August 2014

PROBLEM STATEMENT

Chris: Through data collection over the past several months we've found a number of defects in our wave solder operation. We want to figure out why these defects are occurring, what the root cause is.

Caitlin: Can't all these defects be fixed in post-wave by our normal touch-up process?

Chris: Yes, but there's a lot of waste when you consider the time needed to rework the boards. On average it takes about 20 seconds to correct a defect and that means we're spending about 2 plus hours per week on non-value added activity. That costs us money.

Mark: Caitlin, you've run these boards before. What kinds of defects are we seeing?

Caitlin: Excessive solder, insufficient fill, outgassing, voids. We need to meet IPC class 2 standards.

Dan: OK, what's our objective on this project?

Chris: Our average weekly DPMO is 2471 which is not bad. But we want to do better! Our goal is to reduce the weekly DPMO by 50% . We'd like to review our process and make some recommendations for further analysis.