Reducing Waste and Improving Operational Efficiency at Discovery Space

Overview
Due to the rapid expansion of Discovery Space, the manual processes that were used in the early days of operations are slow and do not collect all the necessary data. Semi-automated processes were needed, but with Discovery Space being a non-profit, it was unable to dedicate large funds to purchasing and maintaining licenses for organizational software. Therefore, semi-automated processes were limited to using free software packages or ones that the company already possessed like Excel, doodle poll, Wufoo, and Google Calendar. These processes were required to collect data on events, customers, material handling and reservations for more data mining and analysing for profit and marketing purposes.

Objectives
The key objectives of the Discovery Space project have been accomplished. A Finance Model has been created that allows for the program manager to input events and keep track of profit. This model doubles as a reminder for the amount of staff that is needed for an event and can be imported to Google Calendar to book classrooms at Discovery Space. As family memberships continue to grow more than 300, tracking and managing customers became very complex. The more active members at the museum, the busier the front desk staff is. Our team wanted to integrate technology to ease operations and collect valuable data at Discovery Space. The objectives in operation improvement are to reduce the bottlenecks that were identified in the process of value stream mapping where the purchasing process and the volunteer sign up process.

Approach
● Collect and analyze data
● Create models to automate processes
● Observe current processes and determine bottleneck
● Use value stream mapping to improve efficiency
● Understand current state of CRM
● Automate data collection processes

Outcomes
As a team, we were able to reduce waste and improve operations by pinpointing the bottlenecks, which increased the project cycle efficiency by 70 percent for Discovery Space.

● Document profit per program and avoid overbooking
● Decrease lead times and cycle reduction time
● System to scan members in and generate corresponding response
● Automatically collect valuable data
● Ability to group members based on level of engagement for marketing purposes
● Organize sales and inventory using POS gift shop application

Figure 1: Tracking Software