

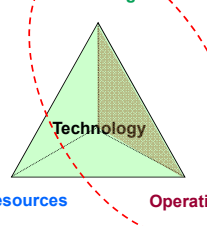
Services Science Management

COMP5138



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Functional Processes Along the Service Triangle



- **Service Marketers**
 - creating realistic customer expectations:
 - service system design
 - promotion
- **Operations Management**
 - rendering the service as promised:
 - managing fail points
 - training systems
 - quality control
- **Human Resources Management**
 - empowering the human element:
 - job descriptions
 - selection criteria
 - appraisal systems
- **System Technology**
 - providing necessary tools:
 - system specifications
 - personal preference databases

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Service Evaluation



- **Service characteristics**
 - Intangible, Inseparable, Inconsistent, Inventory
- **Service management**
 - People, Process, Physical
- **Expectation and Perception**
 - Disconfirmation
 - Zone of tolerance bounded by desire and adequate service
 - Service quality
 - The five Servqual dimensions (RATER)
 - E-S-Qual
 - The seven online service quality dimensions
- **Technology Adoptions**
 - DeLone and McLean Model
 - Technology Acceptance Model

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Services Marketing



- **Gaps Model of Service Quality**
 - Customer Gap (Source of customer dissatisfaction)
 - Differences between expectation and perception
 - Provider Gap (Ideas to close the customer gap)
 - Gap 1
 - Knowledge of customers
 - Gap 2
 - Design of standards
 - Gap 3
 - Performance
 - Gap 4
 - Communication

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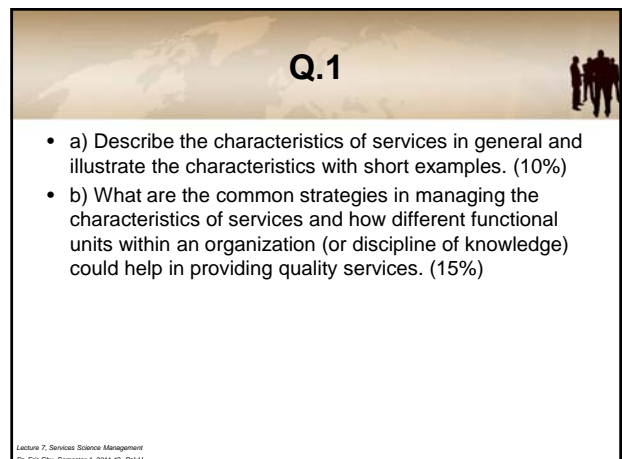
Exam. Questions Review

Marketing Management



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Q.1



- a) Describe the characteristics of services in general and illustrate the characteristics with short examples. (10%)
- b) What are the common strategies in managing the characteristics of services and how different functional units within an organization (or discipline of knowledge) could help in providing quality services. (15%)

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Q.1 Answer

- a) The characteristics of services are **inconsistent** – service is varying from time to time across different employees, **intangible** – service cannot be touch or seen, **inseparable** – service will need the cooperation of customer with the service provider, and **inventory** – service is perishable and not able to store. The answer should describe correct illustration of examples
- b) The common strategy in managing the characteristics of services including managing the **people** - training and education, **process** – design of service systems, and **physical evidence** – tangible elements to imply the level of services. In order to provide good services, the services triangle highlighted the key functional areas including strategic management, marketing management, operations management, human resources management, and information technology management

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Q.2

- a) Describe the measurement of service quality in terms of the disconfirmation approach and explain the factors that would affect the disconfirmation process (8%);
- b) Evaluate how the disconfirmation measurement is represented within the Gaps Model of Service Quality and briefly explain how management could make use of such measurement on service improvements (4%);
- c) Compare service quality in general (Servqual) and online service quality (E-S-Qual) in terms of measurement dimensions and application in different service environment (8%);
- d) Discuss the role of service quality in one of the technology adoption models (8%).

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Q.2 Answer (1)

- 1a) Service quality satisfaction is commonly measured in terms of customer expectation and perception. Disconfirmation would mean the **differences/gaps between customer expectation and perception**. Students should be able to illustrate the concepts of service quality satisfaction in terms of desire service, adequate service, and zone of tolerance. Factors associated with the desire and adequate service should be explained as below:
 - Desire service** – lasting service intensifiers, personal needs;
 - Adequate service** – temporary service intensifiers, perceived service alternatives, customers' perceived roles, situation factors and predicted service.

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Q.2 Answer (2)

- 1b) The key service quality measurement lies on the customer feeling about the service quality environment. **Customer gap** in the Gaps Model specifically points to the customer feeling in terms of the disconfirmation approach. By way of understanding the customer gap, managers should identify the key source of customer dissatisfaction in terms of the **4 provider gaps** and improvements should be focus on the key provider gap in order to close the customer gap.
- 1c) The 5 dimensions of Servqual and the 7 dimensions of the E-S-Qual should be discussed in details. It should highlight the special **recovery dimensions** as found in the E-S-Qual for online service environments.
- 1d) Both Delone and McLean Model and Technology Acceptance Model are taken into considerations of **service quality** in estimating success in technology adoption. The discussion should illustrate the relationship on how service quality would affect user behaviors in accepting new technologies.

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Q.3

- a) Briefly describe the provider gaps and discuss how each of the gaps could help to improve service quality (10%);
- b) Illustrate the disconfirmation approach in measuring customer satisfaction and highlight the factors that would affect customer satisfaction (8%);
- c) Discuss customer gap in the Gaps Model of Service Quality in relation to the service quality dimensions in SERVQUAL (7%).

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Q3. Answer

- a) The discussion should focus along the 4 provider gaps: **knowledge, designs and standards, performance, and communication**. General descriptions for each of the four provider gaps should be given and specific issues that could help to deal with the service process deliveries should be described
- b) Disconfirmation approach refers to the measurement of customer expectation and perception in a service process. The concepts of **customer satisfaction** should be illustrated in terms of desire service, adequate service, and zone of tolerance. Factors associated with the **desire and adequate service** should be explained
- c) Customer gap reflects the customer's perception that falls short of the expectation. Customer gap is the source of dissatisfaction and service provider should narrow the customer gap by way of improvements along the 4 provider gaps. **SERVQUAL further elaborates the customer gap** in terms of customer expectation and perception. The 5 service quality dimensions (reliability, assurance, tangibles, empathy, and responsiveness) should be discussed in light of the disconfirmation approach in service quality and satisfaction measurement

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Q.4

- a) Illustrate the concept of disconfirmation approach in perceptual measurement of service quality and outline the factors that could affect such disconfirmation process (8%).
- b) Define service quality and explain how Servqual applies the concept of disconfirmation in measuring service quality (8%).
- c) Interpret the following results in terms of the requirements on service quality in the fast food industry with the sample results in the below (9%):

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Q.4

Questions on Service Quality Measurement

Expectation

- Assurance
- Reliability
- Empathy
- Responsiveness
- Tangible

Their employees should get adequate support from these firms to do their jobs well. They should provide their services at the time they promise to do so. They shouldn't be expected to have operating hours convenient to all their customers. It is okay if they are too busy to respond to customer requests promptly. Their employees should be well dressed and appear neat.

Perception

- Empathy
- Reliability
- Tangible
- Responsiveness
- Assurance

The Canteen does not have operating hours convenient to all their customers. The Canteen provides its services at the time it promise to do so. The Canteen's employees are well dressed and appear neat. Employees of the Canteen are too busy to respond to customer requests promptly. Employees get adequate support from the Canteen to do their jobs well.

Results from the above Survey

	Expectation	University Canteen*	Restaurant 1*	Restaurant 2*
Reliability	6.307	1.906	1.029	1.600
Assurance	5.984	1.907	1.428	1.342
Tangible	6.046	0.937	0.548	0.742
Empathy	3.081	0.593	-0.343	-0.429
Responsiveness	3.092	0.718	0.058	-0.029

* Gap for specific restaurant (expectation - perception)

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Q.4 Answer (1)

- a) Service quality commonly measured in terms of customer expectation and perception. **Disconfirmation** would mean the differences/gaps between customer expectation and perception. Students should be able to illustrate the concepts of service quality satisfaction in terms of **desire service**, **adequate service**, and **zone of tolerance** (4%). Factors associated with the desire and adequate service should be explained as below:
 - Desire service – **lasting service intensifiers, personal needs** (2%);
 - Adequate service – **temporary service intensifiers, perceived service alternatives, customers' perceived roles, situation factors and predicted service** (2%).

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Q.4 Answer (2)

- b) The key service quality measurement lies on the customer feeling about the service quality environment. Servqual makes use of measuring the **expectation and perception** of customer to keep track of the **satisfaction from service quality** (4%). Students should also be able to define the five dimensions of service quality (4%).
- c) Students should be able to interpret the results with some of the observations in the below (9%):
 - **Reliability** is one of the service quality dimensions that exhibits significant effects over different industry;
 - A negative figure above would mean there is no gap on the performance measurement and the customer might have a **delight** to the service quality dimension;
 - Canteen has the poorest performance but yet the location and price (part of the **physical and process**) make up the value of services.

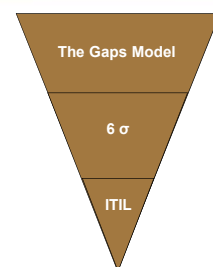
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Services Science Management

Sample Group Project

Approach for the Group Project

- Identify a customer problem with a service process (Marketing Management)
- Design and planning of the new process through operational tools (Operations Management)
- Evaluate the opportunities for innovation and enhancement through IT services (IT Management)



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Sample Project Structure

- Cover page
- Introduction to the company, a service process, and the problem
- Analysis with Gaps Model
- Analysis and redesign of the service process
- Analysis with the ITIL framework
- References
- Appendix

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Sample Background

- Stock Exchange System for a security trading company
- Online stock purchase, sales, market information update, and account information update
- Complaints handled by front line – service desk
- Prioritize by Incident and Problem Management of ITIL framework
- Slow response of the online market data

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Sample Service Encounters



★ Critical incident

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Sample Analysis with Service Quality Dimensions



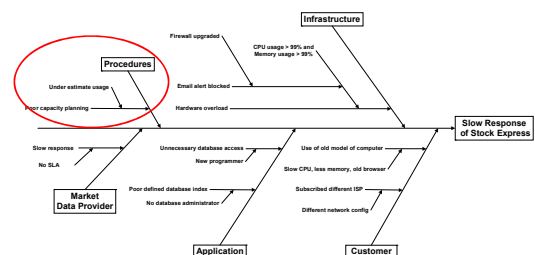
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Sample Analysis with the Gaps Model

		Gap 1	Gap 2	Gap 3	Gap 4
	Customer Expectation	Management Perceptions of Customer Expectations	Customer-Driven Design and Standards	Service Delivery	...
System Function Response Time:	1-3 sec	8-10 sec during Peak hour 3-5 sec during Non-peak hour	Focus on Cost effective service design and infrastructure.	8-10 sec during Peak hour 3-5 sec during Non-peak hour	...
System Flow:	Simple Steps to complete a transaction	Simple Steps	To design and develop a user-friendly & simple interface	Simple Interface to complete a transaction with 1-2 clicks	...

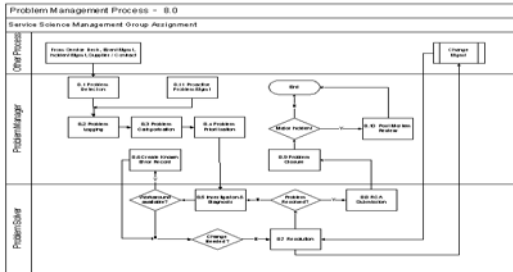
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Sample Root Cause Analysis



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Sample Analysis with ITIL Problem Management



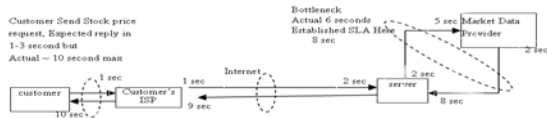
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Sample Problem Management Processes

- Problem detection
- Problem logging
- Problem categorization
- Problem prioritization
- Investigation and diagnosis
- Create known error records
- Create resolution
- Root cause analysis submission

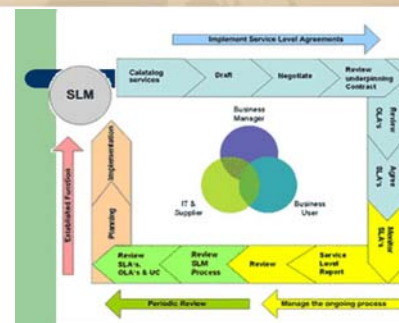
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Sample System Diagram



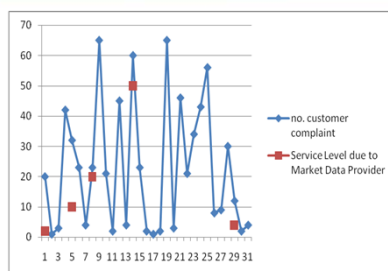
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Sample Service Level Management



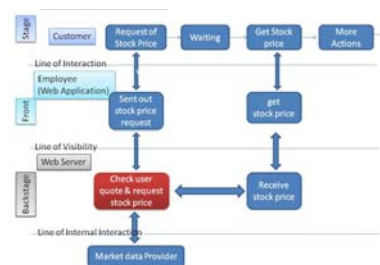
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Sample Run Chart to Control SLA



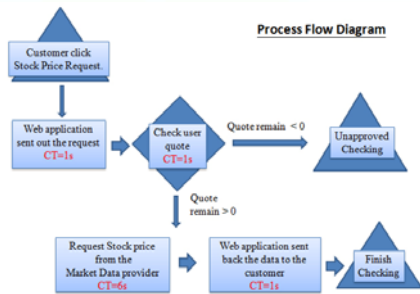
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Sample Process Blueprinting



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Sample Bottleneck Analysis



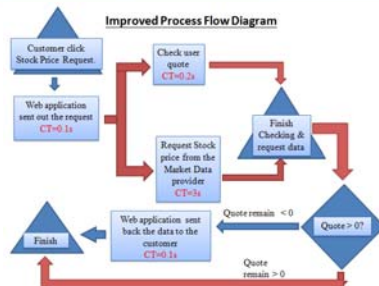
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Sample Process Redesign



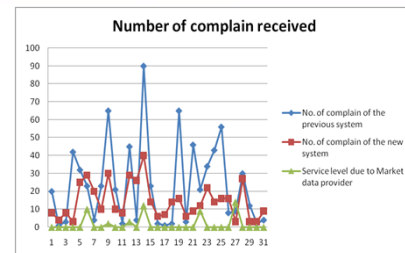
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Sample Recommendations



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Sample Control Run Chart



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