

ABSTRACT

Quality is key in manufacturing any type of product. Customer expectations only rise with time, and it has become more crucial than ever for companies to produce quality products to survive. This project sets out to improve quality of flagship products at Patio Pacific. This report contains the background of the company, Patio Pacific, the process of finding critical problems, and the methodology to solve them.

Customer returns and inquiries have the ability to eat up cash flow in any type of company. This senior project sets out with introduction of the project that explains how the project came about, followed by background of the project, which explains in detail the steps it took to illuminate the core scope of the project. Below, there is evidence that magnets in the threshold of the pet doors are causing a huge volume of customer inquiries and returns. The design section of the project discusses an experiment that supports that 80% overlap between the magnet in the flap and the magnet in the threshold is optimal for minimum magnetic strength and a 100% threshold pop up rate. The report ends with recommendations of future work, as this project is only the beginning of quality and continuous improvement.