

Case Study: Check all assumptions

SITUATION:

A manufacturing division was struggling to improve on time delivery from a dismal 50%. The conventional wisdom maintained that the issue was somewhere in the factory, yet in spite of efforts to speed up the factory, the performance was not improving.

INTERVENTION:

Observation of the manufacturing process produced no obvious root cause related to yields, highly variable cycle time, or rework. However, a high incidence of expedite demands and reprioritization of work orders were coming from the planning function.

Widening the field of view of the observation process to include order acceptance and planning process yielded the first clue as to the true root cause. Orders reviewed in the order acceptance meeting were frequently inside of the normal factory lead time, and occasionally resulted in demand exceeding capacity of some product lines. The corporate sales organization included an office in Europe, Japan, and North America with all orders funneling through the North American office prior to routing to the manufacturing division.

An international team was convened with representatives from each office and the marketing, manufacturing and planning functions of the manufacturing division. The team collaborated on an “as-is” flow chart describing what transpired from the time a customer said “buy” to the time the order was scheduled in the factory. To say that this was eye opening to the team would be an understatement. It became immediately apparent that a significant amount of time elapsed as an order propagated through the system, and tracking databases were duplicated at least three times. Furthermore, there was little or no communication directly between the sales office dealing with the customer and the factory. Hence, capacity planning was faulty, and much of the lead time committed to the customer was consumed by processes that added no value at all.

The team then collaborated on a flow that represented the desired process and information flow. The procedures to implement the new flow as well as points of contact were developed and implemented.

RESULT:

On time delivery improved to over 95% in a matter of a couple of months.

INSIGHT:

Assumptions must be tested prior to acceptance for use as a basis for improvement. The reality of this situation was that the order entry process that had evolved was dysfunctional and had never been examined. This is not an unusual situation for a relatively young company. The client division was about 10 years old and had been a start up prior to acquisition by the parent company. As the company grew, the process evolved but remained “tribal knowledge” rather than a well understood process. Communication should always be as direct as possible. A large part of the improvement came from the planners having a heads up as to what was coming and planning accordingly.