Shri Vile Parle Kelavani Mandal's
DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING
(Autonomous College Affiliated to the University of Mumbai)
NAAC Accredited with "A" Grade (CGPA : 3.18)

Department of Information Technology

COURSE CODE: DJS22ITL6015 **DATE:06-05-2025**

COURSE NAME: ISIG Laboratory **CLASS: T. Y. B.Tech**

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Experiment No.8

CO/LO: Describe the types of support that an information system can provide to each functional area of the organization.

AIM / OBJECTIVE: To analyze the organization's IT investment portfolio by classifying IT assets into four key categories—Firm-Wide Infrastructure, Transactional Systems, Informational Systems, and Strategic Systems—and to evaluate each category's contribution to organizational value, thereby guiding informed and optimal IT investment decisions.

PROCEDURE:

1. Define the Four IT Investment Categories

Category	Description	Examples	Primary Value
Firm-Wide Infrastructure	Shared foundation systems enabling other IT capabilities	Networks, data centers, cloud platforms, identity management	Enables scalability and flexibility
Transactional Systems	Automate routine, repetitive operations	Payroll, billing, ERP, order processing	Improves efficiency, reduces costs
Informational Systems	Provide data for control, analysis, and decision-making	Business Intelligence (BI), dashboards, analytics tools	Enhances decision quality
Strategic Systems	Enable competitive advantage or business transformation	AI/ML-based personalization, R&D systems, digital twins	Drives innovation and growth

2. Inventory and Classify IT Assets

- **Step 1:** Create a list of all IT assets and systems in the organization.
- **Step 2:** For each asset, identify:
  - Purpose/functionality
  - Primary users
  - Dependencies and integrations

- Classification into one of the four categories above

3. Evaluate Value Contribution

Use a **multi-criteria evaluation**, such as:

Evaluation Criteria	Description
Cost Savings	Operational cost reductions
Revenue Enablement	Contribution to sales or service delivery
Strategic Fit	Alignment with long-term business goals
User Impact	Productivity or experience enhancement
Risk Reduction	Security, compliance, or continuity benefits

4. Create a Portfolio Map

Visualize assets in a **2x2 matrix** for **value vs. cost** or **value vs. risk**. Another option is the **McFarlan Strategic Grid**:

	Low Strategic Impact	High Strategic Impact
Low Operational Impact	Support Systems	Strategic Systems
High Operational Impact	Transactional Systems	High-Potential Systems

5. Guide Investment Decisions

Based on the classification and evaluation:

- **Increase Investment** in high-value Strategic and Informational systems.
- **Optimize** or **automate** Transactional systems to reduce costs.
- **Maintain and modernize** Infrastructure for flexibility and support.
- **Reallocate resources** from low-value or redundant systems.

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OUTPUT

To classify RetailNova's IT assets into four categories—Firm-Wide Infrastructure, Transactional, Informational, and Strategic Systems—and evaluate their contribution to organizational value to guide optimal investment decisions.

Step 1: List of IT Assets at RetailNova

IT Asset	Description
Cloud Storage & Network	Centralized cloud infrastructure for all departments
POS System	Used for billing at stores and inventory updates
CRM System	Customer relationship management platform
Sales Dashboard	Provides real-time and historical sales analytics
Personalized E-Commerce Engine	AI-based system recommending products to online shoppers

Step 2: Classification into 4 Categories

IT Asset	Category
Cloud Storage & Network	Firm-Wide Infrastructure
POS System	Transactional System
CRM System	Informational System
Sales Dashboard	Informational System
E-Commerce Personalization Engine	Strategic System

Step 3: Value Evaluation (Scored out of 5)

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IT Asset	Cost Savings	Revenue Impact	Strategic Fit	User Impact	Avg. Score
Cloud Infrastructure	4	2	3	3	**3.0**
POS System	5	3	2	4	**3.5**
CRM System	3	4	3	5	**3.75**
Sales Dashboard	2	3	4	5	**3.5**
E-Commerce Engine	2	5	5	4	**4.0**

Step 4: Portfolio Map

You can visualize this on a 2x2 matrix:

	High Value	Low Value
High Cost	E-Commerce Engine	Cloud Infrastructure
Low Cost	CRM, POS, Sales Dashboard	*(None in this case)*

Step 5: Recommendations

- **Invest more** in the **E-Commerce Personalization Engine**: It offers high strategic value and revenue growth potential.
- **Maintain and optimize** CRM and POS systems as they offer consistent value with lower costs.
- **Modernize or outsource** cloud infrastructure to improve ROI.
- **Use dashboards** more widely across departments to enhance decision-making.

CONCLUSION

Through this experiment, RetailNova gained clear insights into the strategic and operational value of its IT assets. Categorizing and evaluating systems helped in identifying which tools drive growth, which support daily operations, and where to allocate future investments. This methodology enables smarter budgeting and technology upgrades aligned with business goals.

QUESTIONS:

REFERENCES: