

# Lesson 12: ICT for Business

## 1. The Digital Marketplace & Business Models

### Digital Economy & Business Transformation

- **Digital Economy:** An economy based on digital computing technologies, driven by the Internet.
- **Information Systems (IS):** The key ICT-based tool for business transformation.
- **Types of IS:**
  - **TPS:** Transaction Processing Systems (e.g., a sale).
  - **Decision Support:** MIS, DSS, ESS.
- **Business Models in the Digital Economy**
- **New Methods:** Reverse Auctions, Group Purchasing, e-Marketplace.
- **Organization Types:** Pure Brick, Brick and Click, Pure Click.
- **Role of ICT in Business Functions**
- **Accounting, HR** (HRIS, self-service portals), **Production** (Industry 4.0), **Marketing, SCM** (Inter-organizational systems), **Communication** (Teleworking).
- **Secure Payment Mechanisms**
- **Payment Gateway:** Securely handles credit card verification.
- **Third-party Systems:** e.g., PayPal (mediates payment).
- **Mechanisms:** Data Encryption.
- **Currencies:** Virtual and Crypto (e.g., Bitcoin).
- **Threats and Opportunities**
- Privacy, Security, Product Commercialization.

## 3. E-Marketing & Competitive Advantage

### E-marketing

- Using the internet for marketing (promotions, PR, support).
- **Use of ICT:** Web Advertising, Data Mining.
- **Mobile Marketing**
- A form of e-marketing via mobile devices.
- **Location-Based Services:**
  - **Geosocial:** Find people with similar interests nearby.
  - **Geoadvertising:** Target users in a specific location.
  - **Geoinformation:** Provide info about a location.
- **Database Marketing**
- A direct marketing technique using customer databases.
- Uses data mining to create customer profiles for personalized offers.
- **Gaining Competitive Advantages through ICT**

## 2. E-Commerce & E-Business Operations

### E-Commerce vs. E-Business

- **E-Business:** Broader concept. Includes all internal and external electronic business processes.
  - **Architecture:** Often via **ERP** systems, integrating modules (Sales, Finance) with a central **Corporate Database**.
- **E-Commerce:** A subset of E-Business, focusing on buying and selling online.

### Types of E-Commerce Transactions

- **B2B:** Business-to-Business
- **B2C:** Business-to-Consumer
- **C2C:** Consumer-to-Consumer
- **C2B:** Consumer-to-Business
- **B2E:** Business-to-Employee
- **G2C:** Government-to-Citizen

### Internet and Business (E-Commerce Components)

- **Virtual Storefronts:** Online shop display.
- **Information Brokers:** Filter information for consumers.
- **Online Marketplace:** Platform for multiple sellers (e.g., eBay).
- **Content Provider:** Offers digital content (e.g., iTunes).
- **Online Service Provider:** Offers services (e.g., Google).
- **Portal:** Entry point to e-commerce (e.g., Yahoo).
- **Virtual Community:** Online social networks.

### Advantages and Disadvantages of E-Commerce

- *(Briefly list key pros and cons based on syllabus understanding)*

### E-Commerce Trends

- Becoming more social, mobile-based (m-commerce), etc.