



**IS Innovation & New Technologies: Midterm Review**

**Section 1: Fundamentals of Information System**

Definition: A system that collects, processes, stores, and provides useful information .

The Golden Rule: "IS = People + Processes + Technology working together. Technology alone is NOT IS."

The Three Dimensions of IS:

Organization: People, business processes, rules, and procedures .

Management: Decision-making, monitoring performance, and planning ahead .

Technology: Hardware, software, databases, and networks .

Importance: Helps businesses work faster, reduce errors, improve decisions, and stay competitive .

**Section 2: Mobile App Features & Design**

Core Types:

Recommendation Systems: Suggests content based on behavior (e.g., Netflix) .

Automation: Tasks performed without user input (e.g., auto-save) .

Real-Time: Instant updates (e.g., live chat, ride tracking) .

Offline Capability: Functions without internet (e.g., offline notes) .

Instant Access: Fast login via biometrics (Face ID) .

Feature Justification: Every feature must have a purpose, solve a real problem, and improve user experience (UX)

Disruption: (e.g., Streaming vs. Movie Theaters)

**Section 3: Business Strategy & Innovation**

Competitive Factors: Competitors, barriers to entry, customer choice, and substitutes (e.g., streaming vs. movie theaters) .

Disruption: When new technology completely changes an industry (e.g., ride-hailing replacing taxis) .

Value Creation: Successful companies combine strategy, technology, and customer experience through operations, marketing, and support .

**Section 4: Cloud Technology & Innovation**

Definition: Delivering computing services (storage, apps) over the internet instead of local servers .

The "As-A-Service" Trio:

IaaS (Infrastructure): Provides servers and storage .

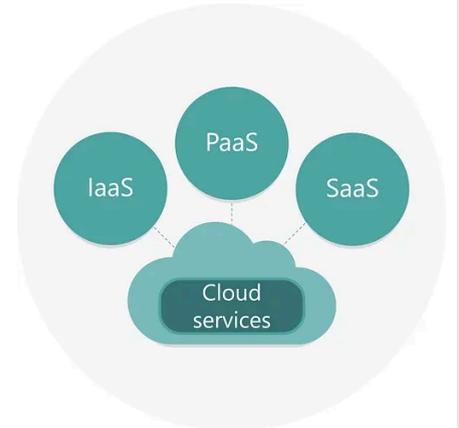
PaaS (Platform): Provides tools for developers to build apps .

SaaS (Software): Ready-to-use apps over the web (e.g., Email, Google Drive) .

Key Benefits: Scalability (grows with you), cost efficiency, and flexibility .

Challenges: Security risks, privacy issues, and internet dependence

| Service | Focus             | Example           |
|---------|-------------------|-------------------|
| IaaS    | Servers/Storage   | AWS / Azure       |
| PaaS    | Dev Tools         | Google App Engine |
| SaaS    | Ready-to-use Apps | Gmail / Drive     |



**Section 5: Ethics, Privacy, & Accountability**

Ethics: Determining "right and wrong" in tech behavior .

Major Risks: Data misuse, lack of transparency, and privacy breaches .

User Rights: Users should know what data is collected and have control over it .

Accountability: "Companies must take responsibility for data breaches and inform users immediately." This is a major point in your "How Companies Compete" module.