# SERVQUAL: Un instrument per a la mesura de la qualitat dels serveis

Seminari d'ESSI

(Març 2011)

Summary

- **Service Quality (Parasuraman et al., 1985, 1988)**

- **The Gaps Model (Parasuraman et al., 1985, Bitner et al., 2010)**

- **SERVQUAL (Parasuraman et al., 1988, 1994)**

- **E-SQ (Parasuraman et al., 2005)**

- **Categories for Internet Service Quality (Francis, 2009)**

- **e-Learning Service Quality (Udo, Bagchi, Kirs, 2011)**

Service Quality

Measuring Service Quality

Even if you can't heft or gauge it, you can still assess it.
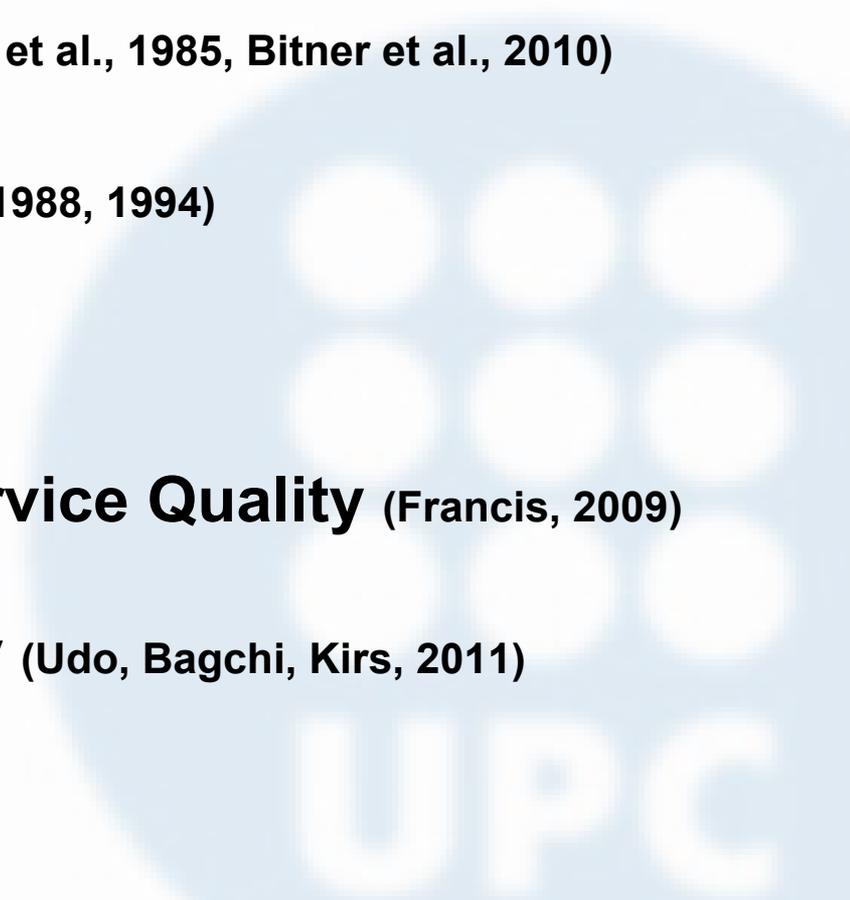
- Service characteristics:
  - ➢ Intangibility
  - ➢ Heterogeneity
  - ➢ Inseparability

- Is more difficult to evaluate than goods quality
- Is a comparison among expectations and performance.
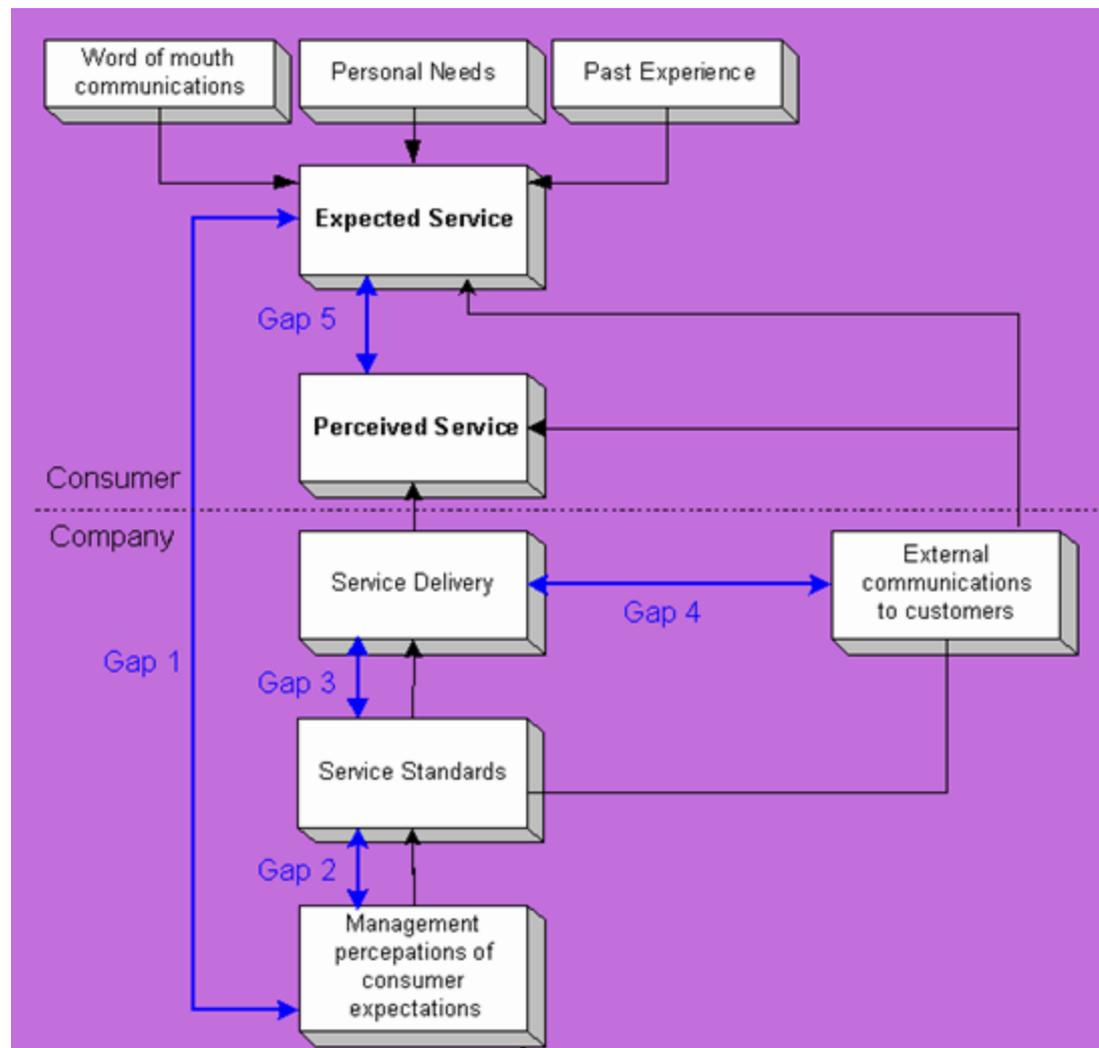- Involves not just outcomes, but also processes

Service Quality

- How do customers perceive and evaluate service quality?

- What are managers' perceptions about service quality?

- Do discrepancies exist between the perceptions of customers and those of managers?

- Can customers' and managers' perceptions be combined into a general model of service quality?

- How can service organizations improve customer service and achieve excellence?

The Gaps Model

- Gap 1: Market Information Gap. Not knowing what customer expects

- Gap 2: Service Standards Gap. Not having the right service designs and standards.

- Gap 3: Service Performance Gap. Not delivering to service standards.

- Gap 4: Communication Gap. Not matching performance promises.

- Gap 5: Customer Gap. Difference between customer expectations and perceptions.

Service Quality Gap = Customer Gap = f(Gap1, Gap2, Gap3, Gap4)

The Gaps Model: Market Gap

Your favourite TV shows. Now on iTunes.
Download and watch hit TV shows on your computer, iPod or Apple TV.

<u>Difference between customer expectations of service and company understanding of those expectations</u>.

Possible reasons: Not direct interaction with customers; Not asking about expectations; Not prepared to address expectations,...

Closing the gap: Listen to customers; Build relationships; Know and act when there is a service failure.

Technology influence:
• Knowing customers in new ways: Internet and online customer research
• Management of profiles of individual needs, behaviours and responses to marketing: Customer Relationship Management (CRM) software (EX: Hallmark's system. Loyalty program Total Rewards).
• Allowing rapid knowledge about service failures.

The Gaps Model: Service Standards Gap

Understanding of the customer expectations but still failing on designing services that satisfy the expectations.

Closing the gap: New services development and innovation practices; Change the design of elements in the customer experience of the service; Measure service operations via customer-defined standards.

Technology influence:
• Construction of technology-enabled services and technology-enabled processes. Ex: Book sales,..
• Development of new services. Ex: eBay, Monitor patients remotely,...
• Changes in the process of services innovations. Possibility to engage in the design the customer.
• Web based feedback systems. Improving the knowledge of customer standards and measuring operations.

The Gaps Model: Service Performance Gap

Understanding of the customer expectations, succeeding on designing the services, but <u>being unable to deliver services in the way they are designed</u>.

Closing the gap: Align human resources practices around delivering service excellence; Define customers' roles and help them to understand and perform effectively; Integrate technology to aid service performance.

Technology influence:
• Customer-contact employees to become more efficient and effective. Ex: Remote fixing of problems,...
• Customers more involved in co-creation and adding value to the service experience. Ex: Online check-in,...
• Self-service technologies.

The Gaps Model: Communications Gap

Understanding of the customer expectations, succeeding on designing the services, being able to deliver services in the way they are designed, but <u>communications about the service do not match with what is delivered</u>.

Closing the gap: Employ integrated services marketing communication strategies; Manage customer expectations throughout the service experience; Develop mechanisms for internal communication.

Technology influence:
• New communication channels, that are not optional.
• Virtual online experiences. Ex: Hotels,...
• Make possible to influence on customer expectations.
• Facilitates the comparison of services. Ex: Prices,...

The Gaps Model: Customer Gap

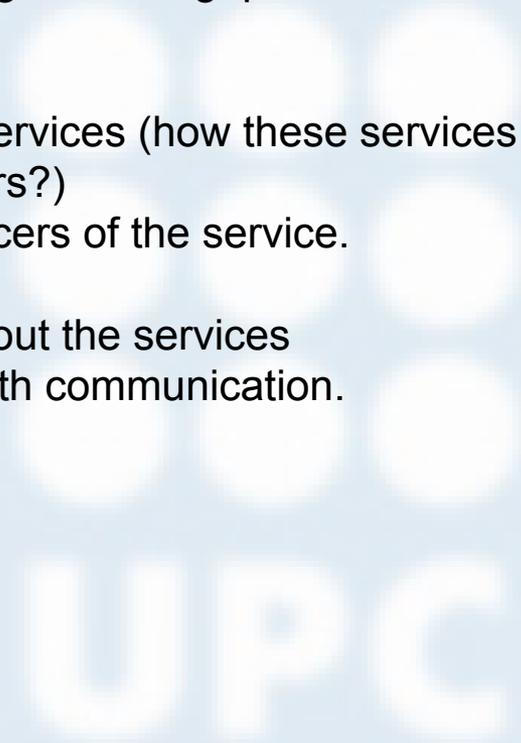Difference among the customer expectations and perceptions of the service performance.
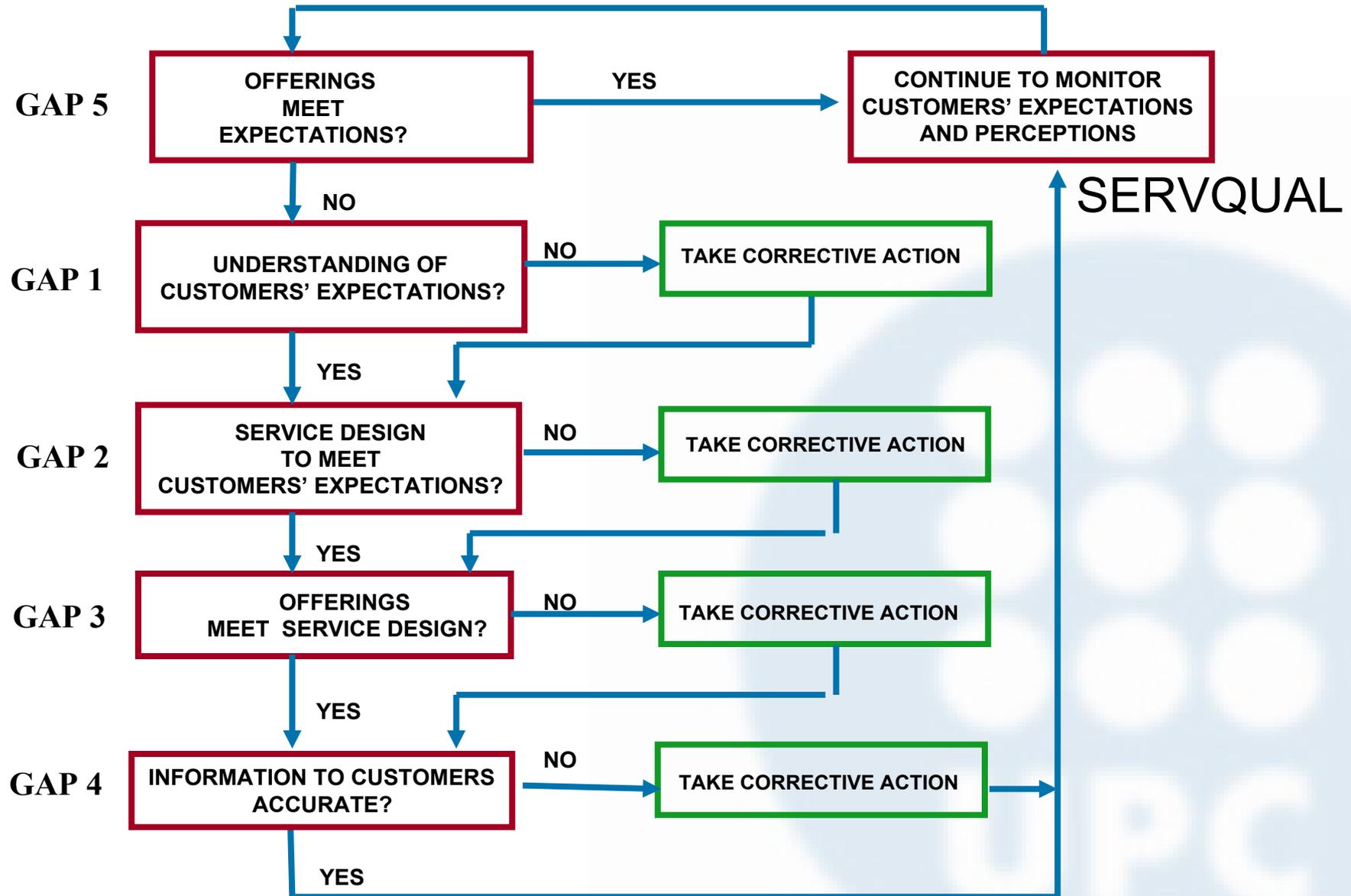
Measurement: SERVQUAL.

Closing the gap: By closing all other gaps.

Technology influence:
• Many services are self-services (how these services are evaluated by customers?)
• Customers are co-producers of the service.
• New services.
• How customers learn about the services
• Changes in word-to-mouth communication.

The Gaps Model: Process Model

SERVQUAL: Mesura de la qualitat dels serveis

SERVQUAL

GAP 5
OFFERINGS MEET EXPECTATIONS? —— YES →→ CONTINUE TO MONITOR CUSTOMERS' EXPECTATIONS AND PERCEPTIONS

NO ↓

GAP 1
UNDERSTANDING OF CUSTOMERS' EXPECTATIONS? —— NO →→ TAKE CORRECTIVE ACTION

YES ↓

GAP 2
SERVICE DESIGN TO MEET CUSTOMERS' EXPECTATIONS? —— NO →→ TAKE CORRECTIVE ACTION

YES ↓

GAP 3
OFFERINGS MEET SERVICE DESIGN? —— NO →→ TAKE CORRECTIVE ACTION

YES ↓

GAP 4
INFORMATION TO CUSTOMERS ACCURATE? —— NO →→ TAKE CORRECTIVE ACTION

YES

SERVQUAL

Multiple-item scale for measuring service quality

5 dimensions (originally 10), 22 items (originally 97):

• *Reliability*: Ability to perform the promised service dependably and accurately.

• *Responsiveness*: Willingness to help customers and provide prompt service.

• *Assurance*: Knowledge and courtesy of employees and their ability to inspire trust and confidence.

• *Empathy*: Caring, individualized attention the firm provides its customers.

• *Tangibles*: Appearance of physical facilities, equipment, personnel, and communication materials.
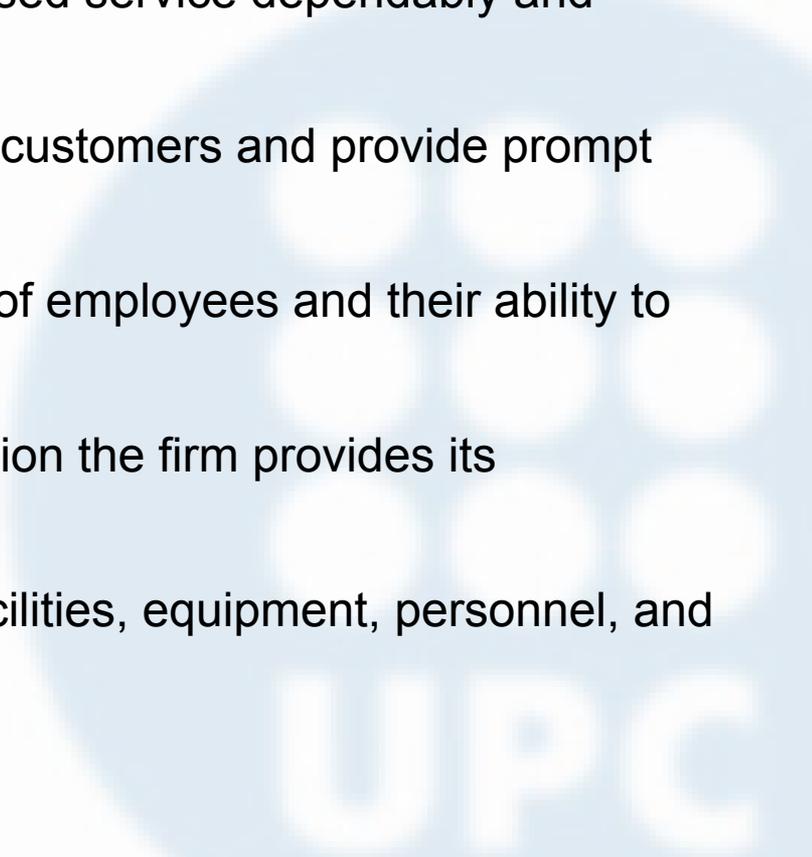
SERVQUAL: Reviewed Items (21)

Reliability

1. Providing services as promised

2. Dependability in handling customers' service problems

3. Performing services right the first time

4. Providing services at the promised time

5. Keeping customers informed about when services will be performed

Responsiveness

6. Prompt service to customers

7. Willingness to help customers

8. Readiness to respond to customers' requests

Assurance

9. Employees who instill confidence in customers

10. Making customers feel safe in their transactions

11. Employees who are consistently courteous

12. Employees who have the knowledge to answer customer questions

Empathy

13. Giving customers individual attention

14. Employees who deal with customers in a caring fashion

15. Having the customer's best interest at heart

16. Employees who understand the needs of their customers

Tangibles

17. Modern equipment

18. Visually appealing facilities

19. Employees who have a neat, professional appearance

20. Visually appealing materials associated with the service

21. Convenient business hours

SERVQUAL: How to use it?

- Select a representative of customers of the service to assess.

- Give them a questionnaire, that will have two parts:
  - ➢ The first one with the 21/22 items to measure the expectations on the services of a sector in general.
  - ➢ The second one with the 21/22 items to measure the perceptions on a specific company of that sector that offers the services.

SECTION 2: YOUR SECTOR SERVICE EXPECTATIONS

Based on your experiences of SECTOR services, please think about the kind of SECTOR company that would deliver excellent quality of service. Think about the kind of SECTOR company you would be pleased to do business with.
Please show the extent to which you think such a SECTOR company would possess the feature described by each statement.
If you feel a feature is *not all essential* for excellent SECTOR companies such as the one you have in mind, then please *select 1*; if you feel such a feature is *absolutely essential* then please *select 7*. If your feelings are less strong then select one of the numbers in between
There are no right or wrong answers, only your feelings as to what defines a SECTOR company that delivers excellent quality of service.

22 QUESTIONS WITH ANSWERS RANKING: *STRONGLY AGREE=7* TO *STRONGLY DISAGREE=1*.
Please answer ALL questions.

1 Excellent SECTOR companies will have modern looking equipment.

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

2 The physical facilities at SECTOR companies will be visually appealing.

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

3 Employees at SECTOR companies will appear professionally dressed.

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

SECTION 4: YOUR SERVICE PERCEPTIONS of COMPANY

The following set of statements relate to your feelings about COMPANY. For each statement please show the extent to which you think COMPANY has the feature described by each statement. *Selecting 1 means you strongly disagree that COMPANY has the feature*; and *selecting 7 means you strongly agree that COMPANY has the feature*.
If your feelings are less strong then select one of the numbers in between. There are no right or wrong answers, only your perceptions about COMPANY are important.

22 QUESTIONS WITH ANSWERS RANKING: *STRONGLY AGREE=7* TO *STRONGLY DISAGREE=1*.
Please answer ALL questions.

1 COMPANY has modern looking equipment

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

2 The physical facilities at COMPANY are visually appealing.

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

3 Employees at COMPANY appear professionally dressed.

7 strongly agree	6	5	4 neither agree nor disagree	3	2	1 strongly disagree
○	○	○	○	○	○	○

SERVQUAL: Improvement

Desired Service

**Zone
of
Tolerance**

Adequate Service

Level Customers
Believe Can and Should Be
Delivered

Minimum Level
Customers Are Willing
to Accept

Measure of Service
Adequacy (MSA) = Perceived
Service − Adequate
Service

Measure of Service
Superiority (MSS) = Perceived
Service − Desired
Service

For each item
• Two columns format: <u>performance compared with your minimum service level</u>, <u>performance compared with your desired service level</u>.
• Three columns format: <u>minimum service level</u>, <u>desired service level</u>, <u>perception of service</u>

SERVQUAL: Applications

• Understand service expectations and perceptions of consumers (better if done periodically).

• Assess a given firm on the quality of its services on each dimensions.

• Determine the relative importance of the five dimensions in the quality perception of the customer.

• Categorize customers depending on their perception of the quality of the company services.

• Track the level of service provided by a department (store) of the company.

• Know the service performance of the company compared to its principal competitors (include set of perception items for each).
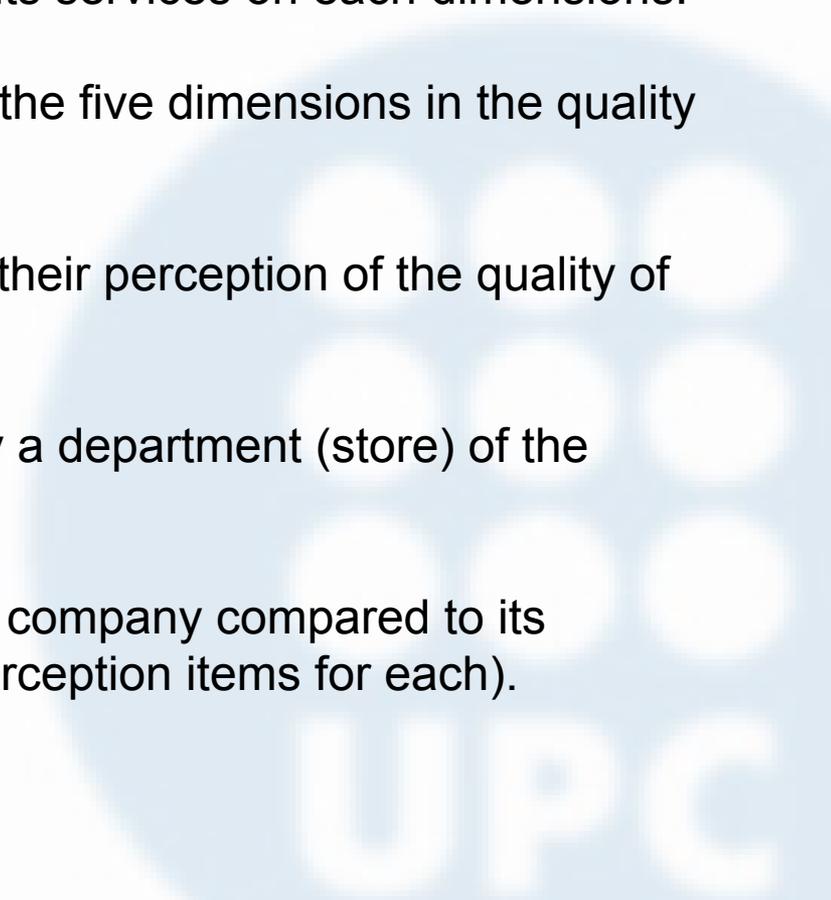
SERVQUAL: Critiques

• Number of dimensions.

• Stability from one context to another. Adaptation of the items may be needed. Items added or removed.

• The calculation of difference score (expectation of service quality minus perception of service quality) can result in psychometric problems and customers overstating their expectations because of prior bad experience with the organisations.

• The first proposal was excessively lengthy and redundant.

•...
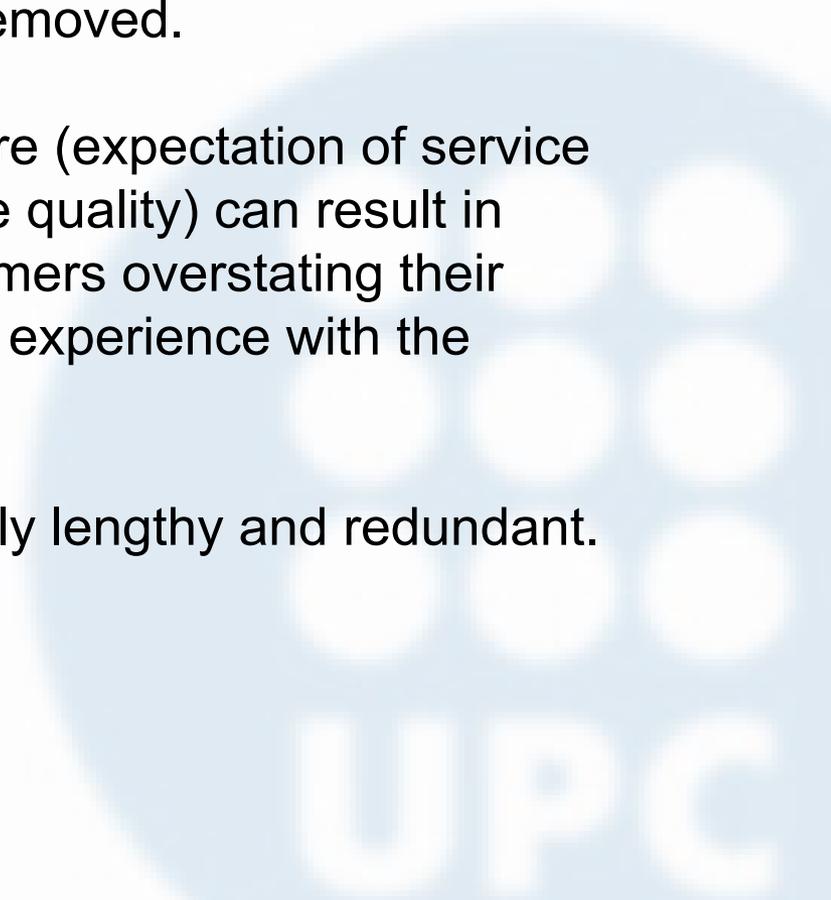
e-SQ: Online Shopping Service Quality

- No sales staff
- Absence of tangibles..
- Self-service.

- What is good service on the Web?
- What are the underlying dimensions of superior electronic service quality (e-SQ?)
- How can e-SQ be conceptualized?
- How can e-SQ be measured and thereby assessed?

e-SQ is the extent to which a web site facilitates efficient and effective shopping, purchasing and delivery of products and services.

E-SQ: E-S-QUAL, E-RecS-Qual

Two different scales, depending on if the customers have experienced problems or experimented the recovery service.

• **E-S-QUAL: 4 dimensions, 22 items**

- **Efficiency**: The ease and speed of accessing and using the site. (++)
- **Fulfillment**: The extent to which the promises about order delivery and item availability are fulfilled. (++)
- **System availability:** The correct technical functioning of the site.
- **Privacy**: The degree to which the site is safe and protects customer information. (-)

• **E_RecS-Qual: 3 dimensions, 11 items**

- **Responsiveness**: Effective handling of problems and returns through the site.
- **Compensation**: The degree to which the site compensates customers for problems.
- **Contact**: The availability of assistance through telephone or online representatives.

e-SQ: E-S-QUAL Items

Efficiency

EFF1 This site makes it easy to find what I need.
EFF2 It makes it easy to get anywhere on the site.
EFF3 It enables me to complete a transaction quickly.
EFF4 Information at this site is well organized.
EFF5 It loads its pages fast.
EFF6 This site is simple to use.
EFF7 This site enables me to get on to it quickly.
EFF8 This site is well organized.

System Availability

SYS1 This site is always available for business.
SYS2 This site launches and runs right away.
SYS3 This site does not crash.
SYS4 Pages at this site do not freeze after I enter my order information.

Fulfillment

FUL1 It delivers orders when promised.
FUL2 This site makes items available for delivery within a suitable time frame.
FUL3 It quickly delivers what I order.
FUL4 It sends out the items ordered.
FUL5 It has in stock the items the company claims to have.
FUL6 It is truthful about its offerings.
FUL7 It makes accurate promises about delivery of products.

Privacy

PRI1 It protects information about my Web-shopping behavior.
PRI2 It does not share my personal information with other sites.
PRI3 This site protects information about my credit card.

Categories for Internet Services Quality

• *offline goods* – consumers purchase tangible goods that are delivered to them via post or courier (e.g. books, groceries, CDs);

• *offline services* – consumers purchase or reserve a service then travel to an offline delivery location to consume the core service (e.g. airline travel, accommodation);

• *electronic goods* – consumers purchase and download digital goods from a website (e.g. software, music files);

• *electronic services* – consumers purchase, co-produce and consume a service via a website (e.g. brokerage, chat/dating sites).
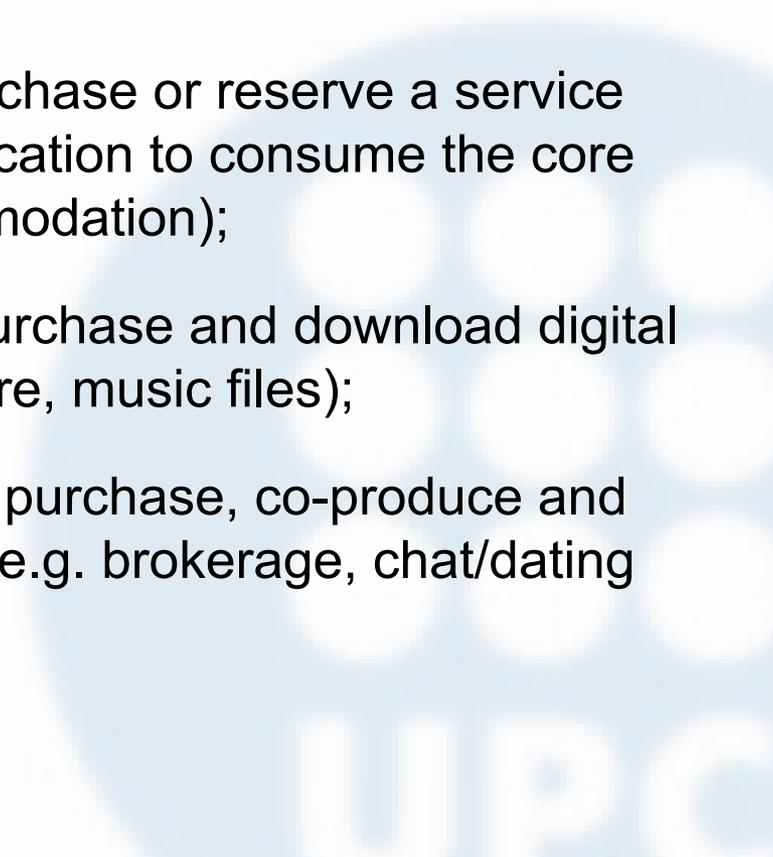
e-Learning Service Quality Evaluation
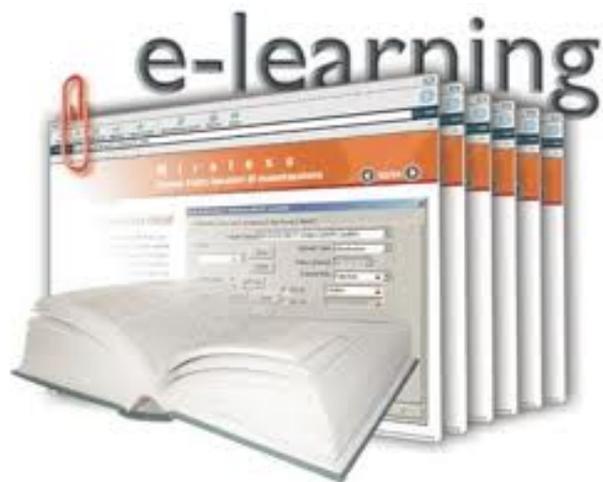
1) Can SERVQUAL be used to measure e-learning quality?

2) What are the main constructs affecting e-learning quality?

3) What is the relationship between satisfaction and behavioral intentions in e-learning?

4) What role does a student's grade expectation play in student satisfaction in e-learning?

e-Learning Service Quality: Dimensions

SERVQUAL Dimensions

H1. In an e-learning environment, ''Assurance'' has a positive association with students' perceptions of e-learning quality.

H2. In an e-learning environment, ''Empathy'' has a positive association with students' perceptions of e-learning quality.

H3. In an e-learning environment, ''Responsiveness'' has a positive association with students' perceptions of e-learning quality.

H4. In an e-learning environment, ''Reliability'' has a positive association with students' perceptions of e-learning quality.

Website content

H5. In an e-learning environment, 'website content' has a positive association with students' perceptions of e-learning quality.

Satisfaction

H6. Online students' perceptions of e-learning quality are positively associated with the students' satisfaction with the learning experience.

Behavioural intentions

H7. Online students' perceptions of learning quality are positively associated with the students' intention to continue with the online classes.

Interrelationships among eLQ, SAT, BI

H8. Online students' satisfaction plays a mediating role between perceived e-learning quality and behavioral intentions (i.e., eLQ -> SAT ->BI).

Grade expectation

H9. Online students' grade expectations are positively associated with students' perceptions of e-learning quality.
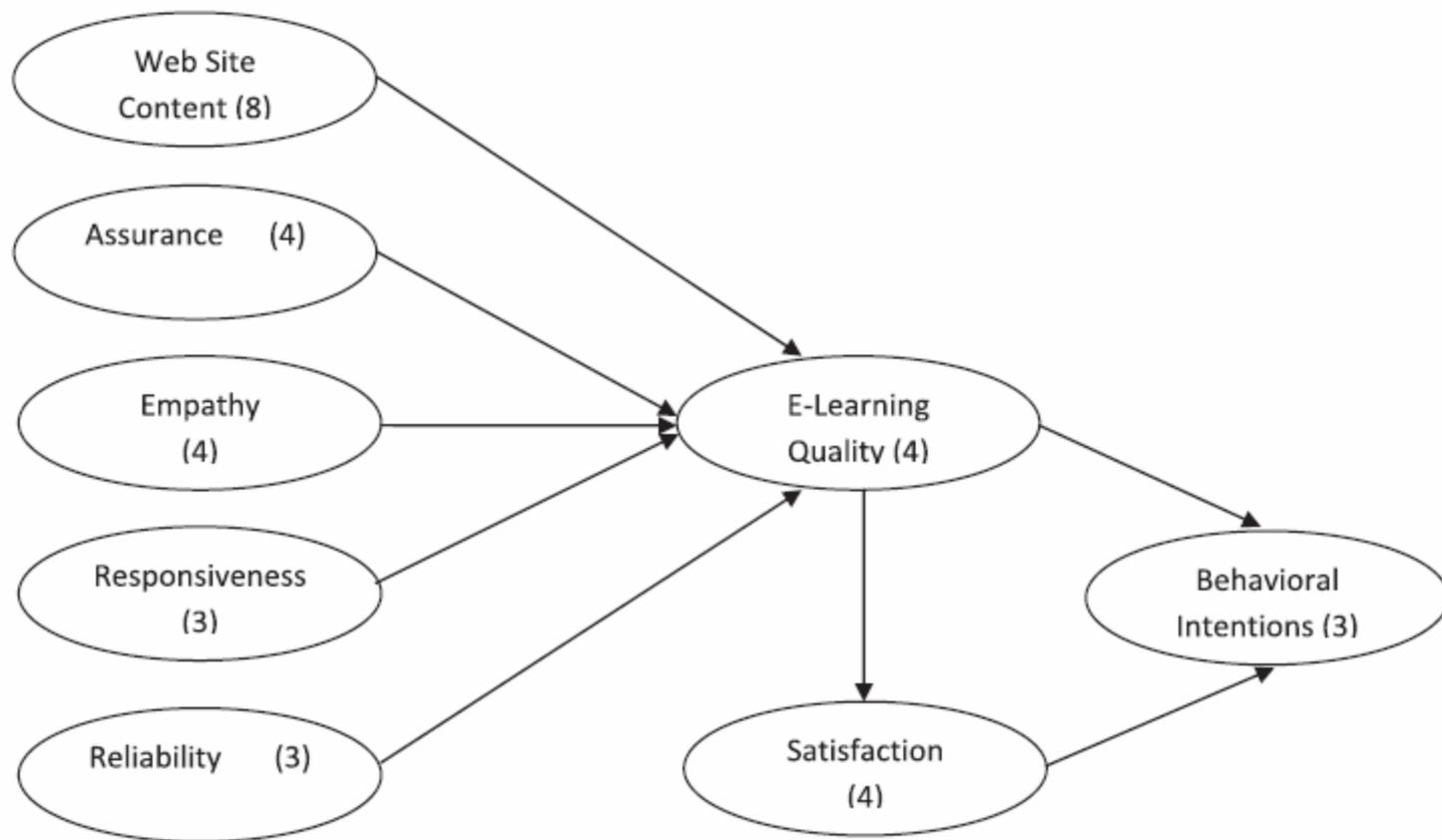
e-Learning Service Quality Evaluation

Fig. 1. E-learning quality model: SERVQUAL.

e-Learning Service Quality: Results

Table 5
Results summary.

Hypotheses	Model	Std. regression coef.
H1	ASS → eLQ	0.200**
H2	EMP → eLQ	0.155*
H3	RES → eLQ	0.163*
H4	REL → eLQ	0.114
H5	WSC → eLQ	0.372**
H6	eLQ → SAT	0.382**
H7	eLQ → BI	0.124
H8	eLQ → SAT → BI	0.851**
H9	EXP → SAT	0.521**

Rejected

R^2 for eLQ = 0.706; R^2 for SAT = 0.631; R^2 for BI = 0.886.

* $p \leqslant 0.05$.

** $P \leqslant 0.01$

e-Learning Service Quality Evaluation

|	
Assurance	0.87
ASS1. The instructor is knowledgeable in his/her field	0.81
ASS2. The instructor is fair and impartial in grading	0.82
ASS3. The instructor answers all the questions thoroughly	0.78
ASS4. I am confident the instructor has an expert understanding of the material	0.78
Empathy	0.94
EMO1. The instructor is genuinely concerned about the students	0.89
EMP2. The instructor understands the individual needs of students	0.92
EMP3. The instructor has the student's best long-term interests in mind	0.88
EMP4. The instructor encourages and motivates students to do their best	0.86
Responsiveness	0.9
RES1. The instructor quickly and efficiently responds to student needs	0.9
RES2. The instructor is willing to go out of his or her way to help students	0.9
RES3. The instructor always welcomes student questions and comments	0.81
Reliability	0.92
REL1. The instructor consistently provides good lectures	0.84
REL2. The instructor is dependable	0.92
REL3. The instructor reliably corrects information when needed	0.9
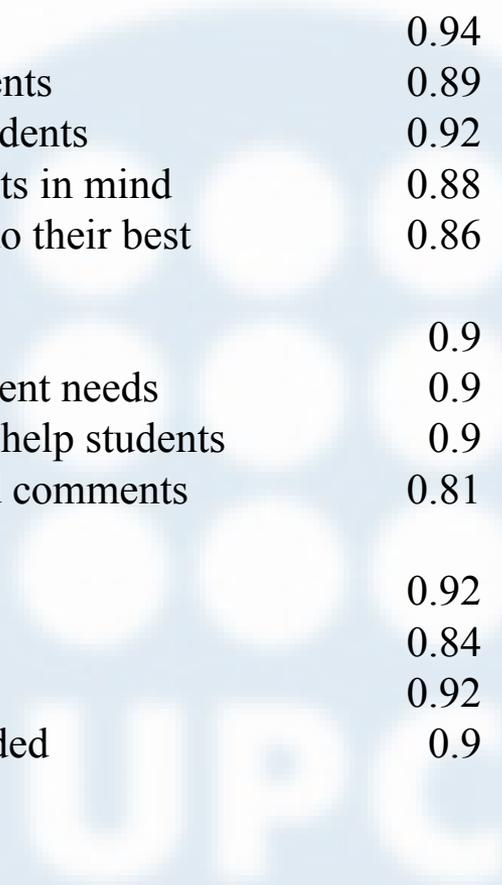
e-Learning Service Quality Evaluation

Web site content 0.95
WSC1. The web site uses audio elements properly 0.78
WSC2. The web site uses video elements properly 0.89
WSC3. The web site uses animations/graphics properly 0.84
WSC4. The web site uses multimedia features properly 0.86
WSC5. The web site provides useful information 0.85
WSC6. The web site provides accurate information 0.77
WSC7. The website provides high quality information 0.8
WSC8. The information on the web site is relevant to me 0.82

E-learning quality 0.91
eLQ1. Perception of the overall quality of the instruction from online learning 0.82
eLQ2. The instructional web site seems to be up to date 0.76
eLQ3. The instructional web site works well 0.89
eLQ4. The instructional web site has clear instruction 0.89
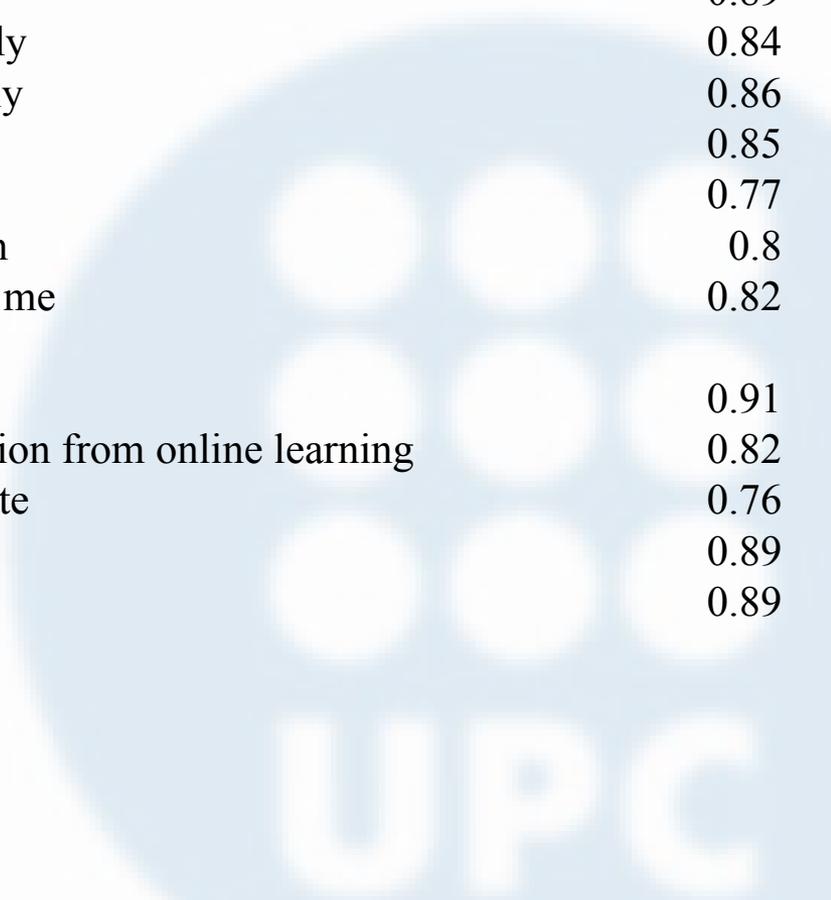
# e-Learning Service Quality Evaluation

Satisfaction   0.98

SAT.1 Agree to say ''I am satisfied with my decision to enroll in the online classes?''   0.94

SAT2. Agree to say ''My choice to enroll in online classes was a wise one?''   0.97

SAT3. Agree to say ''I think I did the right thing when I paid for online learning service?''   0.98

SAT.4 Would you agree to say that ''I feel that my experience with online learning has been enjoyable?''   0.93

Behavioral intentions   0.95

BEH1. Would you recommend this online learning to someone else?   0.94

BEH2. I know I get good value for the fee I paid for online distance learning   0.92

BEH3. I would likely do another degree program online   0.93

Grade expectations   0.91

EXP1. I expect to do very well (I did very well) in this online class   0.94

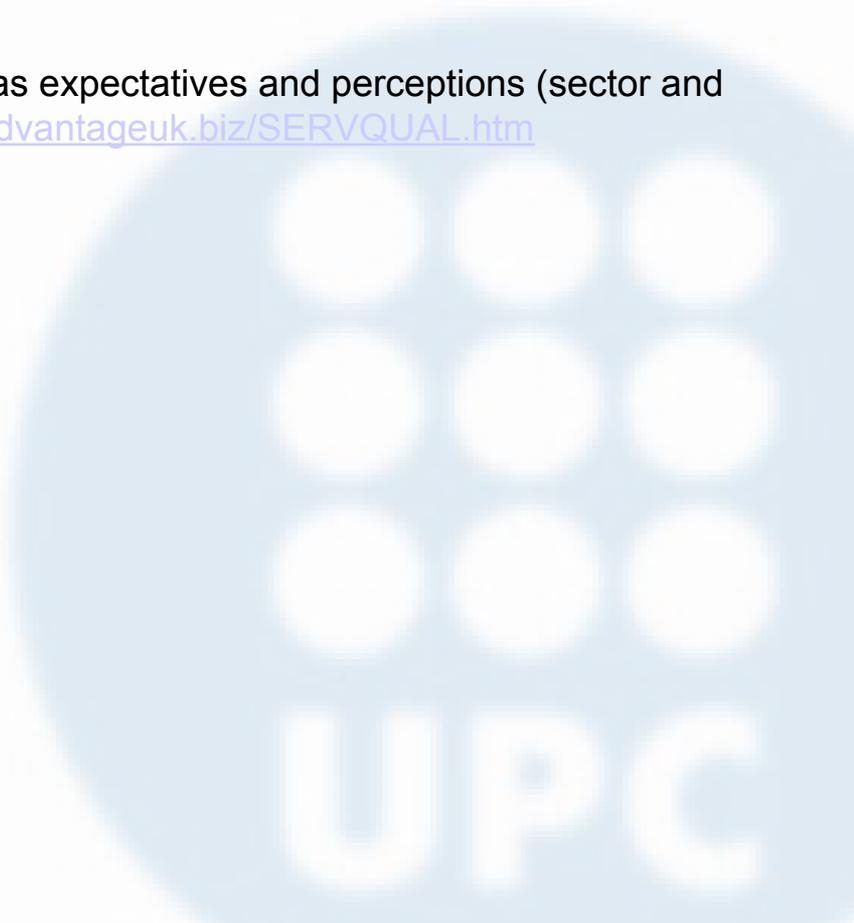EXP2. What final grade do you expect (received) from this class?   0.89
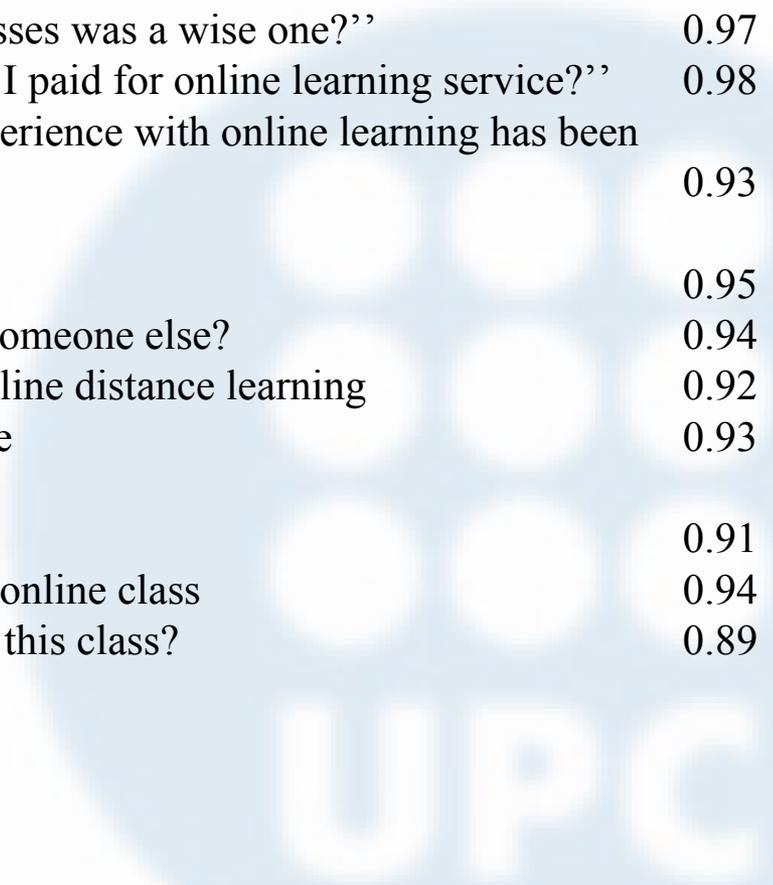
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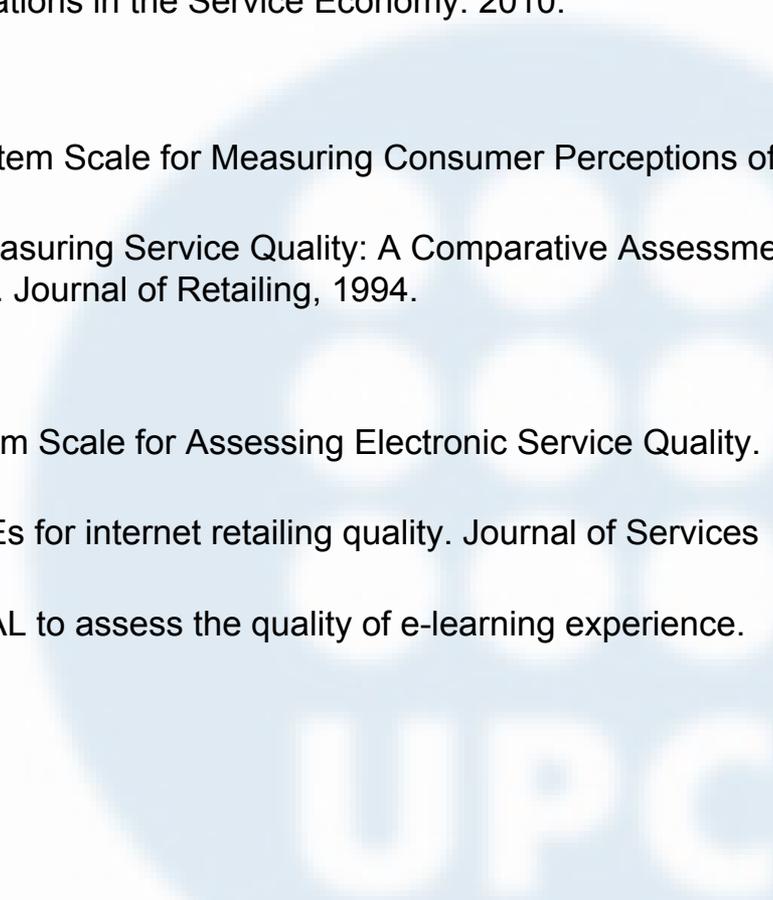
Sources: PPTs, Web Pages,...

- A. Parasuraman. TRI/SERVQUAL/LibQUAL+TM Presentation http://es.scribd.com/doc/50960764/parsu-LAB2002pp

- Business AdvAntAge. 22 items SERVQUAL seen as expectatives and perceptions (sector and company to be instantiated). http://www.businessadvantageuk.biz/SERVQUAL.htm

SERVQUAL: Mesura de la qualitat dels serveis

Questions?