Buzby Networks and the Learning Factory

Overview
Concurrently, the team will look at where the BuzNet technology could be utilized to help prepare for, conduct, and/or interpret the Learning Factory improvement project.

Objectives
Our primary objective is to make recommendations to the Learning Factory using our IE background while leveraging the Buzby system as an additional tool. These changes would focus on improving the safety, utilization, and organization of the Learning Factory. Concurrently, notes will be taken on where the Buzby software was helpful and where it lacked certain capabilities to improve the software's interface for IE projects going forward.

Approach
• Met with multiple sources to understand and create scope for project
• Changed tag usage from TAs to students in order to understand student trends
• Updated the system to have a maximum of 8 tags
• Data collection from October 30th through December 6th
  o Senior design group attended data collection from 6-10pm (Monday through Thursday)
  o Implemented a check-in station to collect manual data about machine shop
• Analysis about the Learning Factory Attendance, Room Level Dwell Times, and Machine utilization and durations. Used both Buzby software data and manual data for results.

Outcomes
This project helped to show that multiple changes should be made to the Learning Factory:
• Potential implementation of reservation system due to long machine duration times and high attendance at the end of the semester
• Potential machine shop layout change due to student congestion around mills and lathes, which is a safety hazard
• Safety Method Sheets to help students remember correct operating procedures

This project also allowed the group to give feedback to Buzby for potential changes to their software and new system options for the Learning Factory that should be considered for the future.