Issue

On average, every order delivered to customers had one component missing (Short shipped). Management has directed that the incidence of such short shipments be reduced by 50% and thus lessen the administrative burden of coordinating such shipments, increase customer satisfaction, and reduce the risk of loosing future sales

Breakthrough Strategy

Measure	Over 80 % of the short shipments were due to one section, the *Industrial Division.* Of these, only half were “Approved Short Shipments”, in other words, the other half of the short shipments were only detected by Customers on unpacking or installation. A Total of 838 Parts or kits had to be shipped later to enable the customer to complete the installation. There was no formal process in place for managing short shipments.
Analyze	Process Maps and Cause and Effects Matrices were developed to identify the key variables “X”s driving the short shipping results. Chi Squared tests where conducted to test peoples’ beliefs that differences by product groups existed within the Industrial Division. No differences were detected
Improve	A new Short Ship Process was designed since no formal one existed. An FMEA was conducted to identify those factors that could cause this new process to fail. These factors were either fool proofed or controlled
Control	System Controls were but in place that did not exist before, including a more effective checklist, tagging of the location on the product where missing parts are required, and utilisation of the corporate information system to track the short shipments effectively. Further opportunities were identified in reducing some of the causes of the short shipments that fell outside the scope of this project, eg Order Entry and Production Scheduling
Results	A 52 % reduction in additional shipments required to complete an order
Savings	$116,000 in direct cost savings in the Shipping function, not including an soft savings in the retention of Customers