Relationship Between Project Management and Quality Management

Andre Samuel

What is Quality?

- Customers know it when they see it!
- Suppliers promise that their goods and services embody it !

SO:

- Customers demand quality and an organization promise to deliver quality
- But a project manager is the one who has to do it!
- Failure can have devastating immediate and long-term consequences for both the project manager and the project organization

Domain of operations, services and supply chain management

- Quality is what customer expects as a lasting experience

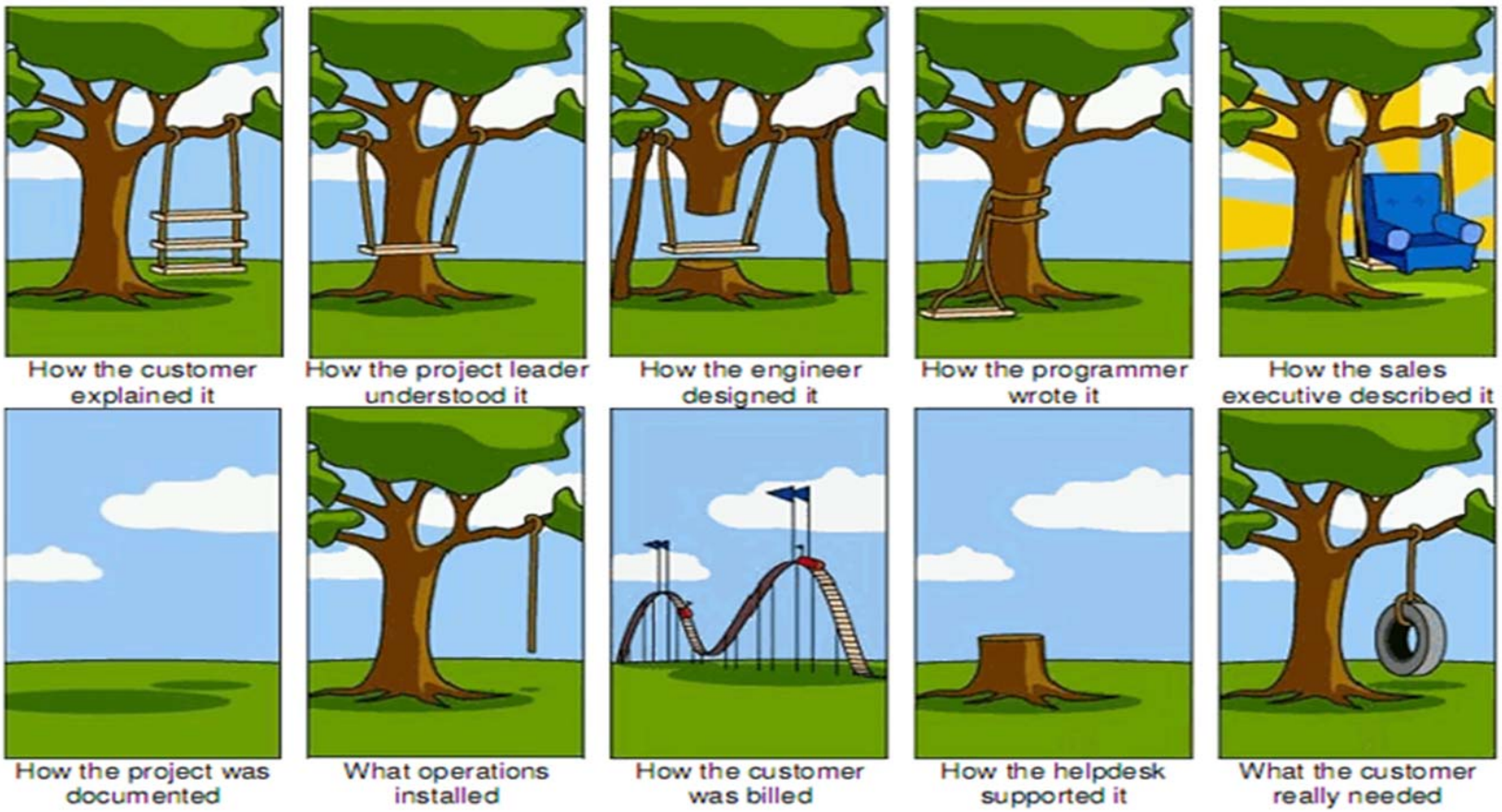
- Joseph M. Juran:
  - Quality means “features of products which meet customer needs and thereby provide customer satisfaction.”
  - Quality also means “freedom from deficiencies.”

Quality has to do with:

- **Customers-** quality is defined by customers, their needs, and their expectations.
- **Product-** We define quality by our view of the features or attributes of some particular product
- **Defects-** We expect quality products to be free of defects
- **Processes-** If we manufacture a product, we probably care very much about processes. The processes that produce that product have great effect on the outcome

Quality Targets/Goals

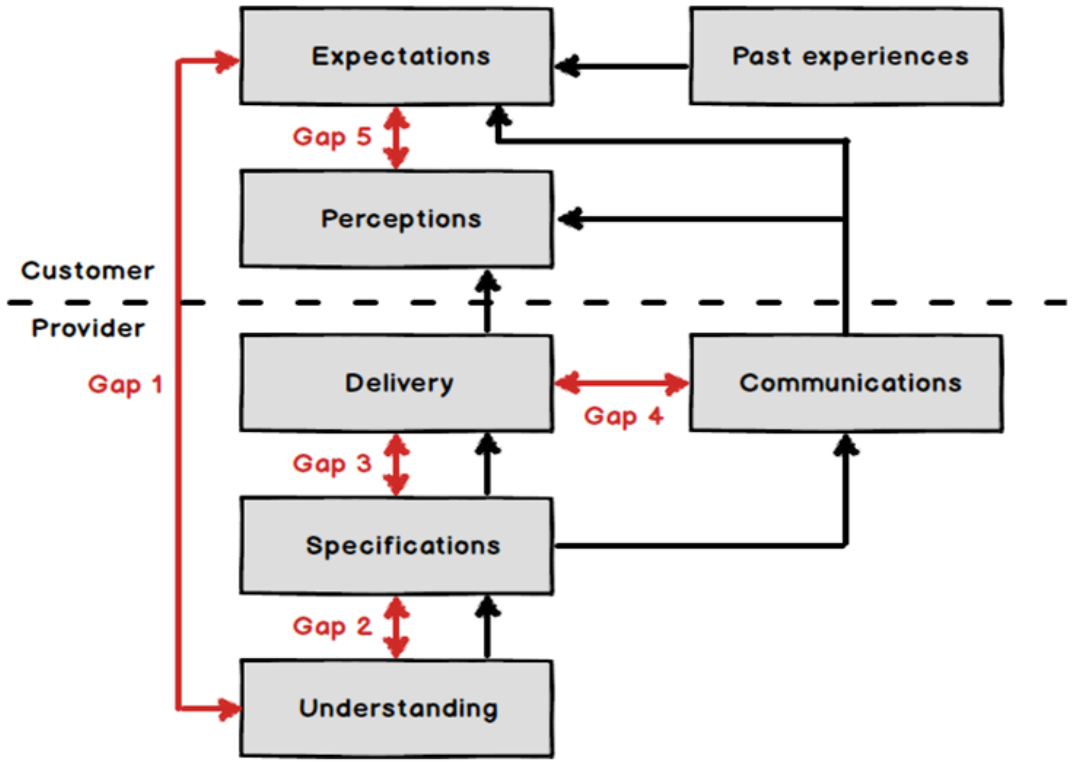
- Fitness for use
- Compliance with requirements
- Conformance/Zero Defects
- Performance
- Reliability
- Durability


How the customer explained it
How the project leader understood it
How the engineer designed it
How the programmer wrote it
How the sales executive described it
How the project was documented
What operations installed
How the customer was billed
How the helpdesk supported it
What the customer really needed

GAP Model

- It recognises five major areas where quality gaps can occur between expectations and reality:
  - Customer expectations and manager expectations
  - Management perceptions of what is required and what is actually delivered
  - Documented quality levels and actual delivered quality levels
  - Level of quality promised and level of quality delivered
  - Customers expectations and perceptions

Gap Model - Parasuraman et al. (1985)



Project Quality?

- **‘how diligent are we in terms of project processes to deliver project objectives’?**

- This is the minimum requirement to meet the customer needs.

- **‘how good is our project management … as a vehicle for delivering the longer-term outcomes and benefits as required by the sponsors and end users’.**

- Achieving quality in project implementation is not a matter of luck or coincidence; it is a matter of management.

- Turner (2002) is among the few authors who attempts to more clearly define project quality comprising two dimensions:

  - **Product Quality-** WHAT?- Outcome- quality of the product of the project

  - **Process Quality-** HOW?- Processes- quality of the project itself

- PMI (2013)
  - “the degree to which a set of inherent characteristics fulfill requirements”

- Quality Management tools have been developed and successfully applied to Operations Management

- Applying these proven ways to project management should be a simple matter of transference, but that is the problem.

- **BUT** Projects come in many stripes and colors!

Linkage between Quality Mgt and Project Mgt

Distinct Disciplines

- Quality management and project management are distinct disciplines and bodies of knowledge.

- Project management has long been associated with the term “temporary organization”

- Whereas quality management has been associated with the term “permanent organization”, where repetitive processes dominate

Convergence

- However, project management as a discipline has matured towards the management of permanent organizations

- For project-based organizations, where the project is the basic form of organization for its operation, PM is of itself an ongoing, repetitive operation to which the QM practices, properly adjusted, should relate.

- Any convergence of thought between PM and QM has to be focused on:
  - Using PM to implement a total quality management culture
  - **OR** on assuring the quality of the project outcomes and deliverables

Project management maturity is rising

- An increasing number of organizations are selecting project management as a means to achieve their strategic objectives (Kerzner, 2003).

- In other words, a growing number of organizations are adopting project management as part of their management practices

- This orientation reflects a modern organization that brings value to its customers through projects

- As organizations gain more project management maturity, making continuous improvements to project management has to appear as a new avenue towards achieving improved results.

- Implementing continuous improvement in project management is essential for the success (Meredith and Mantel, 2003).

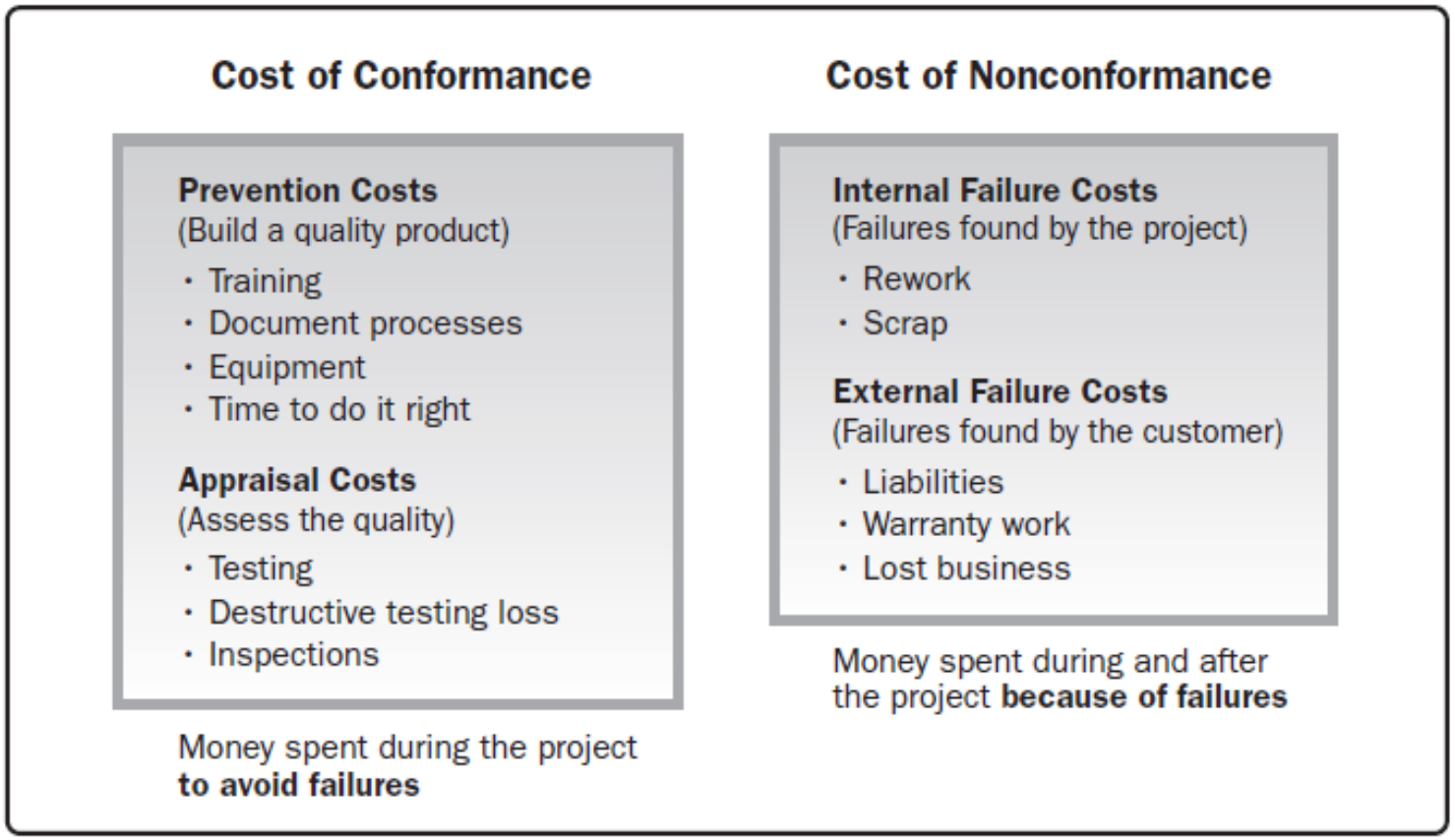
- **In other words, using quality management in project management.**

Quality and Triple Constraints

- The project “triple constraint” includes time, cost, and Quality
- Project managers accept the ‘iron triangle of cost, budget and quality’ (Atkinson, 1999) as applicable for measuring project performance
- But focus more on ‘on time and budget’ delivery as the success factors
- Quality in projects is often relegated to mere ‘lip service’ and to tick-box compliance.

- Quality is most closely associated with scope because scope is based on customer requirements and quality is closely associated with customer requirements.
  - This linkage addresses quality of the product of the project.
- There is another important quality consideration: quality of the project itself
- Quality processes, attuned to the scope specifications, will ensure a quality product
- Quality processes that maintain cost and schedule constraints will ensure a quality project.

Cost of Quality



Trade-Offs

- Project managers typically try to balance the three when meeting project objectives

- But they may make trade-offs among the three during project implementation in order to meet objectives and satisfy customers

Never, never, ever trade-off quality

- Quality can be achieved without extra cost!
- Using Juran and Godfrey (1999) quality is “fit for purpose”
  - downgrading quality is not an option, non-negotiable
- Hence using “level of specification” or “performance” is more negotiable
  - Marble floors vs carpeted floors- fit for purpose, but cost saving as the level of specification has changed

Quality vs Grade

- **Quality**
  - as a delivered performance or result is “the degree to which a set of inherent characteristics fulfill requirements” (ISO 9000)

- **Grade**
  - as a design intent is a category assigned to deliverables having the **same functional use but different technical characteristics**

- **a quality level that fails to meet quality requirements is always a problem**
- **a low grade of quality may not be a problem**

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