

SERVICES SCIENCE AND SERVICE OPERATIONAL MANAGEMENT

UNIT 02

LECTURE 04

Unit-2 New Service Development

2.7	Service Process Analysis
	Service Encounter Triad – Service Organization,
2.8	Contact Personnel and Customer
2.9	Service Profit Chain
2.10	Technology in Service Encounter

Virupakshan K

+91-9840847872 | VIRU@KART.LA

21MGH402T SERVICES SCIENCE AND SERVICE OPERATIONS MANAGEMENT SYLLABUS

VirupakshanK@gmail.com

Unit-1 - Service – Definition	9 Hour
<i>Characteristics, Stages of economic development, Role of services in economy, Experience economy, Service science, Service dominant logic, Service systems, Service operations, Open system view of service operations, Service package, Strategic service vision, Competitive service strategies, Strategic analysis, Sustainability in services, Competitive role of information in services</i>	
Unit-2 - New Service Development	9 Hour
<i>Innovation in services, Service blueprinting, Service process design, Service system design, Service facility design and layout, Strategic location considerations, Service process analysis, Service encounter triad - Service organization, Contact personnel and Customer, Service profit chain, Technology in service encounter</i>	
Unit-3 - Service Quality Dimensions	9 Hour
<i>Measuring service quality – SERVQUAL gap model, walk through audit, Service quality by design, achieving service quality, Quality and productivity improvement process, Quality tools, Benchmarking, Improvement programs</i>	
Unit-4 - Strategies	9 Hour
<i>Strategies for managing service demand and service capacity, Forecasting service demand, Forecasting models – Subjective models, Causal models and Time-series models, Yield management and its application, Queuing systems, Essential features of queuing systems</i>	
Unit-5 - Managing Service Projects	9 Hour
<i>Characteristics of project, Project management – Principles, Process, and Building team, Selecting the project manager, Roles and responsibilities of project manager, Techniques for project management – PERT, CPM and Gantt charts, Monitoring project performance, Globalization of services, Global service strategies, Domestic growth and expansion strategies, Franchising</i>	

SSSOM Syllabus

Unit-1 Service – Definition

1.1	Characteristics
1.2	Stages of Economic Development
1.3	Role of Services in Economy
1.4	Experience Economy
1.5	Service Science
1.6	Service Dominant Logic
1.7	Service Systems
1.8	Service Operations
	Open System View of Service
1.9	Operations
1.1	Service Package
1.11	Strategic Service Vision
1.12	Competitive Service Strategies
1.13	Strategic Analysis
1.14	Sustainability in Services
	Competitive Role of Information in
1.15	Services

Unit-2 New Service Development

2.1	Innovation in Services
2.2	Service Blueprinting
2.3	Service Process Design
2.4	Service System Design
2.5	Service Facility Design and Layout
2.6	Strategic Location Considerations
2.7	Service Process Analysis
	Service Encounter Triad – Service
2.8	Organization, Contact Personnel and
	Customer
2.9	Service Profit Chain
2.10	Technology in Service Encounter

Unit-3 Service Quality Dimensions

3.1	Measuring Service Quality
3.2	SERVQUAL Gap Model
3.3	Walk Through Audit
3.4	Service Quality by Design
3.5	Achieving Service Quality
	Quality and Productivity Improvement
3.6	Process
3.7	Quality Tools
3.8	Benchmarking
3.9	Improvement Programs

Unit-4 Strategies

4.1	Strategies for Managing Service Demand and Service Capacity
4.2	Forecasting Service Demand
4.3	Forecasting Models – Subjective Models
4.4	Forecasting Models – Causal Models
4.5	Forecasting Models – Time-Series Models
4.6	Yield Management and its Application
4.7	Queuing Systems
4.8	Essential Features of Queuing Systems

Unit-5 Managing Service Projects

5.1	Characteristics of Project
5.2	Project Management – Principles, Process and Building Team
5.3	Selecting the Project Manager
5.4	Roles and Responsibilities of Project Manager
5.5	Techniques for Project Management – PERT
5.6	Techniques for Project Management – CPM
5.7	Techniques for Project Management – Gantt Charts
5.8	Monitoring Project Performance
5.9	Globalization of Services
5.1	Global Service Strategies
5.11	Domestic Growth and Expansion Strategies
5.12	Franchising

Lecture 03 Topics

VirupakshanK@gmail.com

Unit-1 Service – Definition

1.1	Characteristics
1.2	Stages of Economic Development
1.3	Role of Services in Economy
1.4	Experience Economy
1.5	Service Science
1.6	Service Dominant Logic
1.7	Service Systems
1.8	Service Operations
1.9	Open System View of Service Operations
1.1	Service Package
1.11	Strategic Service Vision
1.12	Competitive Service Strategies
1.13	Strategic Analysis
1.14	Sustainability in Services
1.15	Competitive Role of Information in Services

Unit-2 New Service Development

2.1	Innovation in Services
2.2	Service Blueprinting
2.3	Service Process Design
2.4	Service System Design
2.5	Service Facility Design and Layout
2.6	Strategic Location Considerations
2.7	Service Process Analysis
2.8	Service Encounter Triad – Service Organization, Contact Personnel and Customer
2.9	Service Profit Chain
2.10	Technology in Service Encounter

Unit-3 Service Quality Dimensions

3.1	Measuring Service Quality
3.2	SERVQUAL Gap Model
3.3	Walk Through Audit
3.4	Service Quality by Design
3.5	Achieving Service Quality
3.6	Quality and Productivity
3.7	Quality Tools
3.8	Benchmarking
3.9	Improvement Programs

Unit-4 Strategies

4.1	Strategies for Managing Service Demand and Service Capacity
4.2	Forecasting Service Demand
4.3	Forecasting Models – Subjective Models
4.4	Forecasting Models – Causal Models
4.5	Forecasting Models – Time-Series Models
4.6	Yield Management and its Application
4.7	Queuing Systems
4.8	Essential Features of Queuing Systems

Unit-5 Managing Service Projects

5.1	Characteristics of Project
5.2	Project Management – Principles, Process and Building Team
5.11	Domestic Growth and Expansion Strategies
5.12	Franchising

2.7 Service Process Analysis
2.8 Service Encounter Triad – Service Organization, Contact Personnel and Customer
2.9 Service Profit Chain
2.10 Technology in Service Encounter

2.7.1 Service Process Analysis

Process analysis examines service activities to **identify inefficiencies and opportunities** for improvement.

Objectives

- Reduce waiting time
- Improve productivity
- Eliminate waste

Tools Used

Flowchart

Visual representation of process.

Gantt Chart

Schedule of activities.

Process Mapping

Detailed workflow analysis.

Benefits

- Better resource utilization
- Faster service delivery
- Improved customer satisfaction

Example

Bank Loan Process

Application



Verification



Approval

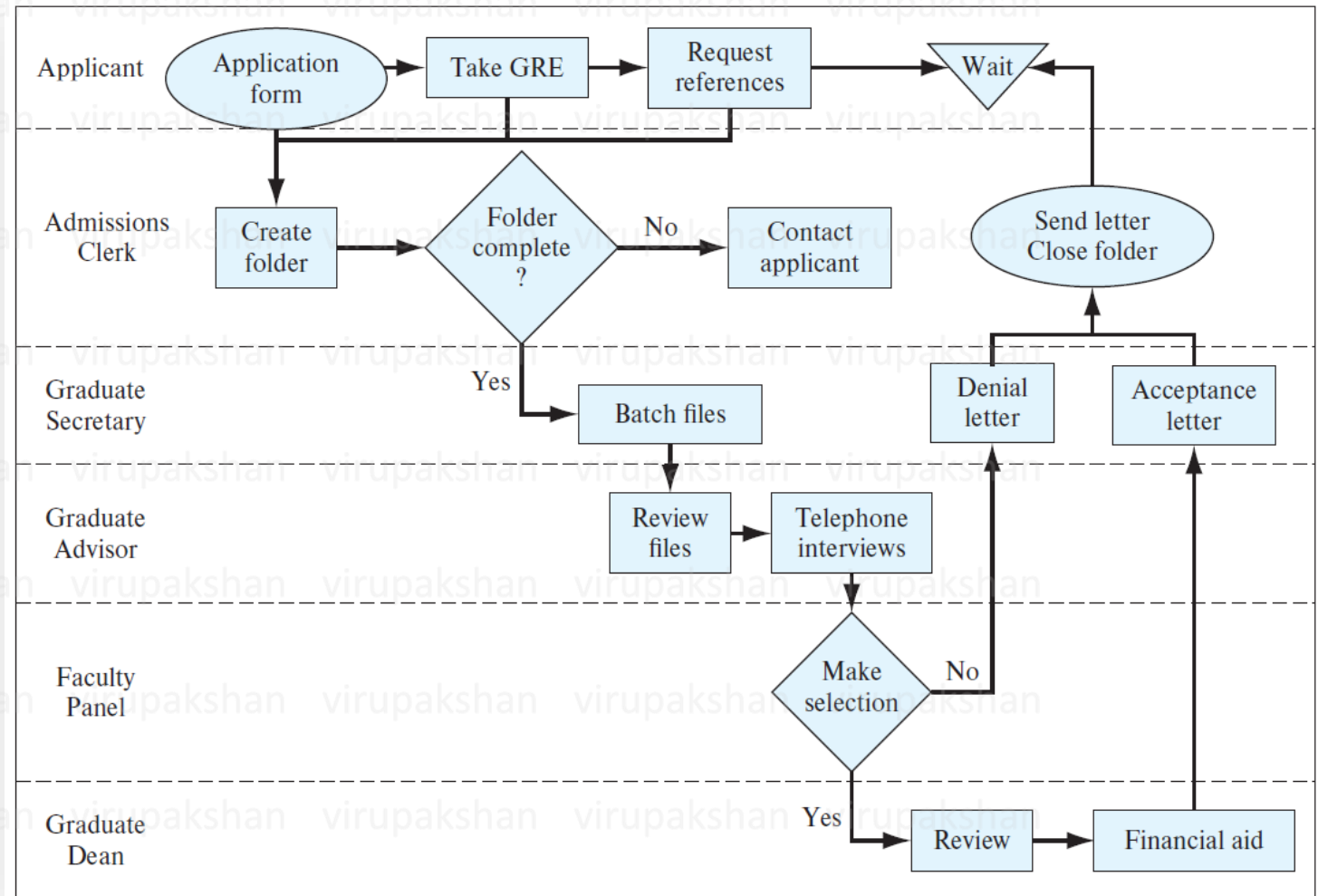


Disbursement

2.7.2 Service Process Analysis: Tools Used - Flowchart

Visual representation of process.

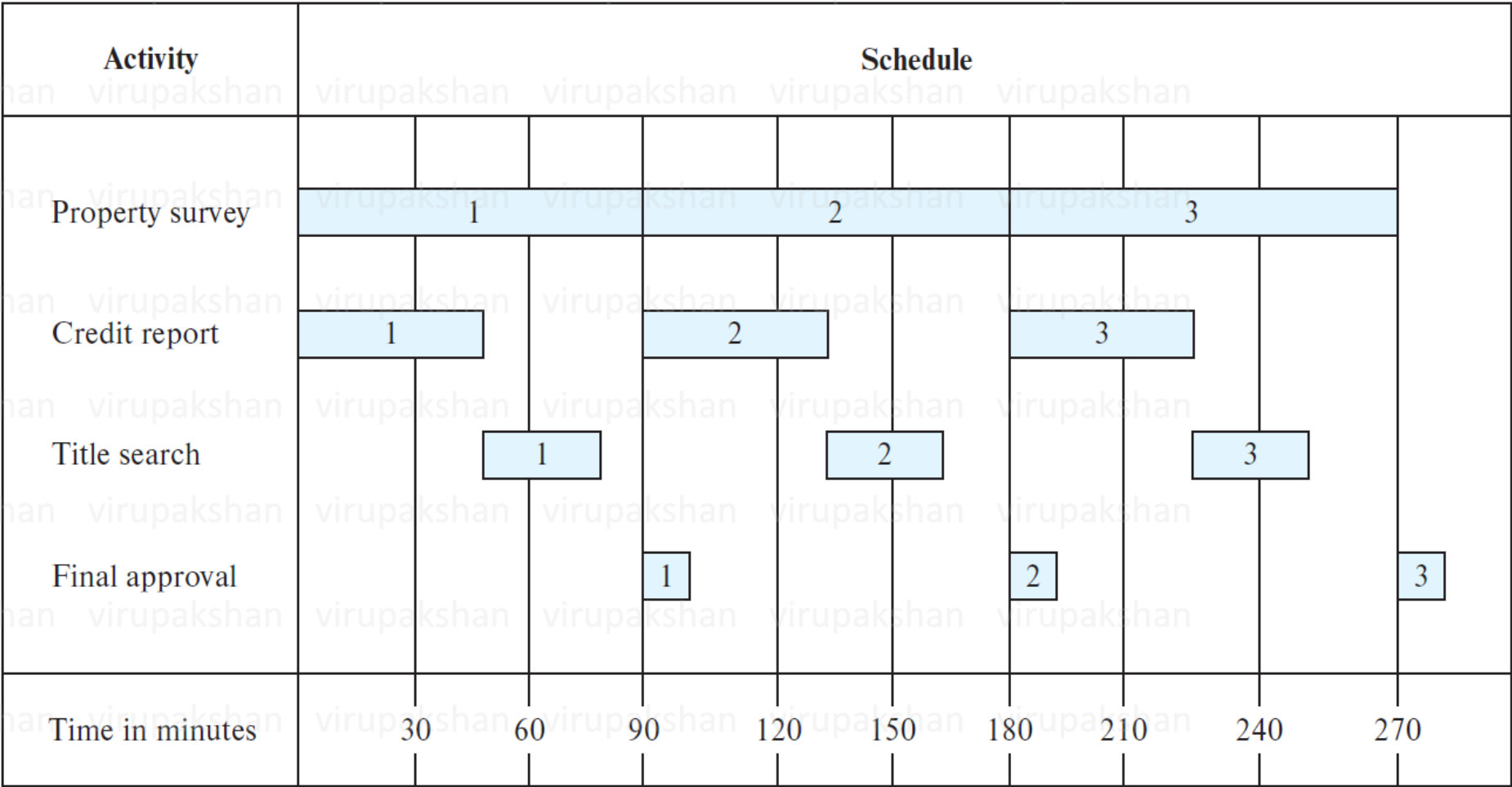
Flowchart of Graduate School Admissions



2.7.3 Service Process Analysis: Tools Used – Gantt Chart

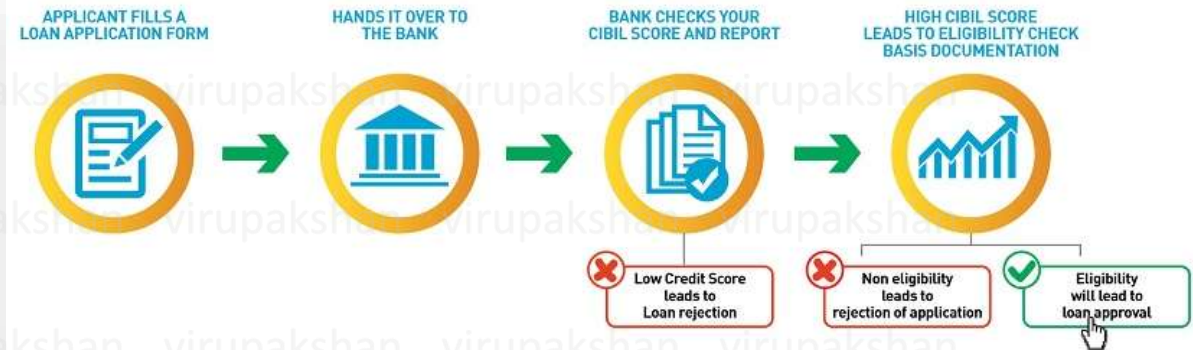
Schedule of activities.

Gantt Chart of Mortgage Service



2.7.4 Service Process Analysis : Tools Used – Process Mapping

Detailed workflow analysis.



Real-World Improvement Example

**Before
Improvement**

Average Time
= 7 days

Application
↓
Manual Verification
↓
Manager Approval
↓
Loan Processing

**After
Improvement**

Average Time
= 2 days

Application
↓
Automated Verification
↓
Credit Scoring Software
↓
Manager Approval
↓
Loan Processing

2.8.0 EMERGENCE OF SERVICE ENCOUNTER

Types of Service Encounters:

- **Remote Encounters:** These involve interactions through digital channels, such as websites, apps, or email.
- **Phone Encounters:** These occur over the phone when customers seek assistance or information.
- **Face-to-Face Encounters:** These happen in person, such as when a customer visits a store or interacts with service staff².

Phone-Phone



Face-to-Face



Online



2.8.1 Service Encounter Triad – Service Organization, Contact Personnel and Customer

The service encounter triad **captures the relationships between three key parties** in a service interaction:

1. Service Organization:

- This includes the company or service provider.
- **Efficiency versus Satisfaction:** Organizations may standardize service delivery to be efficient, imposing strict operating procedures. However, this can limit contact personnel's discretion and diminish job satisfaction.

2. Contact Personnel:

- These are the frontline employees who directly interact with customers.
- **Contact Personnel Dominated Encounter:** When contact personnel limit the scope of the encounter to reduce stress, customers may feel restricted.
- **Autonomous Position:** When given autonomy, contact personnel may perceive control over customers, relying on their expertise.

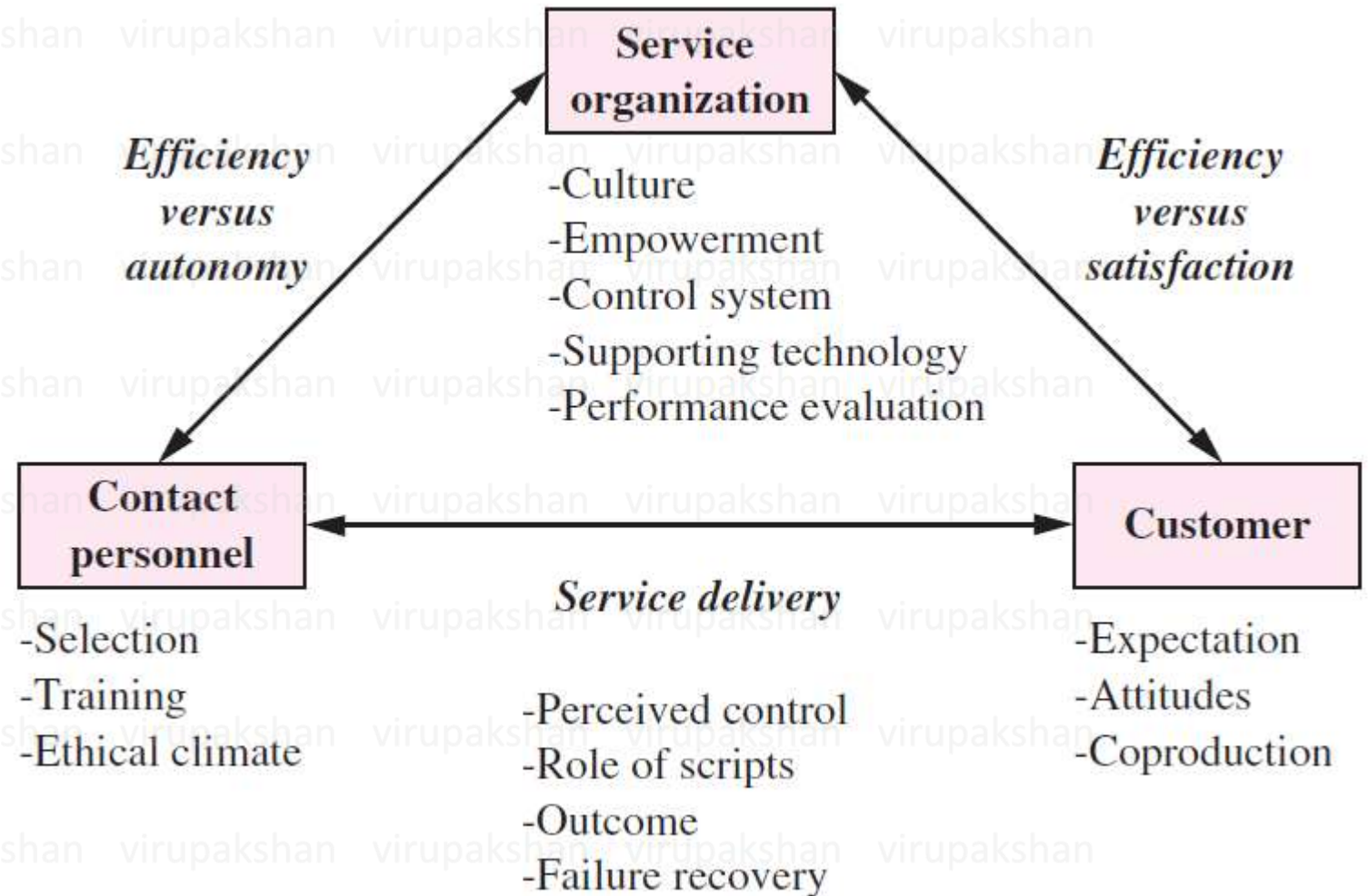
3. Customer:

- Customers play a crucial role in service encounters.
- **Customer Dominated Encounter:** Opportunities arise when services are either standardized (self-service) or highly customized, allowing customers to control the interaction.

Ideally, **all three parties collaborate to create a beneficial service encounter**

2.8.2 SERVICE ENCOUNTER TRIAD

The **service encounter triad** shown in the picture captures the **relationships** between the three parties in the service encounter and **suggests possible sources of conflict**



2.8.3 SERVICE ENCOUNTER TRIAD

Service manager wants **efficiency** in service delivery to increase profits. They will impose rules and procedures on contact personnel (service provider) to bring standardization, which may result in **dissatisfied customers**.

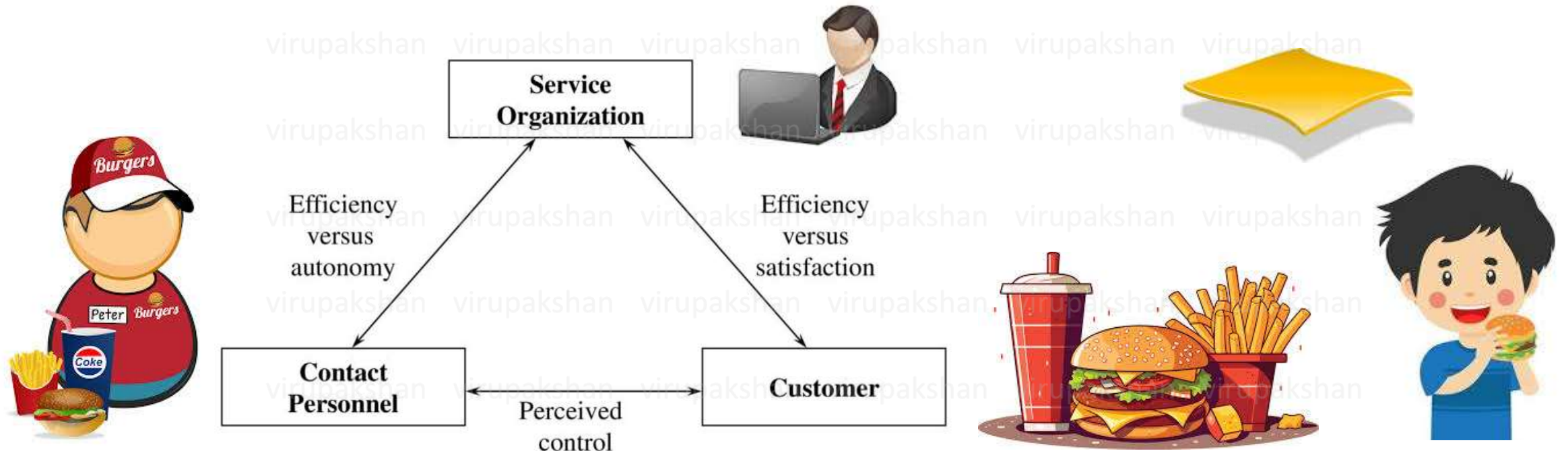
Alternatively, **service provider** wants to **control the behavior** of the customer to make their own work manageable and less stressful.

However, the **customer** wants to **control the service encounter** to derive the most benefit from it.

2.8.3a SERVICE ENCOUNTER TRIAD – SERVICE MANAGER

Service manager wants **efficiency** in service delivery to increase profits. They will impose rules and procedures on contact personnel (service provider) to bring standardization, which may result in **dissatisfied customers**.

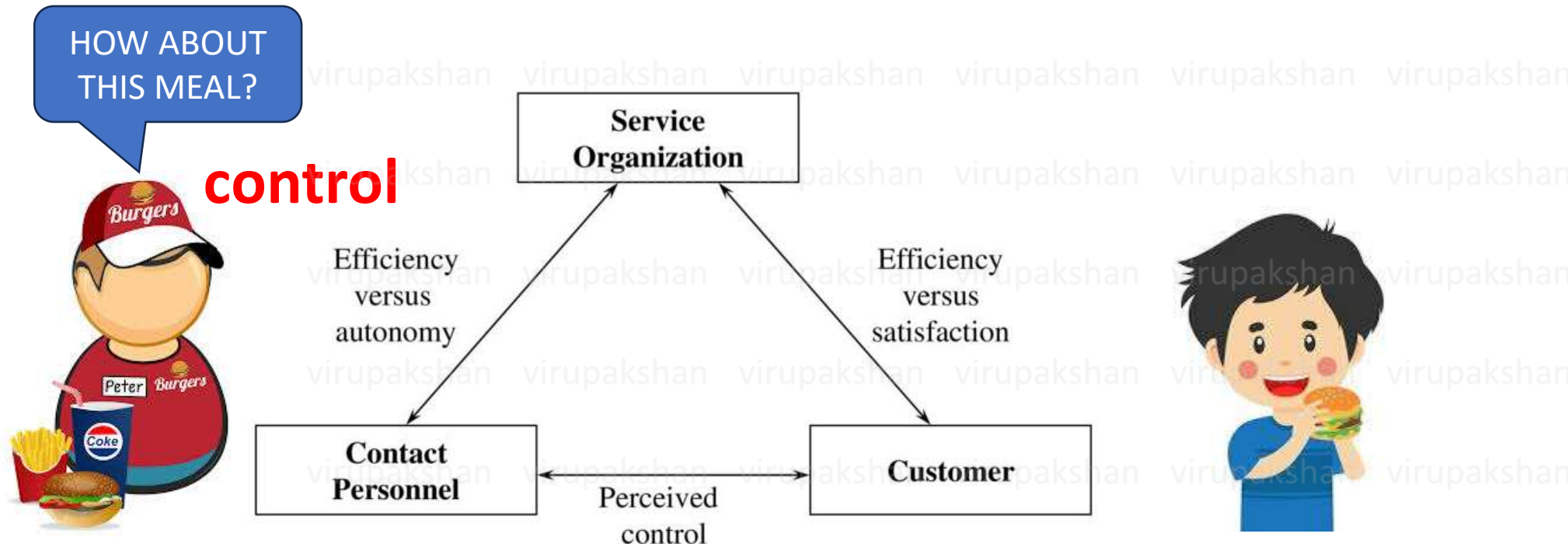
e.g. Server in a restaurant refuse to give extra side dish to the Customer due to restaurant policy - leading to dissatisfied customer.



2.8.3b SERVICE ENCOUNTER TRIAD – SERVICE PROVIDER

Alternatively, **Service Provider** wants to **control the behavior** of the **Customer** to make their own work manageable and less stressful.

e.g. Server in a restaurant manipulates the Customer to order a dish that is readily available and easy to serve.



2.8.3c SERVICE ENCOUNTER TRIAD - CUSTOMER

However, the **Customer** wants to **control the service encounter** to derive the most benefit from it.

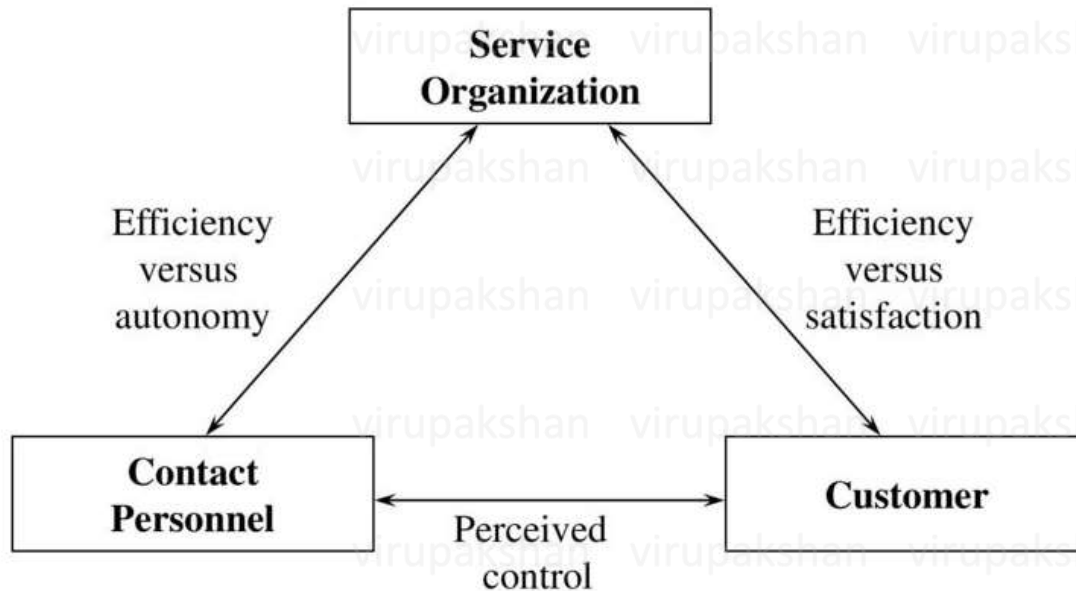
e.g. Customer argues about an offer to get discount



Q. Explain how the “Service Encounter Triad” suggests possible sources of conflict.

Answer:

The **service encounter triad** shown in the diagram captures the relationships between the three parties.



a) **Service Organisation** wants **efficiency** in service delivery to increase profits. They will impose rules and procedures on **Contact Personnel** (service provider) to bring standardization, which may result in **dissatisfied Customers**.

e.g. Server in a restaurant refuse to give extra side dish to the Customer due to restaurant policy - leading to dissatisfied customer.

b) Alternatively, **Service Provider** wants to **control the behavior** of the **Customer** to make their own work manageable and less stressful.

e.g. Server in a restaurant manipulates the Customer to order a dish that is readily available and easy to serve.

c) However, the **Customer** wants to **control the service encounter** to derive the most benefit from it.

e.g. Customer argues about an offer to get discount

2.8.4 ENCOUNTER DOMINATED BY THE SERVICE ORG

To achieve **efficiency** and follow a **cost leadership** strategy, an **organization** may **standardize service delivery** by imposing strict operating procedures and limit the discretion of **contact personnel**, **example**, McDonald's.

Success here can come from teaching the customer **what not to expect** from their service.

2.8.5 ENCOUNTER DOMINATED BY THE SERVICE ORG

To achieve **efficiency** and follow a **cost leadership** strategy, an **organization** may **standardize service delivery** by imposing strict operating procedures and limit the discretion of **contact personnel**, E.G. McDonald's.



control



SORRY, NO EXTRA CHEESE FOR THIS



Q. Explain “Encounter Dominated by the Service Org”

Answer:

To achieve **efficiency** and follow a **cost leadership** strategy, an **organization** may **standardize service delivery** by imposing strict operating procedures and limit the discretion of **contact personnel**,

Success here can come from teaching the customer **what not to expect** from their service.

For example:

1) Consider a fast-food restaurant like **Dominos Pizza**.

2) When a **Customer** orders a pizza, it would have only a limited quantity of the toppings as per SOP.

3) If the **Customer** requests for additional topping, it may not be offered for free, but for an additional cost.

4) Thus by imposing strict operating procedures and limiting the discretion of **Contact Personnel**(Service Provider – in the restaurant), the organization could achieve efficiency and be able to follow cost leadership.

5) Thus, the Organization **dominates** the **service encounter** while the **Customer** and **Contact Personnel** are unable to deviate from the SOP.



control



Q. Explain “Encounter Dominated by the Service Org”

Answer:

To achieve **efficiency** and follow a **cost leadership** strategy, an **organization** may **standardize service delivery** by imposing strict operating procedures and limit the discretion of **contact personnel**,

Success here can come from teaching the customer **what not to expect** from their service.

For example:

- 1) Consider a fast-food restaurant like **Dominos Pizza**.
- 2) When a **Customer** orders a pizza, it would have only a limited quantity of the toppings as per SOP.

3) If the **Customer** requests for additional topping, it may not be offered for free, but for an additional cost.

4) Thus by imposing strict operating procedures and limiting the discretion of **Contact Personnel**(Service Provider – in the restaurant), the organization could achieve efficiency and be able to follow cost leadership.

5) Thus, the Organization **dominates** the **service encounter** while the **Customer** and **Contact Personnel** are unable to deviate from the SOP.



2.8.6 CONTACT PERSONNEL—DOMINATED ENCOUNTER

Service personnel attempt to **limit the scope** of the service encounter to reduce their own stress in meeting demanding **customers**.

The **customer** is expected to place considerable **trust in the contact person's judgment** because of the **service provider's** perceived expertise.

Example doctor-patient.

Q. Explain “Contact Personnel-Dominated Encounter” with example

Answer:

Service personnel attempt to **limit the scope** of the service encounter to reduce their own stress in meeting demanding **customers**.

The **customer** is expected to place considerable **trust in the contact person’s judgment** because of the **service provider’s** perceived expertise.

For example:

When a **Patient** (Customer) consults a **Doctor** (Contact Personnel), the Patient has to trust in the Doctor’s judgement because of the Doctor’s perceived expertise.

Thus such service encounters are “**Contact Personnel Dominated Encounter**”



“**Contact Personnel Dominated Encounter**”

2.8.7 CUSTOMER-DOMINATED ENCOUNTER

In standardized service, **self-service** is an option that gives the **customer** complete control over the limited service that is provided.

Example, a **vending machine**, the customer need not interact with anyone.

The result can be very efficient and satisfying to the customer who needs or desires very little service.

Q. Explain “Customer Dominated Encounter” with example

Answer:

In standardized service, **self-service** is an option that gives the **Customer** complete control over the limited service that is provided. This is called as “Customer Dominated Encounter” – as there is no Contact Personnel or Service Organization involvement in the “self-service”.

The result can be very efficient and satisfying to the **customer** who needs or desires very little service.

Examples:

- 1) In a vending machine, the customer need not interact with anyone.
- 2) In an ATM, the customer need not interact with anyone.



**“Customer
Dominated Encounter”**

2.9 Service Profit Chain

The Service Profit Chain links employee satisfaction, customer satisfaction, and profitability.

Employee Satisfaction



Service Quality



Customer Satisfaction



Customer Loyalty



Profitability

Employee Satisfaction

Happy employees perform better.

Service Quality

Better service attracts customers.

Customer Satisfaction

Satisfied customers return.

Customer Loyalty

Repeat customers generate revenue.

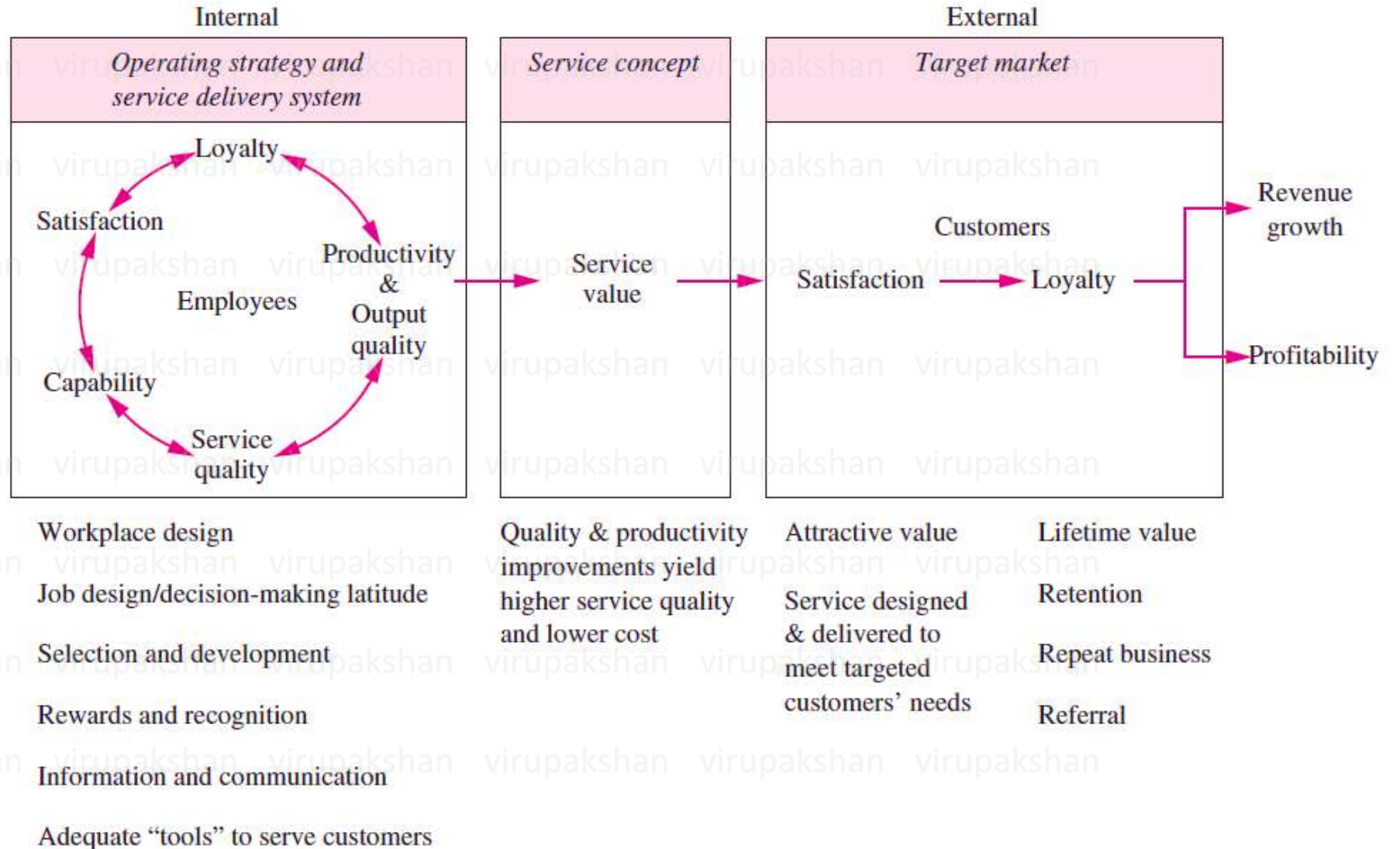
Profitability

Business growth occurs.

2.9.1 SERVICE PROFIT CHAIN

The **service profit chain** proposes a relationship that links **profitability**, **customer loyalty** and **service value** to **employee satisfaction**, **capability** and **productivity**.

The image shows that **profitability and revenue growth** are derived from **loyal customers**.

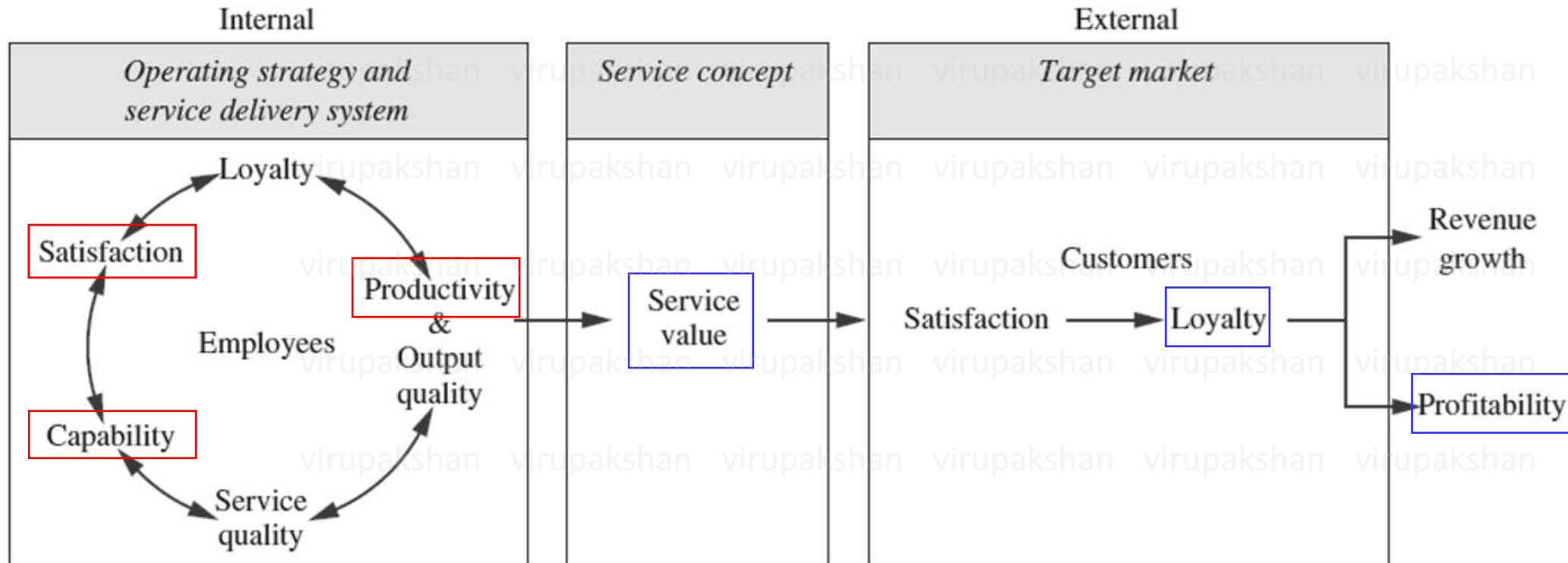


Q. What is “Service Profit Chain”? Draw a simple diagram.

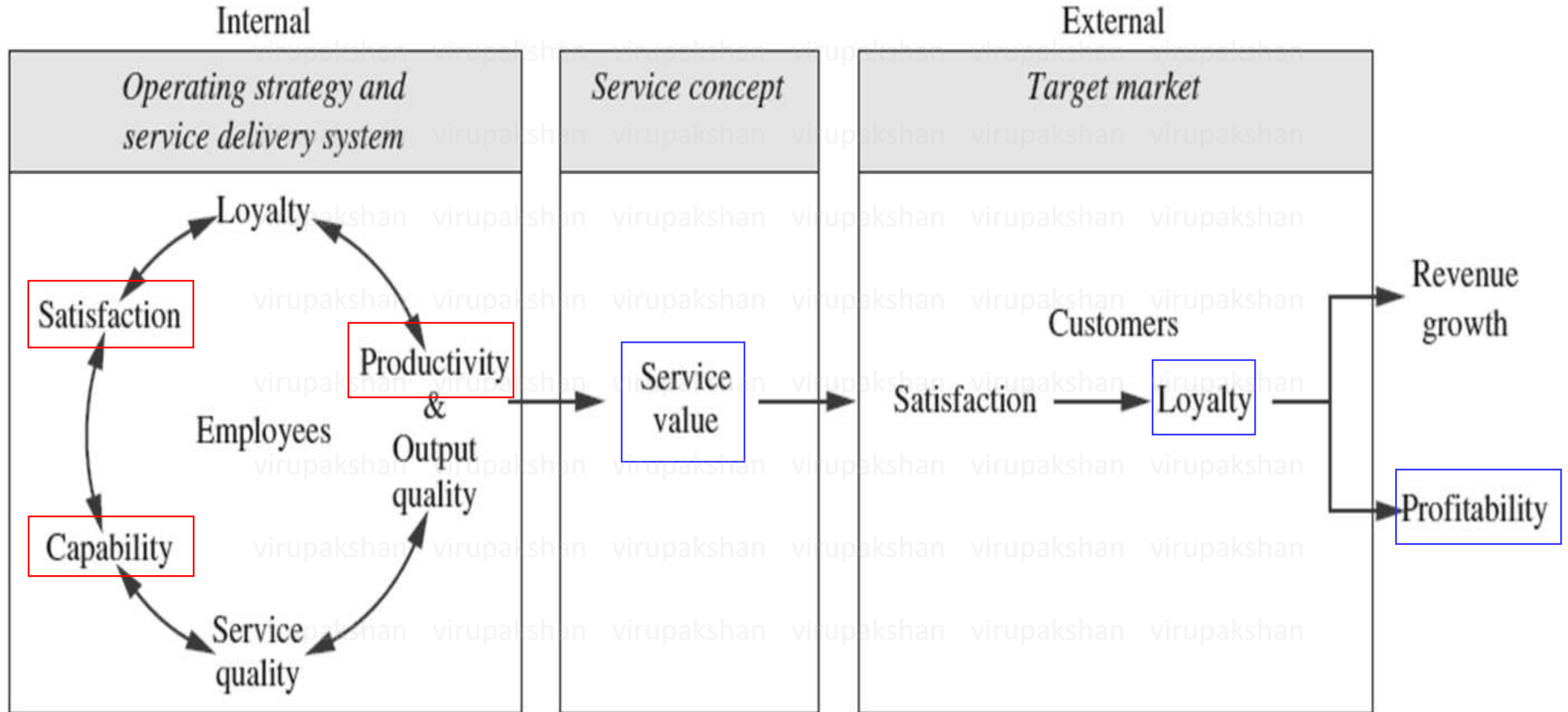
Answer:

The **Service Profit Chain** proposes a relationship that links **profitability**, **customer loyalty** and **service value** to **employee satisfaction**, **capability** and **productivity**.

The diagram shows that **profitability** and **revenue growth** are derived from **loyal customers**.



“Service Profit Chain”



2.10.1 Technology in Service Encounter

Advances in communications and information technology are having a profound effect on ways customers interface with service providers. The **five modes of technology's contribution** to the service encounter are:

The **A mode** is called **technology-free service encounter**, where the customer is in physical proximity to and interacts with a human service provider. **Example:** This mode represents the traditional high-touch service that we experience at a hairdresser salon

The **B mode** is called **technology-assisted service encounter**, because only the service provider has access to the technology to facilitate the delivery of face-to-face service. **Example:** Many health care procedures fall in this category such as an eye exam during the office visit to an optometrist or full mouth X-ray at the dentist.

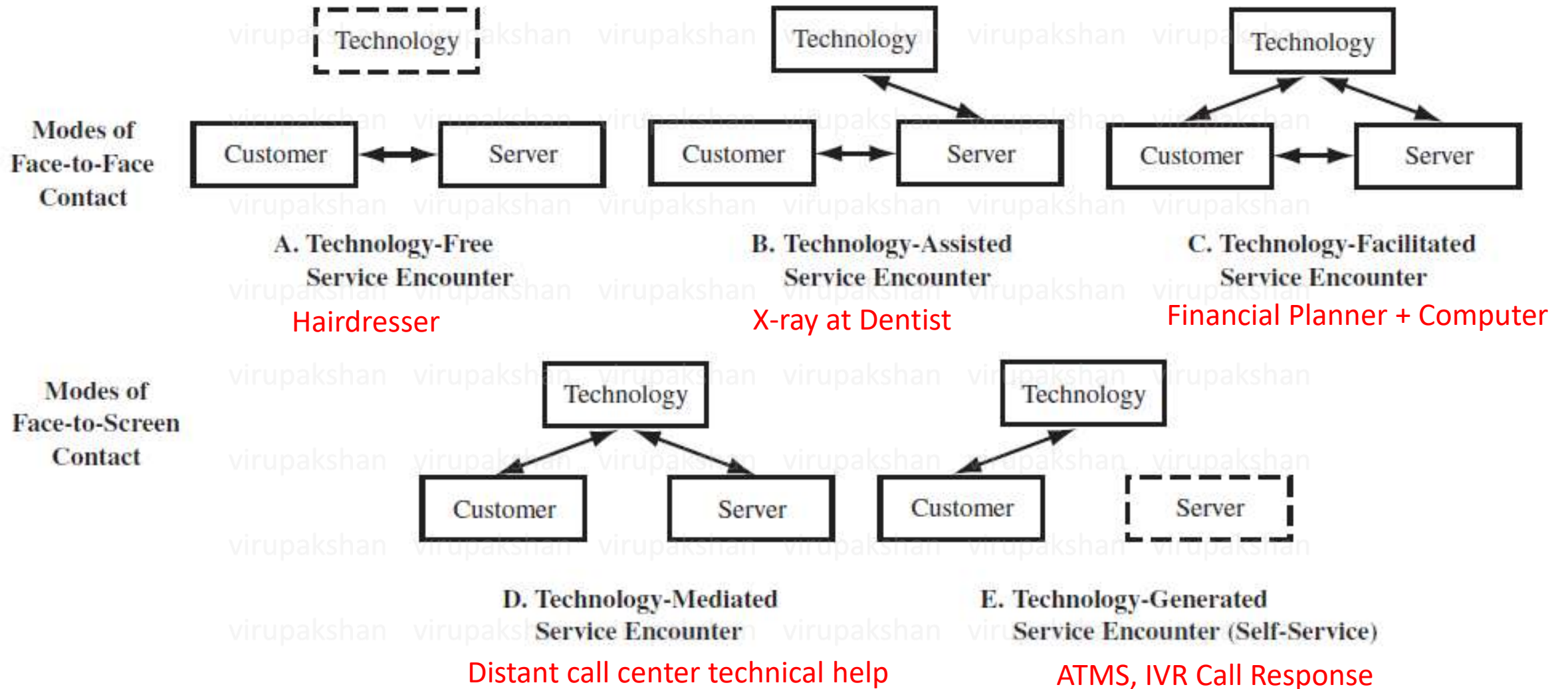
The **C mode** is called **technology-facilitated service encounter**, because both the customer and service provider have access to the same technology. **Example:** A financial planner in consultation with a client can refer to a financial model on a personal computer to illustrate projected returns for different risk profiles.

The **D mode**, called **technology-mediated service encounter**, the customer and human service provider are not physically co-located and thus the service encounter no longer is the traditional “face-to-face” contact. **Example:** Making a restaurant reservation or getting technical help from a distant call center.

The **E mode**, called **technology-generated service encounter**, the human service provider is replaced entirely with technology that allows the customer to self-serve (i.e., outsourcing the job to their customers). **Examples:** Bank ATMs, online reservations, and interactive voice response (IVR) technology in call centers.

2.10.2 Technology in Service Encounter – MODES OF CONTACT

VirupakshanK@gmail.com

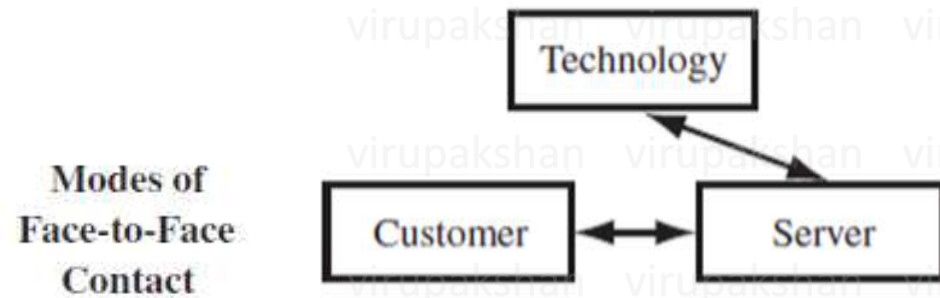


Q. Write briefly any **two modes** of technology's contribution to the service encounter with example.

Answer:

1.1) The “**B mode**” is called **technology-assisted service encounter**, because only the service provider has access to the technology to facilitate the delivery of face-to-face service.

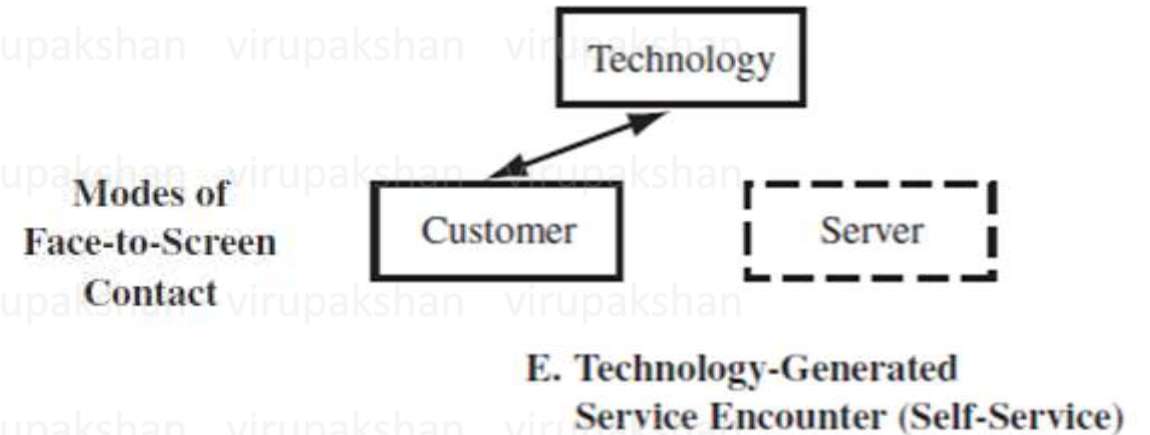
e.g.: X-Ray at Dentist



B. Technology-Assisted Service Encounter

1.2) The “**E mode**”, called **technology-generated service encounter**, the human service provider is replaced entirely with technology that allows the customer to self-serve.

e.g: Bank ATMs



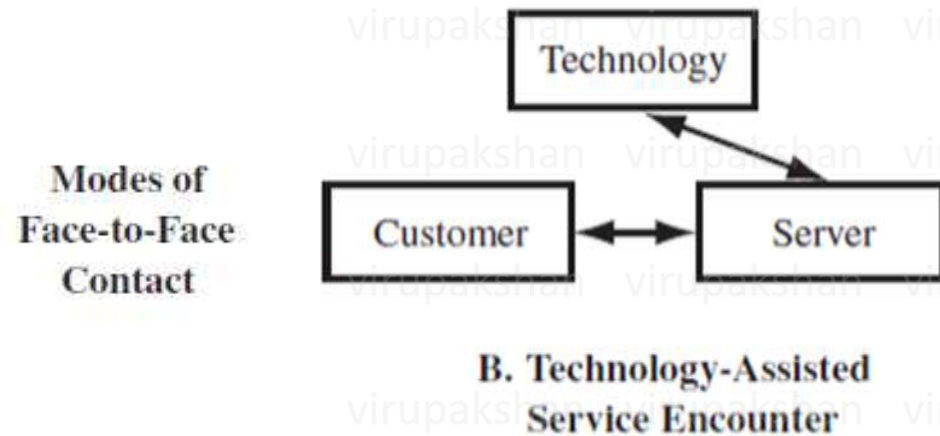
E. Technology-Generated Service Encounter (Self-Service)

Q. Write briefly any **two modes** of technology's contribution to the service encounter with example.

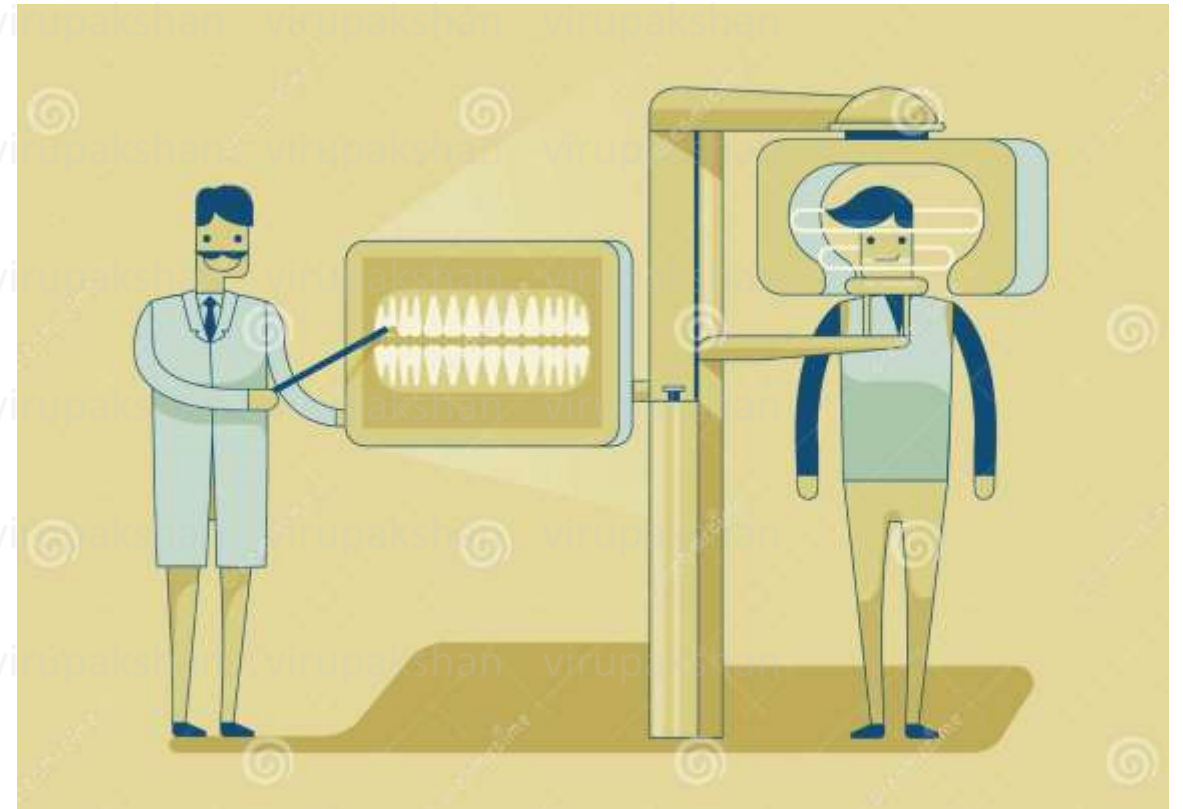
Answer – Part 1:

1.1) The “**B mode**” is called **technology-assisted service encounter**, because only the service provider has access to the technology to facilitate the delivery of face-to-face service.

e.g.: X-Ray at Dentist



“**B mode**” is called **technology-assisted service encounter**,



Q. Write briefly any **two modes** of technology's contribution to the service encounter with example.

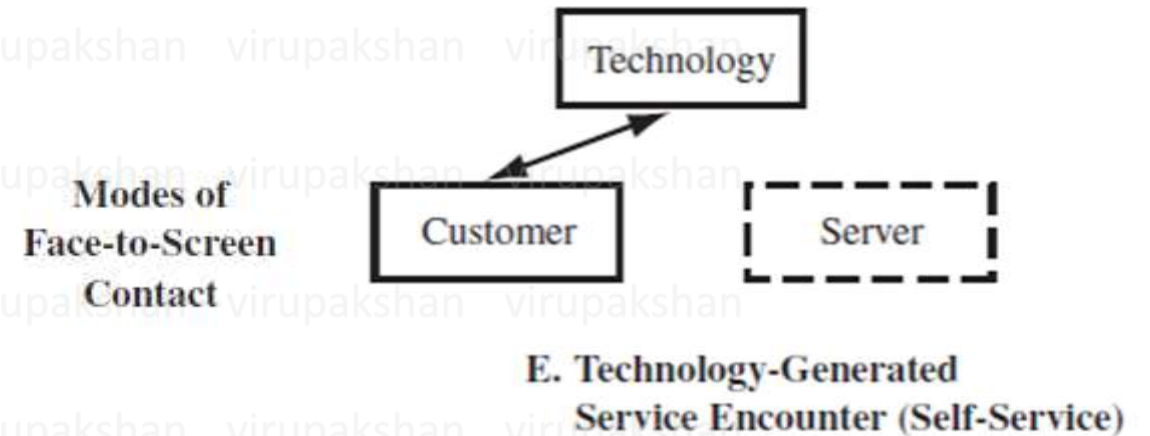
Answer: – Part 2

“E mode” is called **technology-generated service encounter**,



1.2) The **“E mode”**, called **technology-generated service encounter**, the human service provider is replaced entirely with technology that allows the customer to self-serve.

e.g: Bank ATMs



Lecture 03 Topics

Unit-1 Service – Definition

1.1	Characteristics
1.2	Stages of Economic Development
1.3	Role of Services in Economy
1.4	Experience Economy
1.5	Service Science
1.6	Service Dominant Logic
1.7	Service Systems
1.8	Service Operations
1.9	Open System View of Service Operations
1.1	Service Package
1.11	Strategic Service Vision
1.12	Competitive Service Strategies
1.13	Strategic Analysis
1.14	Sustainability in Services
1.15	Competitive Role of Information in Services

Unit-2 New Service Development

2.1	Innovation in Services
2.2	Service Blueprinting
2.3	Service Process Design
2.4	Service System Design
2.5	Service Facility Design and Layout
2.6	Strategic Location Considerations
2.7	Service Process Analysis
2.8	Service Encounter Triad – Service Organization, Contact Personnel and Customer
2.9	Service Profit Chain
2.10	Technology in Service Encounter

Unit-3 Service Quality Dimensions

3.1	Measuring Service Quality
3.2	SERVQUAL Gap Model
3.3	Walk Through Audit
3.4	Service Quality by Design
3.5	Achieving Service Quality
3.6	Quality and Productivity
3.7	Quality Tools
3.8	Benchmarking
3.9	Improvement Programs

Unit-4 Strategies

4.1	Strategies for Managing Service Demand and Service Capacity
4.2	Forecasting Service Demand
4.3	Forecasting Models – Subjective Models
4.4	Forecasting Models – Causal Models
4.5	Forecasting Models – Time-Series Models
4.6	Yield Management and its Application
4.7	Queuing Systems
4.8	Essential Features of Queuing Systems

Unit-5 Managing Service Projects

5.1	Characteristics of Project
5.2	Project Management – Principles, Process and Building Team
5.11	Domestic Growth and Expansion Strategies
5.12	Franchising

2.7 Service Process Analysis
2.8 Service Encounter Triad – Service Organization, Contact Personnel and Customer
2.9 Service Profit Chain
2.10 Technology in Service Encounter

SERVICES SCIENCE AND
SERVICE OPERATIONAL MANAGEMENT

UNIT 02

LECTURE 04

Doubts?

THANK YOU!

Virupakshan K

+91-9840847872 | VIRU@KART.LA