

## **Case Study: Improving First Pass Yield % (FPY%) and Customer Satisfaction**

### **Background:**

A \$240 million manufacturing company faced a significant challenge with a First Pass Yield (FPY) percentage languishing at an alarming 50%. This resulted in heightened customer frustration. Compounding the issue were shortages in both manpower and critical supply chain components.

### **Challenge:**

The dire situation necessitated immediate action. CXMD was brought in to lead a team of directors across engineering, operations, quality, purchasing, and inside sales with a goal that was clear: reverse the declining FPY% and restore customer confidence.

### **Approach:**

A systematic approach was adopted to address the multifaceted challenge. Data was meticulously extracted from internal systems, encompassing the entire ecosystem. Design changes were methodically documented, assigned responsibility codes, and accompanied by individual commentaries. Weekly review meetings were instituted to analyze the latest changes, focusing on root cause identification and agreement on subsequent actions.

Pareto analyses pinpointed engineering as the primary contributor to FPY challenges. A comprehensive set of actions were implemented, including re-training programs, process overhauls, strategic reassignments, engineering peer reviews, and updates to system tools. Concurrently, operations addressed manpower shortages, and purchasing instituted proactive measures for forecasting and acquiring critical components.

### **Solution:**

The combined efforts across multiple departments and strategic interventions formed a holistic solution to the FPY crisis. The emphasis on data-driven decision-making, cross-functional collaboration, and targeted interventions formed the backbone of the approach. The solution encompassed the following:

1. **Data-Driven Decision Making:** The emphasis on securing and analyzing data across the entire ecosystem was pivotal in identifying areas of improvement.
2. **Cross-Functional Collaboration:** The success of this initiative hinged on effective collaboration among directors from engineering, operations, quality, purchasing, and inside sales.
3. **Root Cause Analysis:** Regular reviews focused on understanding root causes, which allowed for targeted and impactful interventions.
4. **Holistic Approach:** Addressing both manpower shortages and supply chain challenges simultaneously ensured a comprehensive solution.
5. **Continuous Improvement:** The weekly, structured governance review meetings established a culture of continuous improvement, ensuring that the team stayed responsive to evolving challenges.

**Results:**

The outcomes were transformative. Within six months, the FPY% surged from 50% to an impressive 80%. Engineering peer reviews emerged as a potent tool, contributing two-thirds to the overall improvement. The holistic strategy not only rectified immediate challenges but also established a foundation for sustained operational efficiency.

**Conclusion:**

Through strategic leadership, collaborative efforts, and a data-driven approach, the company not only addressed the immediate challenge of low FPY% but also cultivated a culture of continuous improvement. The success in this endeavor not only enhanced operational efficiency but also significantly improved customer satisfaction, underlining the long-term benefits of a comprehensive and systematic approach.