Introduction to E-commerce

E-commerce (Electronic Commerce) is the buying and selling of goods or services over the internet. It involves online transactions, where money and data are exchanged to facilitate these operations. E-commerce can take place through websites, mobile apps, or other digital platforms.

Uses of E-commerce

- 1. **Online Shopping:** Customers can browse and buy products 24/7 (e.g., clothes, electronics).
- 2. **Digital Payments:** Secure online transactions using credit cards, mobile wallets, or bank transfers.
- 3. **Online Banking:** Managing accounts, transferring money, or paying bills through bank websites/apps.
- 4. **E-Ticketing:** Buying tickets for travel, movies, or events online.
- 5. **Online Services:** Booking hotels, hiring freelancers, or accessing streaming platforms.
- 6. **Education:** Buying courses, e-books, and study materials online.
- 7. **Marketing & Advertising:** Promoting products via digital platforms and social media.
- 8. **Supply Chain Management:** Managing inventory, orders, and logistics online.

How does ecommerce work?

Ecommerce works by connecting sellers with customers and allowing exchanges to take place online. It can work in many different ways and take many forms. Here's a general overview of how the process can look:

- 1. The seller chooses online selling channels, like a website or social media, and promotes products or services for sale.
- 2. Customers find the products or services and place orders.
- 3. A payment processor enables the exchange of the goods or services electronically via payment options like credit cards or digital currencies.
- 4. The customer receives a confirmation email or SMS along with a printable receipt.
- 5. If the transaction is for goods, the seller ships the products and sends the customer a tracking number via email or SMS. If the transaction is for a service, the service provider can reach out to schedule and complete the service.

Along the way, many ecommerce tools and technologies work together to help make online purchases possible. On the technical side, the transaction can depend on data, logistics, warehousing, supply chains, and other systems and processes.

Where and how does ecommerce take place?

Ecommerce offers people the convenience of shopping from their computers, phones, tablets, and other devices. They visit websites, social media pages, and other virtual channels to find what they're looking for. Entrepreneurs, startups, small and medium-sized businesses, and large retailers can all use ecommerce to reach customers across the globe. Selling online might be a business's sole revenue source, or it might be part of a multi-channel selling strategy. For example, a large brick-and-mortar retailer might adopt an online sales channel, or an entrepreneur might sell a small number of specialty handcrafted.goods through a social media site like Facebook, Instagram, or Pinterest.

Another ecommerce example is social media commerce. Some websites like Facebook support online purchases. A business that generates revenue solely through its presence on social media, or entrepreneurs who supplement their income using social media marketing techniques, are also engaging in social media commerce.

Other ways you can participate in ecommerce include building standalone websites, or setting up shop on an established selling website. For example, you can create a storefront to represent your brand in the Amazon store.

What types of ecommerce are there?

Ecommerce takes as many different forms as there are various ways to interact with online channels. For example, sellers and buyers exchange goods and services through m-commerce, enterprise commerce, and social selling destinations like Amazon Live.

A few common business models are:

- **B2C:** Businesses sell to individual consumers, sometimes called the "end customer."
- **B2B:** Businesses <u>sell to other businesses</u>. Often the buyer <u>resells products</u> to the consumer.
- **C2B:** Consumers sell to businesses. C2B businesses allow customers to sell to other companies.

- **C2C:** Consumers sell to other consumers. Businesses create online shopping destinations to connect customers.
- B2G: Businesses sell to governments or government agencies.
- C2G: Consumers sell to governments or government agencies.
- G2B: Governments or government agencies sell to businesses.
- G2C: Governments or government agencies sell to consumers.

##In Nepal, e-commerce is experiencing rapid growth in 2025,

driven by increased online shopping, local product promotion, and a growing demand for information. The market is projected to reach US\$1.32 billion in 2025, with a steady annual growth rate, <u>according to Statista</u>. Key trends include the rise of social commerce, AI-powered personalization, and the adoption of augmented reality in online retail.

Key Trends:

Increased Online Shopping:

Post-pandemic, online shopping continues to surge, with more consumers embracing digital platforms for their purchases.

• Social Commerce:

Social media platforms like Facebook and Instagram are becoming crucial for e-commerce, allowing direct purchases from posts and enhancing brand awareness, according to BigCommerce.

Al-Powered Personalization:

Artificial intelligence is playing a bigger role in e-commerce, enabling personalized content, customer service, and predictive analytics, says Codeyard.

• Local Product Promotion:

Platforms like Gyapu are dedicated to showcasing Nepali products, boosting local businesses and catering to a growing preference for locally sourced goods.

Augmented Reality (AR):

AR is transforming the online shopping experience by allowing customers to virtually try on clothes or see how products fit in their homes.

Voice Search Optimization:

With the rise of voice-activated devices, optimizing websites for voice search is becoming essential for businesses to be found by customers.

Ethical Marketing:

Nepali consumers are increasingly aware of sustainability and ethical practices, leading businesses to adopt eco-friendly and socially responsible marketing strategies.

• Mobile Commerce (m-commerce):

The increasing smartphone penetration in Nepal is driving the growth of mobile commerce, with more consumers using their phones for online shopping.

Local SEO:

Businesses are focusing on local SEO to attract customers in their specific geographic areas, using strategies like optimizing Google My Business profiles and encouraging customer reviews.

• The E-commerce Act Nepal 2025:

This act aims to establish a legal framework for e-commerce, ensuring consumer protection, fair trade practices, and compliance requirements.

• Omnichannel Presence:

Businesses are increasingly adopting an omnichannel approach, providing a consistent experience across multiple online and offline channels to build customer loyalty.

• Focus on Niche Products:

Entrepreneurs are finding success by offering specialized products and services, catering to specific customer needs and preferences.

• Cross-border E-commerce:

As Nepal's digital landscape evolves, cross-border e-commerce is also growing, allowing businesses to reach customers in other countries and vice versa.

• Sustainability:

Consumers are increasingly conscious of sustainability, leading businesses to adopt ecofriendly practices and offer sustainable products, <u>says Business 360°</u>.

• Blockchain Technology:

Blockchain is being explored to enhance transparency and trust in e-commerce transactions, particularly for high-value items or second-hand marketplaces.

E-Commerce Types in 2025

E-Commerce (Electronic Commerce) means **buying and selling goods or services using the internet**. It includes various types of transactions depending on who is involved — businesses, consumers, or governments.

♦ 1. B2C – Business to Consumer

• **Definition**: B2C e-commerce is where a **business sells directly to individual** customers.

Description:

- o Most common form of online shopping.
- o Customers browse products on a website or app and place orders.
- o Involves product display, online payment, delivery, and customer support.

• Examples:

- o Amazon, Daraz, Flipkart, Myntra
- 2025 Trends:
 - Use of **AI** to suggest products.
 - o Same-day or drone delivery services.
 - o Use of **AR/VR** for trying products virtually (like clothes or furniture).

♦ 2. B2B – Business to Business

- **Definition**: B2B e-commerce is when one **business sells products or services to another business**.
- Description:
 - o Deals with **bulk orders**, machinery, raw materials, and software.
 - o Transactions are larger in volume and usually involve **contracts**.
- Examples:
 - o Alibaba (bulk orders), Udaan, IndiaMART, Salesforce (CRM for businesses)
- 2025 Trends:
 - o **Blockchain** for secure and transparent transactions.
 - o Integration with **supply chain systems**.
 - o Automated restocking and billing systems.

◆ 3. C2C – Consumer to Consumer

- **Definition**: C2C is when **individual consumers sell directly to other consumers** using a platform.
- Description:
 - o Mostly used for second-hand goods, handmade products, collectibles.
 - o Platforms offer tools to list, advertise, chat, and transact.
- Examples:
 - o eBay, OLX, Facebook Marketplace, HamroBazar
- 2025 Trends:
 - o Safer transactions through **escrow systems**.
 - Use of mobile apps and secure messaging.
 - o Growth in resale market and **eco-friendly buying**.

♦ 4. C2B – Consumer to Business

- **Definition**: In C2B e-commerce, an **individual offers products or services to a business**.
- Description:
 - o Often seen in freelance work, content creation, and influencer marketing.
 - o Businesses pay individuals for services like writing, design, or advertising.
- Examples:

o Upwork, Fiverr, Freelancer, selling stock photos to websites

• 2025 Trends:

- o **AI-based project matching** between companies and freelancers.
- o Rise in **gig economy**.
- o Paid collaborations between **influencers and companies**.

♦ 5. B2G – Business to Government

- **Definition**: B2G e-commerce involves **businesses providing goods or services to government agencies**.
- Description:
 - o Businesses bid for **government contracts** or tenders.
 - o Involves software development, infrastructure projects, consulting.
- Examples:
 - o A tech company building an e-governance portal.
- 2025 Trends:
 - o Online tendering via **government portals**.
 - o **Digital identity systems** for secure access.
 - o Transparency through **blockchain-based procurement**.

♦ 6. M-Commerce – Mobile Commerce

- **Definition**: M-Commerce is a **subtype of e-commerce conducted through mobile devices** like smartphones and tablets.
- Description:
 - o Includes shopping via apps, mobile banking, e-wallets.
 - o Designed for fast, convenient, and responsive user experience.
- Examples:
 - o Daraz mobile app, food delivery apps, eSewa, Khalti
- 2025 Trends:
 - o Voice-based and gesture-based shopping.
 - o **Biometric authentication** (face/fingerprint).
 - Use of **mobile-only discounts and notifications**.

♦ 7. Social Commerce

- **Definition**: Social Commerce is when **buying and selling takes place directly on social media platforms**.
- Description:
 - o Social media platforms allow sellers to create stores.
 - Shoppers can view products, watch reviews, and check out within the app.
- Examples:
 - o Instagram Shop, TikTok Shopping, Facebook Marketplace
- 2025 Trends:
 - o **Live-stream shopping** with influencers.
 - o In-app checkout.
 - o Social proof through likes, comments, and reviews.

♦ 8. D2C – Direct to Consumer

- **Definition**: D2C means **manufacturers or brands sell directly to customers**, without involving middlemen or retailers.
- Description:
 - o Brands set up their own online store.
 - o Allows more control over **branding**, **pricing**, **and customer service**.
- Examples:
 - o Nike.com, Apple.com, Warby Parker, Glossier
- 2025 Trends:
 - Personalized marketing using AI.
 - o **Subscription-based** product delivery.
 - o Building strong customer-brand relationships.

E-commerce in Nepal

has experienced significant growth from 2021 to 2025, driven by increased internet and mobile device penetration, particularly after the COVID-19 pandemic. This growth is reflected in rising online sales, the adoption of digital payment methods, and the emergence of new ecommerce platforms, including those focusing on local products. While challenges remain, such as security concerns and the need for stronger consumer protection laws, the sector is poised for continued expansion.

Key Trends and Developments:

Increased Online Shopping:

The pandemic accelerated the shift towards online shopping, and this trend has continued, with a greater number of consumers now relying on e-commerce platforms for their needs.

• Growth of Digital Payments:

The rise of cashless transactions and digital payment methods has facilitated online shopping, making it more convenient for consumers.

Focus on Local Products:

E-commerce platforms are increasingly showcasing and promoting Nepali products, supporting local businesses and strengthening the domestic market.

• Emergence of Quick Commerce:

The concept of instant or quick deliveries is gaining traction, with platforms evolving to offer a wider range of services beyond just product sales.

• Need for Policy and Regulation:

There is a growing recognition of the need for government collaboration to enhance ecommerce policies, strengthen consumer protection laws, and ensure a more secure and trustworthy environment for online businesses and consumers.

· Challenges:

Despite the growth, e-commerce in Nepal faces challenges related to security, with concerns about scams and frauds. Strengthening consumer protection laws and addressing these issues are crucial for building trust and long-term sustainability.

Market Size and Revenue:

Nepal's e-commerce market is predicted to reach US\$927.6 million in revenue by 2025, with electronics being the largest market segment, according to ECDB.

Future Outlook:

Continued Growth:

E-commerce in Nepal is expected to continue growing, with a projected market volume of US\$1,013.8 million by 2029, according to ECDB.

Increased Personalization:

Advanced data analytics and AI will drive more personalized shopping experiences, tailoring offerings to individual customer preferences and behaviors.

Omnichannel Presence:

Successful e-commerce businesses will likely adopt an omnichannel approach, offering a seamless experience across multiple channels to reach and engage customers.

• Evolving Role of Government:

The government's role in supporting e-commerce through policy and regulatory frameworks will be crucial for its continued development.

2021–2022: Rapid Growth

- Driven by COVID-19 lockdowns.
- Surge in online shopping and digital payments (e.g., eSewa, Khalti).
- Major platforms like **Daraz** and **Sastodeal** expanded.
- Projected 20% annual growth.

2023: Regulation and Rural Reach

- **E-commerce Bill** introduced to regulate online trade.
- Internet access expanded (~40% population online).
- Growing use of e-wallets and mobile commerce in rural areas.

2024: Market Challenges

- Economic slowdown reduced online shopping.
- Sastodeal shut down, Daraz cut staff.
- Logistics and customer trust issues remained.
- E-commerce Bill delayed in Parliament.

2025: New Law & Innovation

- **E-commerce Law passed (March 2025)** regulates returns, fraud, and seller obligations.
- Launch of **UPI payments** with India improved transactions.
- Interest growing in AI, AR/VR, blockchain, and mobile-first apps.

Q Key Trends

- Rise of **social commerce** via Facebook, TikTok, etc.
- Focus shifting to **rural market** growth.
- Challenges: poor logistics, trust issues, high internet/tax costs.

Conclusion

Nepal's e-commerce grew fast during COVID, faced correction in 2024, and is now entering a stable, law-backed, tech-driven phase in 2025 with opportunities in rural expansion and digital innovation

The Electronic Transactions Act (ETA), 2063 B.S., was

introduced by the Government of Nepal to provide a legal foundation for **digital communications**, **e-commerce**, **and cybercrime regulation**. It is Nepal's first comprehensive law to address electronic transactions and internet-related issues.

Objectives of the Act

- 1. To give **legal recognition** to electronic records and digital signatures.
- 2. To promote the use of **electronic means** for government and commercial purposes.
- 3. To ensure **secure and reliable** digital communication.
- 4. To prevent and punish **cybercrime and computer misuse**.
- 5. To support the growth of **e-governance and e-commerce** in Nepal.

Y Key Provisions

1. Legal Status of Electronic Documents and Signatures

• Electronic documents (emails, e-records) and **digital signatures** have the same **legal validity** as physical documents and handwritten signatures.

2. Digital Signature and Certification

- Introduces rules for **digital signatures**, including encryption methods.
- Establishes the system of **Certifying Authorities** (**CA**) that issue digital signature certificates.
- Specifies conditions for **revocation** or **suspension** of such certificates.

3. Government Use of E-Records

- Government agencies can use **electronic records** for issuing notices, maintaining records, and providing public services.
- Supports the development of **e-governance systems** in Nepal.

4. Cyber Crimes Defined

The Act clearly defines **offenses related to computers and the internet**, including:

- Unauthorized access (hacking) into computer systems.
- **Data theft**, damage, or alteration.
- Spreading viruses or harmful programs.
- Online fraud, identity theft, phishing, and cyberbullying.
- **Publishing obscene or offensive material** on digital platforms.
- Interfering with email communication or digital records.

5. Punishments for Offenses

- Punishments include **fines** (up to Rs. 200,000 or more) and/or **imprisonment** (up to 5 years or more), depending on the offense.
- Severe crimes involving **national security**, **defamation**, **or large-scale fraud** may result in higher penalties.

6. Establishment of Tribunal

- A **special cyber tribunal** is to be formed to **hear and resolve** disputes related to digital records, e-contracts, and cybercrime.
- The tribunal's decision can be appealed in the **Appellate Court**.

7. Electronic Contracts

• Contracts made through **electronic means** (email, e-signature) are considered **legally valid** if both parties agree.

8. Intermediaries and Liability

- Defines roles and responsibilities of **internet service providers (ISPs)** and online platforms.
- ISPs must take steps to prevent and report illegal digital activity or face legal action.

Importance of the ETA in Nepal

- Boosts public and private sector digitization.
- Encourages safe and secure online transactions.
- Enables growth of e-commerce and IT services.
- Provides a strong legal framework for dealing with cybercrimes.
- Helps protect individual rights and digital privacy.

Amendments and Future Updates

- As of now, there have been no major amendments to the ETA.
- However, the government has drafted a **Cyber Security Bill** to address **modern threats**, including social media misuse, data privacy, and national cyber defense.

A business model in e-commerce defines how a company creates, delivers, and captures value online in 2025. It includes how businesses sell products/services, generate revenue, and interact with customers using the internet and digital platforms.

Main Types of E-Commerce Business Models in 2025:

Model Type	Full Form/Meaning	Description	Example
B2C	Business-to- Consumer	Businesses sell directly to end users through online platforms.	Daraz selling smartphones to customers.
B2B	Business-to- Business	Companies sell products/services to other businesses.	Alibaba selling wholesale goods to retailers.
C2C	Consumer-to- Consumer	Individuals sell to other individuals via third-party platforms.	Facebook Marketplace, HamroBazar
C2B	Consumer-to- Business	Individuals sell products/services to businesses.	A graphic designer selling logos to a company on Fiverr .
D2C	Direct-to- Consumer	Manufacturers sell directly to customers, avoiding intermediaries.	Nike.com selling directly to consumers.

Model Type	Full Form/Meaning	Description	Example
Subscription- Based		Customers pay regularly to access products or services.	Netflix, Spotify, Canva Pro
Dropshipping	_	Sellers take orders online and forward them to a supplier for shipping.	1 0
Marketplace	_	Platforms connect buyers and sellers.	Amazon, eBay, Etsy
Freemium Model	_	Basic services are free; premium features require payment.	Zoom, Dropbox

Material Report of the Example 2025 E-Commerce Business Models:

- 1. **AI and Personalization** Smart recommendations and custom offers based on user data
- 2. **Omnichannel Retailing** Combining physical stores and online platforms for a seamless experience.
- 3. **Green E-Commerce** Eco-friendly packaging and sustainable logistics are gaining importance.
- 4. **Voice & Chat Commerce** Shopping using voice assistants like Alexa, Google Assistant.
- 5. **Social Commerce** Selling directly via platforms like Instagram, TikTok, Facebook Shops.

⊗ Summary:

- In 2025, e-commerce business models have become more **customer-focused**, **tech-driven**, and **diversified**.
- Businesses choose their model based on target audience, product type, and digital strategy.
- Examples like Daraz (B2C), Alibaba (B2B), and Facebook Marketplace (C2C) show how different models operate.
- Trends like AI, sustainability, and social selling are reshaping how e-commerce works.