laundromats can be self-sufficient for a period of time. Ex: Employee takes a one-hour break during a time frame we notice generates very little traffic. The scope of this project does not intend to have any changes in *how* our store operates and *how* we conduct customer service. But if that is a byproduct of the goal, we want to minimize it as much as possible.

**E. Team:** The process champion will be the Operations Manager, Matthew Belizaire, who will work with the store owner to analyze and implement the revised schedule.

**F. Project plan:**

**Define:** Week 1

**Measure:** Week 2 & Week 3

**Analyze:** Week 4 & Week 5

**Improve:** Week 6, Week 7, & Week 8

**Control:** Week 9 & Beyond

**G. Process map:**

Monitor customer satisfaction and operational costs

Least profitable hours still generating a “good” profit?

Analyze sales data to identify least profitable hours

Gather Sales Data (Monitor by each hour)

Communicate new schedule to staff and customers

Develop new schedule that eliminates inefficient hours

Start

YES

NO

End process and continue business as usual