Assuring Interactive Quality

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Does quality matter examples from Deservitization slides.
Quality…
Principles of Quality Management?

1. variation is the enemy of quality: reduce variation
2. exceed customer expectations
3. make quality the top priority
4. key to loyalty is speedy service recovery
What is quality?

What is the standard?
What is “quality”?

**Toyota**
- process domain

  - Independent processing
    - produce car

**Driver**
- process domain

  - Independent processing
    - drive car

  - interaction
    - sell car

**Conformance to specifications**

**Fitness for use**
What is “quality”? 

Independent Processing

- “conformance to specifications”
- engineer focused
- product measurement
- homogeneity

Statistical Process Control (SPC)

- Six sigma (6σ)
- focus on reducing variation

Interactive Process

```
<table>
<thead>
<tr>
<th>Sample</th>
<th>Quality characteristic</th>
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<tbody>
<tr>
<td>3</td>
<td>10.058</td>
</tr>
<tr>
<td>6</td>
<td>10.058</td>
</tr>
<tr>
<td>9</td>
<td>10.058</td>
</tr>
<tr>
<td>12</td>
<td>10.058</td>
</tr>
<tr>
<td>15</td>
<td>10.058</td>
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</tbody>
</table>

UCL = 10.860
Center line = 10.058
LCL = 9.256

3.4 ppm
```
What is “quality”? 

**Independent Processing**
- “conformance to specifications”
- engineer focused
- product measurement
- homogeneity
- Statistical Process Control (SPC)
- Six sigma (6σ)
- focus on reducing variation

**Interactive Process**
- “fitness for use” which is subjective
- customer focused
- customer measurement
- heterogeneity
- Project Management
- reduce variation
Reducing variation
Principles of Quality Management?

1. Variation is the enemy of quality: reduce variation.
2. Exceed customer expectations.
3. Make quality the top priority.
4. Key to loyalty is speedy service recovery.

1. Must design to accommodate variation.
2. exceeding customer expectations
Exceeding customer expectations

Given uncertain service delivery, which is a better strategy…

A. to raise customer expectations?
B. to lower customer expectations?
Sustainable strategy

• Set customer expectations at a level that is superior to the competition.
Exceeding customer expectations

Exceeding Customer Expectations
A one-and-half day customer service 101 seminar

Raise the satisfaction bar.

Exceeding Customer Expectations
Achieving true loyalty by raising the satisfaction bar.
Principles of Quality Management?

1. **variation** is the enemy of quality: reduce variation
2. exceed customer expectations
3. make quality the top priority
4. key to loyalty is speedy service recovery

1. must design to accommodate variation
2. consistently deliver at superior level
3. quality is job one?
Does quality matter?
Does quality matter?

What you get from 99.9% suppliers...

- At least 20,000 wrong drug prescriptions each year.
- More than 15,000 newborn babies accidentally dropped by doctors/nurses each year.
- Unsafe drinking water almost 1 hour each month.
- No electricity, water, heat for 8.6 hours each year.
- No telephone service for nearly 10 minutes each week.
- 2 short or long landings at JFK Airport each day.
- Nearly 500 incorrect surgical operations per week.
- 2,000 lost articles of mail per hour.
Which has better service quality?
Which has better service quality?
Which has better service quality?
Which has better service quality?

How do they compare?
Singapore Airlines

Measuring and Assuring Service Quality
Ryanair

I'm hungry.

You're right, they did forget to fit headrests.

Can you feel your legs?

Kill. Me. Now.

In case of pressure loss, insert £1 into slot to release oxygen mask. Secure your own mask, but do not help others. They must pay for it themselves.

If the plane has to land in an emergency, insert your card into the chip and pin device. When the transaction is complete, exit the aircraft. A member of crew will be on hand to collect your £25 emergency disembarkation fee.
How do they compare?

<table>
<thead>
<tr>
<th>Singapore Air</th>
<th>April 2010</th>
<th>April 2011</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passengers</td>
<td>1.30M</td>
<td>1.37M</td>
<td>+6.3%</td>
</tr>
<tr>
<td>Load Factor</td>
<td>77.6%</td>
<td>74.6%</td>
<td>-3%</td>
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<table>
<thead>
<tr>
<th>Ryanair</th>
<th>Change</th>
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<tbody>
<tr>
<td>Passengers</td>
<td>+10%</td>
</tr>
<tr>
<td>Load Factor</td>
<td>+2%</td>
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</tbody>
</table>

Sources:
http://www.reuters.com/article/2011/05/16/singaporeair-loadfactor-idUSL4E7GG1GE20110516
Retail service quality?
Education service quality?

UNIVERSITY OF MIAMI

UNIVERSITY OF CINCINNATI

University of Phoenix Online

ARGOSY UNIVERSITY

Washington University in St. Louis

WESTERN GOVERNORS UNIVERSITY

KAPLAN UNIVERSITY

A different school of thought.
Does quality matter?
Two factors

<table>
<thead>
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<th>Satisfaction of</th>
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What is Quality?

• Quality
  • Does performance meet *expectation*

• Value
  • Satisfaction of *needs*
Attributes

- Attributes that customers expect
- Attributes that we deliver
- Attributes that meet customers needs

- Knowledgeable employees
- Speedy service
- Clean facilities
- Friendly employees
- Technical excellence
- Personal attention
- Accurate transactions
Where do you need to be?

- Knowledgeable employees
- Speedy service
- Clean facilities
- Attributes that customers expect
- Attributes that we deliver
- Attributes that meet customers needs
- Technical excellence
- Personal attention
- Accurate transactions
- Friendly employees
Principles of Quality Management?

1. Variation is the enemy of quality: reduce variation.
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1. Must design to accommodate variation.
2. Consistently deliver at superior level.
3. Quality has meaning only with value.

Measuring and Assuring Service Quality
4. importance of speedy service recovery
Service Recovery

What to do when things go wrong.
Complaints and Service*

1. The average business never hears from 96% of its unhappy customers. For every complaint received, the average company in fact has 26 customers with problems, 6 of which are "serious" problems.

2. Complainers are more likely than non-complainers to do business again with the company that upset them, even if the problem isn't satisfactorily resolved.

*Technical Assistant Research Programs (TARP) study for US Department of Consumer Affairs.
Complaints and Service (continued)

3. Of the customers who register a complaint, between 54 and 70% will do business again with the organization if their complaint is resolved. That figure goes up to a staggering 95% if the customer feels that the complaint was resolved quickly.

4. The average customer who has had a problem with an organization tells 9 or 10 people about it. Thirteen percent of the people who have a problem with an organization recount the incident to more than 20.

5. Customers who have complained to an organization and had their complaints satisfactorily resolved tell an average of 5 people about the treatment they received.
Cost of Service Quality

Unresolved complaint
1 recorded complaint

Resolved promptly
1 recorded complaint
Calculus of Customer Satisfaction
Deceptive silence

AS A LEADER, I MUST LISTEN TO MY CUSTOMERS.

WHAT ARE YOU HEARING FROM OUR CUSTOMERS?

NOT A PEEP.

OUR CUSTOMERS ARE DEFECTIVE.
Complaining customers

sunk by the silent 96%

service recovery
Complaints are gold
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4. service recovery must be tied to process improvement
Service process improvement: Failproofing
Customer co-production

• Risks?
Potential for customer failure?
Customer failure?
Customer failure?
The Dilemma

• Processes are subject to fail.
• Service processes are particularly subject to fail.
• Customers do not follow instructions.
• Customers do not understand their responsibilities.
• Customers have unrealistic expectations.
• What do you do with an unreliable suppliers?
• Manufacturing Business
  • Fix ‘em or Fire ‘em
• Service Business
  • Customers are suppliers
  • You can’t fire the customer (unless you serve soup)
Failure prevention approach

- **Poka-yoke (ポカヨケ)**
  - pronounced "POH-kah YOH-keh"
- Japanese for “mistake-proofing”
- Term attributed to Shigeo Shingo of Toyota
- First term was actually “idiot-proofing”, then changed to “mistake-proofing” or “fail-proofing”
Customer Training?
Costco

Potential fail point?

Poka Yoke?

Provider

Costco

Customer

Purchaser

Independent processing

Surrogate interaction

Direct interaction

Surrogate interaction

Independent processing

procure items

stock shelves

select items

go to checkout

place items on checkout belt

provide payment

travel home

show membership card

need something

travel to store

arrive at store

scan items

hand cashier membership card

Arrival at store

Show membership card

Select items

Go to checkout

Place items on checkout belt

Provide payment

Travel home

F

Potential fail point?

Poka Yoke?
Failproofing: Airline baggage

Potential problem: troublesome baggage
Poka yoke?

YouTube
Surrogate interaction: ATM

Potential failure: forgetting card

Poka yoke?
Independent Processing: Lawn mower

• Process: Mowing lawn.
• Potential Error: Sticking hand or foot in where the blade can cut it.
• Poka Yoke?
Independent Processing: File Cabinet

• Process: Using file cabinet.
• Potential Error: File cabinet tipping over due to multiple top drawers open
• Poka-Yoke?
Surrogate Interaction: Online ordering

Potential failure: Enter invalid credit card number

Poka yoke?
Interaction: School Bus Service

• Process: Boarding school bus.
• Potential Error: Children walk in front of bus so close the driver can’t see them.
• Poka-Yoke?
Summary

1. Variation is the enemy of quality: reduce variation.
2. Exceed customer expectations.
3. Make quality the top priority.
4. Key to loyalty is speedy service recovery.

1. Must design to accommodate variation.
2. Consistently deliver at superior level.
3. Quality has meaning only with value.
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Summary

How?

1. must design to accommodate variation
2. consistently deliver at superior level
3. quality has meaning only with value
4. service recovery must be tied to process improvement

Design in customer poka-yokes