

Process Improvement Final Report for U&G Elevator

MIE 463 - Group 9

Executive Summary

Background:

Union and General Elevators is a medium sized elevator manufacturer based in Guangzhou, China. U&G was founded in 2007 when the real estate market in China was flourishing. The company underwent significant growths and expansions in its first few years of operations. However, as the housing market began to cool down since 2010, the rate of growth for U&G tumbled. Moreover, U&G began to face problems that had not been experienced in the past, U&G's struggles can be attributed to the fact that until recently, U&G had always been a small-sized company. In other words, U&G's corporate mindset and management styles are not suitable for running a multi-million corporation with more than 300 employees.

Process Analysis:

Specifically, U&G has been failing to deliver their products on time and their elevators often require overhauls. The business process to be evaluated is the manufacturing process, which includes drawing the blueprint, producing and assembling elevator parts, and installing the elevators. While U&G is capable of producing impressive elevators,

the poor communication between departments has caused many unnecessary delays. Moreover, employees at U&G are unmotivated and negligent as the company lacks a proper reward and punishment system. Furthermore, much of U&G's manufacturing process is repetitive and can be automated at reasonable costs.

Recommendations:

Therefore, we have advised on the following recommendations. First and foremost, the company should implement a Manufacturing Execution System (MES) to improve the interdepartmental communication. With the MES installed, U&G can track every detail of the manufacturing process and thereby develop an internal reward and punishment system as MES records the actions and mistakes made by each employee.

Furthermore, U&G should support the design engineers to develop blueprint templates for customized elevator designs, which would reduce the chance of errors and time to draw blueprints.

Conclusion:

Although U&G operates in a foreign service environment, the cultural and social implications should not interfere with the process improvement plan. The IT implementation serves to improve communication efficiency and reduce the rooms for errors. Although MES could also eliminate the need for redundant human labour, the cost of labour in China is still rather insignificant. As there's no need for U&G to dismiss any employee, barrier for implementation should be minimal.