Service Quality

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http://www.pu.edu.pk/faculty/descriptions.asp?faculty=66004

MEASUREMENT OF SERV. QUALITY
- ServQual Model
- Service quality is the difference between the “Perceptions” and “Expectations”
  - Expectations measures what is anticipated in an ideal service
  - Perceptions means actual performance
- Satisfaction (S) is the gap between expectations and perceptions
  - S=P-E

Dimensions of Service Quality

1. **Reliability**: Perform promised service dependably, accurately and at promised time.
2. **Responsiveness**: Willingness to help customers promptly. Avoid keeping customers waiting for no apparent reason.
3. **Assurance**: Refer to knowledge & courtesy of employees and ability to convey trust and confidence.
4. **Empathy**: Ability to be approachable “Put yourself in the shoes of customer”
5. **Tangibility**: Appearance of physical facilities, equipment, personnel, Communication materials

Example survey question

Companies should have up to date equipment.

```
1 2 3 4 5 6 7
Strongly Strongly
Disagree Agree
```

Company ABC has up to date equipment.

```
1 2 3 4 5 6 7
Strongly Strongly
Disagree Agree
```
<table>
<thead>
<tr>
<th>Reliability</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Providing services as promised</td>
<td>9. Employees who instill confidence in customers</td>
</tr>
<tr>
<td>2. Dependability in handling customers' service problems</td>
<td>10. Making customers feel safe in their transactions</td>
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<tr>
<td>3. Performing services right first time</td>
<td>11. Employees who are consistently courteous</td>
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<tr>
<td>4. Providing services at the promised time</td>
<td>12. Employees who have the knowledge to answer customer questions</td>
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<tr>
<td>5. Keeping customers informed about when services will be performed</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsiveness</th>
<th>Empathy</th>
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<tbody>
<tr>
<td>6. Prompt service to customers</td>
<td>13. Giving customers individual attention</td>
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<tr>
<td>7. Willingness to help customers</td>
<td>14. Employees who deal with customers in a caring fashion</td>
</tr>
<tr>
<td>8. Readiness to respond to customers' requests</td>
<td>15. Having the customer's best interest at heart</td>
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</table>

**Users**

SERVQUAL has been used by many different companies in several different industries including:

- IS Providers
- Hospitals
- Hotels
- Restaurants
- Telephone Companies
- Libraries

**What next (Analysis of data using Minitab)**

You have collected data about perceptions (P) and expectations (E) of respondents, what next

1. Look at the Mean/Average
2. Conduct the T test to see whether there are significant differences in Ps & Es
3. Three types of T tests

**2-sample t-test**

Whether there are differences between two population means

For example, whether there are differences in the mean mileage of two different types of cars.

Pre requisite: The two populations must be independent; the observations from the first sample must not have any bearing on the observations from the second sample.

**For information only**

1 Sample T test

Compares the sample mean to a hypothesized value.

For example, a soft-drink company claims that on average its 250ml can contains 20 calories. You can use a 1-sample t-test to assess whether the manufacturer's claim is true.

Paired t-test

A hypothesis test for the mean difference between paired observations that are related or dependent. Useful for analyzing differences between twins, differences in before-and-after measurements on the same subject, and differences between two treatments given to the same subject.

Efficiency of weight loss program

B. Before & after administering medicine
Check Normality of data before you proceed

2-Sample t (Test and Confidence Interval)

- Samples in one column
  - Subscript:
  - Samples: [Blank]

- Samples in different columns
  - First: [Blank]
  - Second: [Blank]
  - Summarized data
    - Sample Size: [Blank]
    - Mean: [Blank]
    - Standard deviation: [Blank]

- Assume equal variances
  - First: [Blank]
  - Second: [Blank]

Interpretation of results

Two-sample t for Perceptions vs Expectations

<table>
<thead>
<tr>
<th>t</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.23</td>
<td>129</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Look at the Mean & Standard Deviation
Look at the P Value, is it less than 0.05, if yes then Ps & Es are different

Does confidence interval includes zero, if yes then both (P) & (E) are equal

An example of ServQual Questionnaire (for Libraries)

Contains questions in addition to Servqual items