**My Success Story –**

**Situation** –

Motorolas’s semiconductor division was not doing well. The quality needed to be improved in the end-to-end manufacturing process in order to improve the efficiency.

As the senior staff product engineer, my job was to find out where in the complex semiconductor manufacturing process in its entirety, which stages in the process had the highest reject rates, and then once that is known, evaluate the sub-processes within those processes according to their own reject rates, gather the relevant data at all stages, then pull a team of team leaders together, pinpoint where improvements need to be made in the entire process and then help the team leaders to determine the plan of action in their respective areas. During this entire process, I had to gather and process a lot of data – for every chip that goes through each sub process end to end, slice and dice the data, and find relationships in order to know where actions need to be taken and then help the respective teams and ensure that actions are taken.

**Action -**

One of the main actions was eliminating the boot test. This test involved each processor to be tested in the Apple PC to see if it boots up without any errors, and in case of any error reject that processor. As this was the test on every processor produced it was decided to eliminate it by finding all the errors, fix them in the design by working with design team and also by introducing a corresponding test in the automated test suite. After continuous work on these two fronts for about 8 months we succeeded in completing eliminating the labor intensive and time consuming boot test completely.

**Results** -

The elimination of boot test contributed in increasing in chip production yields from 78% to 96% in about 8 months, and also reduce the defect levels from 5000 ppm to less than 300 ppm.

This example required all of the following –

Leadership ability

· Teamwork ability

· Problem solving ability

· Ability to influence others

·     Ability to analyze a problem