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CEM 515: Project Quality Management
Case study: Quality in Higher Education, Case
study of 8-Phases implementation

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Quality in Higher Education

- Product
 - Good Education
 - Learning Process
- Process
 - Teaching Technique
 - Instruction materials



Introduction

- University of Maryland
 - Starting TQM in 1999
 - Organized 30 TQM process teams
 - Administrative
 - Academic operations
 - Phone Communication
 - Scheduling class
 - Student financial aids
 - **Course development**



1- Define the Quality Issue

- Internal customer assistance Dean was unhappy
- He needs high academic as well as print quality of course material
- When internal customer is not satisfy the student is also not satisfied.



1- Define the Quality Issue

- ❖ **Input:- Customer dissatisfaction with the course material**
- ❖ **Process:-**
- ✓ **Putting the customer in charge of a team to :-**
 - **Define the problem.**
 - **Outline the course-development process.**
 - **Brainstorming with the team**
- ✓ **Weekly meeting lead by customer**
- ❖ **OUTPUT:-**

Customer was looking for high quality printed course guides written clearly and concisely by leaders in their field.



2- Understand and Define the process

❖ **INPUT:-**

- **Planning, designing& producing print based course guides**

❖ **PROCESS:-**

- **Prepare work flowchart.**
- **Understand the system.**
- **Internal check and balance.**
- **Analysis the whole process**

❖ **OUTPUT:-**

- **Work Flow chart**



3-Select Improvement Opportunities

- **Input:**

- Work Flow Documents

- **Process:**

- Reviewing Work Flow Documents
- Brainstorming

- **Output:**

- Preventive measures to reduce defects & problems in printed product
- Desktop publishers and editors not included in the early steps in which customers needs are articulated.
- Need to listen to the customer more attentively.
- Emphasis good publishing procedures.
- Need for a methodology to translate customers need to project design specifications.



4. Analyze the Improvement Opportunities

- **Input:**
 - Output of step 3
- **Process:**
 - Root-cause analysis
- **Output:**
 - Lack of a clear mental model of the process that included customer and the project team members in understanding the problem
 - Lack of early involvement of publisher and editor in course development to address customers concerns regarding print quality
 - Priorities were set on the corrective action to be taken to address the customers need.



5. Take Action

- **Input**
 - Results from Step 4
- **Process**
 - Brainstorming
 - QFD
- **Output**
 - Change the course development process
 - Identified Customer needs
 - Needs translated into WBS using QFD
 - Outline of the new course development manual
 - From the WBS developed a CPM.
 - Progress is gauged by earned value analysis.
 - Approval of Customer
 - Project Management manual was developed for course development



6- Check Result

- Input
 - Project process is completed in step 5



6- Check Result

- Process

Indicator of quality process

1. Time elapsed in process for course development
2. Cost of major process
3. Lost time due unclear customer request
4. Performance of support system (mail ...
5. Workload changes



6- Check Result

- Output

The team leader develop hypothesis to link

1. Selection the right course author
2. Keeping Author throughout the process
3. Meeting customer's quality , time and budget objectives

7- Implement the Improvement



- Input
 - System is tested
 - Measurements system is set
- Process
 - Write procedure
 - Development of training materials

7- Implement the Improvement



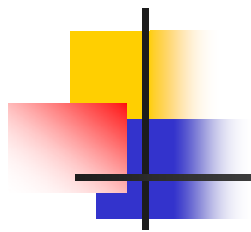
- Output

1. Writing procedures for corrective and preventive actions
2. Developed training materials
3. Ensuring the new procedure is internalized in the office.



8-Monitor Result

- Monitoring the deliverable course material
- There may be some comments
 - Graphics , Media printed course
- The Leader team will do necessary actions to correct the printed course to meet customer needs



Thank you

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