King Fahd University of Petroleum & Minerals

Department of Construction Engineering & Management

CEM 515: Project Quality Management

Case study of Implementation of 8-phases in Logistics communication

Eight step process was utilized to satisfy customers and save more than \$ 3 million dollars

Objective

Show how the Eight-Step process in Warner Robins Center was followed to accomplish:

- 1. Solve logistics communication problem &
- 2. acquire additional savings of 3 million dollars



- Internal Communications system Complaint
- Teamwork was formed to investigate
- Teamwork = User customer (project leader)
- + Communications manager (team facilitator)
- Team discovered inadequacy of communications equipment
- Current system suffers delays and disconnections in the network
- Team sought a need to find the root cause and provide the necessary remedy



- Team prepared a flowchart of the network support system
- One hundred steps were identified in the entire process of providing data communications
- Conclusion was conspicuous deficit of the system performance



- Team brainstormed to find all possible causes
- Key access point obstruction was the first anomaly discovered by the team
- Team decided to proceed to RCFA



- Team used cause & effect diagram
- Root cause was identified to be software and hardware platform inherit problem
- Team decided to reengineer the system to meet customers requirements



- Team performed QFD
- QFD produced a structured set of customer requirements in the area of data quality and reliability
- Team proposed to introduce a leading-edge laser technology
- Project was defined, developed, planned and scheduled using TIMELINE
- Team was directly involved on all project phases



- New system was checked in practice by the team
- Team found that the system has expanded the capability of connectivity as many as 15,000 customers
- Proclaimed a total saving of \$ 3,300,000



- Team developed a new administration procedure manual for users
- Developed a training program for new system managers and users



Team continued to monitor the data communications process proceeding through eight-step process again



Conclusion

- Classical example of how TQM and project management can form a success to increase customer satisfaction
- Assessment of customer needs, analysis process, problems, and root causes all helped the team to grant customer satisfactions, improve the system and acquire additional saving
- Project management tools are powerful in adding legitimacy and new meaning to the quality-improvement effort
- TIMELINE was very useful in translating customer requirements to WBS
- Most important is team worked on the implementation and didn't not stop at the recommendations level

