Unit IV — Systems Analysis & Design in E-Commerce

Software Engineering and Management | BMB IT 01

Unit IV: Systems Analysis and Design in E-Commerce

Syllabus: E-Commerce models — B2B, B2C and C2C; advantages and disadvantages of e-commerce systems; e-commerce system architectures; security considerations in e-commerce.

Exam Blueprint (2025-26 paper)

Topic	2025-26 paper	Marks
Define E-Commerce	Section A	2
Benefits of e-commerce	Section B	7
Compare B2B and B2C	Section B	7
Types of e-commerce with examples	Section C	7
Security measures for Information Systems	Section C	7

YE QUESTION BAAR-BAAR AAYA HAI

Is unit se 2025-26 me **paanch questions** aaye — Section A, B aur C teeno me. E-commerce ke **types aur B2B vs B2C** almost guaranteed hain.

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1. E-Commerce — Concept

DEFINITION - RATTA MAARO

E-Commerce (Electronic Commerce) is the buying and selling of goods and services, and the transfer of funds and data, **over an electronic network**, primarily the internet.

YAHAN 90% STUDENTS GALTI KARTE HAIN

E-Commerce vs E-Business — 2-marker me farak poocha jaa sakta hai. **E-Commerce** = only the **buying and selling transactions**. **E-Business** = the **entire business** conducted electronically — including e-commerce *plus* internal processes like e-procurement, CRM, SCM and online collaboration. **E-Business is the broader term.**

1.1 Features of E-Commerce

- **Ubiquity** — available anywhere, anytime (24×7)
- **Global reach** — crosses national boundaries
- **Universal standards** — one set of internet standards worldwide
- **Richness** — text, audio, video messages together

- **Interactivity** — two-way communication with the customer
- **Information density** — more, cheaper, better-quality information
- **Personalisation and customisation** — offers targeted to the individual
- **Social technology** — user-generated content, reviews, sharing

2. Types / Models of E-Commerce

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                         WHO IS SELLING?
                  Business          Consumer         Government
               +---------------+---------------+---------------+
Business       |     B2B       |     C2B       |     G2B       |
W              | (IndiaMART,   | (freelancer   | (govt e-      |
H              |  Alibaba)     |  bidding)     |  tenders)     |
O              +---------------+---------------+---------------+
I Consumer     |     B2C       |     C2C       |     G2C       |
S              | (Amazon,      | (OLX, eBay,   | (income tax   |
B              |  Flipkart)    |  Quikr)       |  e-filing)    |
U              +---------------+---------------+---------------+
Y Govern-      |     B2G       |     C2G       |     G2G       |
I  ment        | (supplying    | (paying       | (inter-dept   |
N              |  to govt)     |  taxes)       |  data share)  |
G              +---------------+---------------+---------------+
```

2.1 The Three Main Models

A. B2B — Business to Business

> **NOTE**
>
> Transactions between **two businesses** — a manufacturer selling to a wholesaler, or a supplier selling raw material to a manufacturer.

- **Examples:** IndiaMART, Alibaba, TradeIndia, Amazon Business; a company's e-procurement portal
- **Characteristics:** large order volumes and values; fewer but long-term relationships; negotiated pricing; credit terms; complex approval workflows; integration with the buyer's ERP
- **Sub-types:** *e-distributor*, *e-procurement*, *exchange (marketplace)*, *industry consortium*, *private industrial network*

B. B2C — Business to Consumer

> **NOTE**
>
> Transactions between a **business and an individual end consumer** — the model most people mean by "online shopping".

- **Examples:** Amazon, Flipkart, Myntra, Zomato, MakeMyTrip, Netflix
- **Characteristics:** very large number of small-value transactions; fixed catalogue prices; immediate payment; heavy marketing and branding; emphasis on user experience and delivery speed

C. C2C — Consumer to Consumer

> **NOTE**
>
> Transactions **between individual consumers**, facilitated by a **third-party platform** that provides the marketplace, trust mechanisms and payment.