Quality Function Deployment

What is Quality Function Deployment (QFD)?

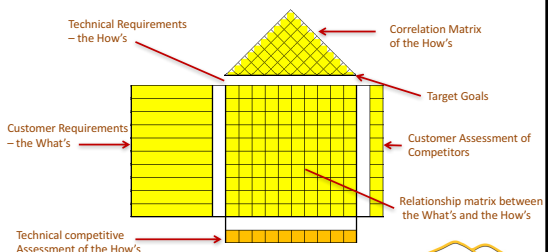
A means to convert customer requirements into multiple levels of *internal requirements*

QFD outlines a process which traces Critical to Satisfaction (Y's) back to process steps and specifically a set of vital few (X's) inputs. In terms of VOC, CTS is the Y and CTP is the X.

QFD Process

- Define customer requirements (these come of the tools discussed in VOC)
- Perform competitive analysis to identify gaps in customer requirements
- Match these gaps to technical requirements that would help meet the customer requirements
- Create the roof of the House of Quality - correlation matrix between the technical descriptors
- Develop the relationship matrix between the technical requirements and the customer requirements.

QFD - House of Quality



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QFD

QFD Example

The first thing we need is knowledge about what the customer requires. So let's start with a group of customer requirements **(CTS's or "what's")** for a Comic Book Collector regarding his purchase.

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QFD Example

Now we need to understand the relative importance of the "What's" to the Customer.

Lays flat	3
No cracks on spine	2
No tears	1
Vibrant Color	1
No Rust on Staples	3

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QFD Example

The next step is to list the technical product requirements for the comic book. These are the **"how's"** we use to satisfy the customer's technical requirements or "what's."

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QFD Example

Technical Requirements - The "How's"

- Bagged and Boarded
- Stored in Long Box
- Kept out of the Sun
- Kept dry
- Smoke free home

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QFD Example

Customer Requirements \ Technical Requirements	Importance to customer	Bagged and Boarded	Stored in Long Box	Kept out of the Sun	Kept dry	Smoke free home
Lays Flat			•	Δ		
No cracks on spine			Δ	•		Δ
No tears			Δ	Δ		
Vibrant color		•	o		Δ	o
No rust on staples					•	
Importance of Weighting		9	33	22	28	5

• = 9 Strong Influence
o = 3 Moderate Influence
Δ = 1 Weak Influence

Focus Effort Here

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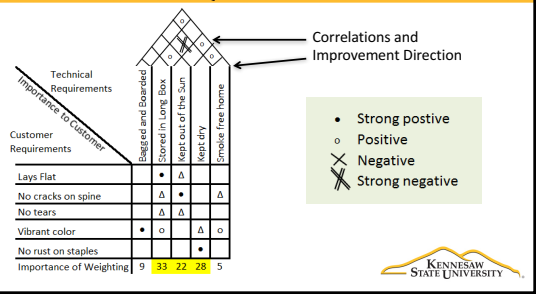
QFD



QFD Example Results