

#### FIGURE 1.11

#### THE INTERNET AND THE EVOLUTION OF CORPORATE COMPUTING

#### Computer Technology

## Mainframe Computers 1950 - 1975











#### **Business Application**



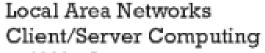
Transaction automation Payroll Accounts receivable



Business function automation Marketing Human resources Design



Desktop automation Word processing Spreadsheets Databases



1980 – Presen

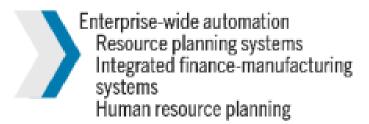




Enterprise-wide Computing

1990 – Present





Internet and Web Mobile Platform Cloud Computing 1995 – Present



Industrial system automation
Supply chain management
Customer relationship
management
Channel management systems
Web and cloud services



# Major Academic disciplines contributing to e-commerce

There are two primary approaches to e-commerce: technical and behavioral. Each of these approaches is represented by several academic disciplines.

- On the technical side, this includes computer science, operations management, and information systems.
- On the behavioral side, it includes information systems as well as sociology, economics, finance and accounting, management, and marketing.



## **ECOMMERCE ADVANTAGES**

- **\***CONVENIENCE
- **❖INCREASED SELECTION**
- **❖** POTENTIALLY LOWER START-UP COST
- **❖INTERNATIONAL SALES**
- **\***EASIER TO RETARGET CUSTOMERS



## **CONVENIENCE**

Ecommerce can occur 24 hours a day, seven days a week.



## **INCREASED SELECTION**

Many stores offer a wider array of products online than they carry in their brick-and-mortar counterparts.



### POTENTIALLY LOWER START-UP COST

Ecommerce companies may require a warehouse or manufacturing site, but they usually don't need a physical storefront. The cost to operate digitally is often less expensive than needing to pay rent, insurance, building maintenance, and property taxes.



## **INTERNATIONAL SALES**

As long as an ecommerce store can ship to the customer, an ecommerce company can sell to anyone in the world and isn't limited by physical geography.



## **EASIER TO RETARGET CUSTOMERS**

As customers browse a digital storefront, it is easier to entice their attention towards placed advertisements, directed marketing campaigns, or pop-ups specifically aimed at a purpose.



# ADDITIONAL ECOMMERCE ADVANTAGES

- Elevate the customer experience
- Differentiate from competitors
- Increase brand awareness and recognition
- Impress current customers and attract new ones
- Create positive word-of-mouth and social proof
- Drive additional revenue



## **ECOMMERCE DISADVANTAGES**

- **\$LIMITED CUSTOMER SERVICE**
- **\$LACK OF INSTANT GRATIFICATION**
- **❖INABILITY TO TOUCH PRODUCTS**
- \*RELIANCE ON TECHNOLOGY
- **\***HIGHER COMPETITION



## LIMITED CUSTOMER SERVICE

If you shop online for a computer, you cannot simply ask an employee to demonstrate a particular model's features in person. And although some websites let you chat online with a staff member, this is not a typical practice.



## LACK OF INSTANT GRATIFICATION

When you buy an item online, you must wait for it to be shipped to your home or office. However, e-tailers like Amazon make the waiting game a little bit less painful by offering sameday delivery as a premium option for select products.



## **INABILITY TO TOUCH PRODUCTS**

Online images do not necessarily convey the whole story about an item, and so ecommerce purchases can be unsatisfying when the products received do not match consumer expectations. Case in point: an item of clothing may be made from shoddier fabric than its online image indicates.



## **RELIANCE ON TECHNOLOGY**

If your website crashes, garners an overwhelming amount of traffic, or must be temporarily taken down for any reason, your business is effectively closed until the ecommerce storefront is back.



## **HIGHER COMPETITION**

Although the low barrier to entry regarding low cost is an advantage, this means other competitors can easily enter the market. Ecommerce companies must have mindful marketing strategies and remain diligent on SEO optimization to ensure they maintain a digital presence.



## TYPES OF ECOMMERCE

- Business to Consumer (B2C)
- Business to Business (B2B)
- Business to Government (B2G)
- Consumer to Consumer (C2C)
- Consumer to Business (C2B)
- Consumer to Government (C2G)



# **Business to Consumer (B2C)**

B2C ecommerce companies sell directly to the product end-user.



# **Business to Business (B2B)**

Similar to B2C, an ecommerce business can directly sell goods to a user. However, instead of being a consumer, that user may be another company.



# **Primary Business Models in B2B**

- Net marketplaces-e-distributors, eprocurement companies, exchanges and industry consortia
- 2. Private Industrial Networks



## **Business to Government (B2G)**

Some entities specialize as government contractors providing goods or services to agencies or administrations. Similar to a B2B relationship, the business produces items of value and remits those items to an entity.



# **Consumer to Consumer (C2C)**

-consumers selling to other consumers with the help of online platform



# **Consumer to Business (C2B)**

Modern platforms have allowed consumers to more easily engage with companies and offer their services, especially related to short-term contracts, gigs, or freelance opportunities.



# **Consumer to Government (C2G)**

Less of a traditional ecommerce relationship, consumers can interact with administrations, agencies, or governments through C2G partnerships.



## **Types of Ecommerce Revenue Models**

- Drop Shipping
- > White Labeling
- **≻** Wholesaling
- > Private Labeling
- > Subscription



#### **Drop Shipping**

Often considered one of the easier forms of ecommerce, drop shipping allows a company to create a digital storefront, generate sales, then rely on a supplier to provide the good.



#### **White Labeling**

White label ecommerce companies leverage already successful products sold by another company. After a customer places an order, the ecommerce company receives the existing product, repackages the product with their own package and label, and distributes the product to the customer.



### Wholesaling

A more capital-intensive approach to ecommerce, wholesaling entails maintaining quantities of inventory, keeping track of customer orders, maintaining customer shipping information, and typically having ownership of the warehouse space to house products



#### **Private Labeling**

Private labeling is a more appropriate ecommerce approach for companies that may not have large upfront capital or do not have their own factory space to manufacture goods.



#### **Subscription**

Ecommerce companies can also leverage repeating orders or loyal customers by implementing subscription services.



## **Example of Ecommerce**

- <u>Amazon</u> is a behemoth in the ecommerce space. In fact, it is the world's largest online retailer and continues to grow. As such, it is a huge disrupter in the retail industry, forcing some major retailers to rethink their strategies and shift their focus.
- The company launched its business with an ecommerce-based model of online sales and product delivery. It was founded by Jeff Bezos in 1994 as an online bookstore but has since expanded to include everything from clothing to housewares, power tools to food and drinks, and electronics.
- Company sales increased by 38% in 2020 from the previous year, totaling \$386.1 billion compared to \$280.5 billion in 2019. Amazon's <u>operating income</u> also jumped to \$22.9 billion for the 2020 fiscal year from \$14.5 billion in 2019. <u>Net income</u> rose from \$11.6 billion in 2019 to \$21.3 billion by the end of 2020.6
- As the world adapted to the constraints of COVID-19, ecommerce capitalized on the opportunity to further distance itself from in-store shopping. In 2021, Amazon's net income rose to \$33.4 billion, and it ended the year with over \$42 billion of cash on hand.7 Amazon has stated as a result of the pandemic, the company recognized three years' worth of forecasted growth in about 15 months.7



#### **How Do You Start an Ecommerce Business?**

- Make sure you do your research before you start your business.
   Figure out what products and services you're going to sell and look into the market, target audience, competition, and expected costs. (Feasibility Study)
- Next, come up with a name, choose a business structure, and get the necessary documentation (taxpayer numbers, licenses, and permits if they apply).
- 3. Before you start selling, decide on a platform and design your website (or have someone do it for you).
- 4. Remember to keep everything simple at the beginning and make sure you use as many channels as you can to market your business so it can grow.



## What Is an Ecommerce Website?

An ecommerce website is any site that allows you to buy and sell products and services online. Companies like Amazon, Alibaba, Lazada, Shopee, Shein are examples of ecommerce websites.



### **Ecommerce and Ebusiness?**

Ecommerce involves the purchase and sale of goods and services online and is actually just one part of an ebusiness. An ebusiness involves the entire process of running a company online. Put simply, it's all of the activity that takes place with an online business.



## **The Bottom Line**

Ecommerce is just one part of running an ebusiness. While the latter involves the entire process of running a business online, ecommerce simply refers to the sale of goods and services via the internet.



## Ecommerce in Asia and Philippines

China remains the biggest e- commerce market (US\$562.66B) followed by the United States of America (US\$349.06B) and the United Kingdom (US\$93.89B) -Keith, M. (2015, September 2). Global E-commerce Sales,

Trends and Statistics 2015. Retrieved October 26, 2015, from http://www.remarkety.com/global-ecommerce-sales-trends-and-statistics-2015



In 2021, the Philippines eCommerce market sales reached \$17 billion, largely contributed by 73 million online active users. This is estimated to reach \$24 billion, with 17% growth through 2025. The COVID-19 pandemic increased the eCommerce demand, with Filipinos working and studying from home.



The top Philippine eCommerce platforms are Shopee, Lazada, Zalora, and BeautyMNL.

In 2000, the Philippine Government issued the Electronic Commerce Act (RA 8792) and a 2022 E-Commerce Philippines Roadmap to support eCommerce growth.



The National Privacy Commission (NPC) leads the Philippines Data Privacy Law and encourages locally registered companies to designate data privacy officers. NPC leads the Philippines' compliance with international privacy agreements such as the European General Data Protection Regulation and APEC Cross Border Privacy Rules.



## **Consumer Behavior**

- **Digital Marketing and Social Media:** Filipinos are prolific social media users and actively use platforms for a whopping 10 hours per day, seven days a week. The best platforms to reach Filipino consumers are Facebook (67 million active users), YouTube (58.5 million active users), Instagram (14 million active users), Twitter (9.3 million users), and LinkedIn (9.2 million users). It is estimated that Filipino social media users will reach 78.5 million in 2022.
- Major Buying Holidays: The top eCommerce platforms organize doubledigit monthly promotions and mega campaigns such as platform birthday, midyear, 9.9, 11.11, and 12.12 events. eCommerce platforms also offer campaign packages for participating retail companies.
- **Mobile eCommerce:** In 2022, Philippine telecommunication companies recorded 159 million mobile subscribers. The Philippines is the fastest-growing app market in Southeast Asia.
- Online Payment: In 2020, the Philpines Central Bank recorded 20.1% digital payments from financial transactions (\$46.8 billion), a 61% increase from 2019. The Central Bank aims to bank 70% of Filipino adults by 2023.



# **Industry Associations:**

Digital Commerce Association in the Philippines:

Website: https://www.dcom.ph/

Philippine Retailers Association

Website: https://www.philretailers.com/



# Economic factors and conditions using e-Commerce:

- (i) ICT affordability and accessibility
- (ii)bandwidth availability
- (iii) availability of online payment options,
- (iv) delivery infrastructure development, and
- (v) economies of scale.



# ICT accessibility, availability, affordability ans security

While the availability of broadband internet connection has been a key factor in fueling its growth, e-commerce requires substantial ICT infrastructure that allows sellers to transact business with buyers.



# Availability of Online Payment Options

Apart from lack of internet access, another barrier is the inadequacy of payment solutions, with online shopper payment systems failing to meet what online vendors need.



eWallet

Prepaid card

PrePay

Offline bank transfer

# Republic of the Philippines CAMARINES SUR POLYTECHNIC COLLEGES Nabua, Camarines Sur



Casil on delivery Consumers pay for goods with Casil when item is delivered.

Charge and deferred debit card

Consumers pay monthly, with no interest, and must pay the outstanding balance in full upon receipt of statement or receive stiff penalties—includes deferred debit cards (e.g. American Express).

Credit card

Draws on a credit limit approved by card-issuer—at least the stated minimum amount of the balance needs to be paid on a 30-day basis, with interest and/or charges added until the full balance is paid.

Debit card

Consumer purchase amounts are withdrawn from the available balance in their bank account. If the available funds are insufficient, the transaction is not completed (except where an overdraft facility is in place). Differs from pre-paid cards in that it is linked to a bank account.

Direct debit

Consumers allows merchants direct access to their debit account to collect varying amounts at set intervals—
normally used for regular, predictable payments such as subscriptions (e.g. Single Euro Payments Area (SEPA) and
Elektronisches Lastschriftverfahren (ELV).

E-invoice Consumers pay for goods after delivery, without sharing credit card or bank details, and can use e-mail address and postcode to make payments (e.g. Kiarna and Afterpay).

Consumers either use stored value or extract funds from other payment method—like a credit card—linked to their eWallet (e.g. Alipay and Tenpay).

Consumers receive a reference number during their purchase and pay later using their online banking facility authorization is not immediate (e.g. Dineromail and SafetyPay).

Others Includes mobile carrier billing, crypto-currencies and other emerging technologies (e.g. Bitcoin and Zong).

PostPay Consumers buy online, and pay later at an affiliated outlet or store—not suitable for perishable goods or timesensitive purchases due to the delay in payment (e.g. Konbini and Boleto Bancario).

Consumers make purchases or withdraw cash similar to a debit or credit card, but card must be loaded with cash in advance—the balance functions as spending limit—often offered to the unbanked or underbanked, young people, or people with a poor credit history (e.g. VirginMoney).

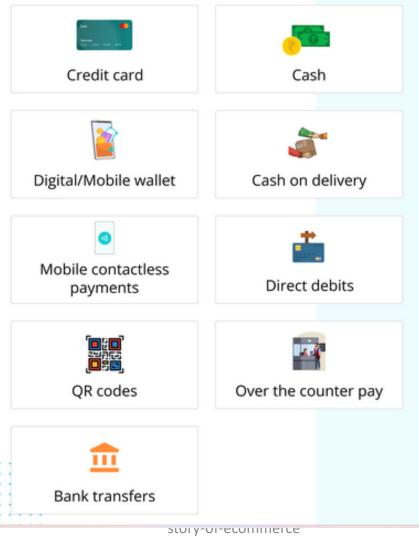
Consumers need to buy a card or voucher before starting a transaction—most prepay products have a funding limit and some do not allow multiple cards/vouchers to fund one transaction (e.g. paysafecard and NeoSurf).

Real-time bank transfer Consumers pay for goods using online banking facilities. Authorization is immediate in most cases (e.g. iDeal and Sofort Banking).

Sources: Direct Debit. What is Direct Debit? https://www.directdebit.co.uk/DirectDebitExplained/pages/whatisdirectdebit.aspx; Security Bank. Credit Card vs Debit Card vs Prepaid Card: Which Should You Use? https://www.securitybank.com/blog/credit-card-vs-debit-card-vs-prepaid-card-use/ (both accessed 23 April 2018); and WorldPay (2017).



#### **Top Payment Methods in Philippines**



https://www.investopedia.com/terms/e/ec



As of 2021, credit cards occupy 16% of all Philippines eCom transactions and 14% of all POS payment method preferences. The post-pandemic revival of the economy has contributed significantly to the re-emergence of credit card transactions.

Philippines' Central Bank aims to popularize credit cards by reducing the burden on credit card holders during the COVID-19 pandemic.

#### 2) Cash

In 2021, Philippines retailers witnessed a rapid decline in POS cash transactions, causing the cash payments to fall below 1/3rd of all sales. The pandemic has caused a paradigm shift in the various payment methods of Filipino consumers.

The BSP creates practices and regulations to drive nations towards a 'cash-lite' economy. In contrast, cash-based transactions are not entirely out of practice. The BSP plans to facilitate reliable and efficient digital payment methods to utilize interoperable technological advancements.



#### 3) Digital/Mobile Wallet:

Currently, digital wallets are leading the eCom payment solutions pack. GCash and PayMaya will piggyback on at least 45% of all eCom transactions in the Philippines by 2025.

In 2021, digital and mobile wallets contributed 16% of all preferred POS payment methods. Some notable features include trackable transaction trails for bookkeeping, seamless integration with web services, and incentives for service usage amongst local and domestic service providers.

The above-mentioned digital payment services lead the digital payment domain by occupying 30.5% of the market. They have become the fastest payment method of choice; a few well-known names in Philippines are:

#### -Gcash

GCash is an e-wallet in the Philippines that allows customers to pay bills, send and receive money, buy in-store and online, all through their smartphone.

#### -Coins.ph

Coins.ph is the simplest way to buy, sell, and store cryptocurrency in the Philippines. Coins.ph will enable you to invoke e-wallet activities like sending money, buying and loading, paying bills, and more.

#### -PayMaya

PayMaya is a popular Philippine electronic wallet that may be used for both personal and business transactions. PayMaya is a wonderful alternative if you prefer cashless transactions for your purchases and payments, like I do, especially if you don't have a bank account or a credit card. PayMaya can also be used to send and receive money.

A PayMaya enterprise account allows you to accept digital payments in your retail or online store if you are a merchant.

#### -GrabPay

GrabPay is a mobile wallet within the Grab app that lets you pay seamlessly for Grab services. Recently, they added more features to make it a more full-fledged mobile wallet.

#### -Global Wallets

Alipay, Paypal and Bitpay Are just a few of the global wallets that are accepted in the Philippines.



#### 4) Cash on Delivery (COD)

Cash-on-Delivery (COD) continues to be one of the most preferred means of financial transactions among Filipino retailers and consumers. However, this payment mode took a massive hit when the BSP mobilized mandates to transition to cashless payment systems.

Mobile wallets, online card payments, and QR payments slowly grew in usage. Still, the banked and unbanked Philippines population continued to rely on cash and COD in tandem.

#### 5) Mobile Contactless Payments

Mobile contactless payments allow consumers to pay confidently with a mobile wallet balance and integrated credit/debit cards. Users can transact with their finances using Near-Field Communication (NFC) on two NFC-enabled devices. The NFC technology uses Radio-Frequency Identification (RFID) technology.

RFID allows NFC-active devices to read information from passive machines. This enables a consumer to permit financial transactions with prior authentication.

NFC devices offer a novel use case, such as contactless credit cards. This facility helps consumers and retailers sustain economic activities while maintaining social distancing protocols.



#### 6) Direct Debits

In recent years, most businesses have been relying on convenient payment methods. Direct debit is a viable payment model in the Philippines, APAC, and beyond.

Direct debit is still in use in the Philippine public sector. This mode of financial transactions drives regional bank transfers. Direct debit payment methods are here to stay in this South Asian nation, given the high volume-value payments.

#### 7) QR Codes

The primary idea behind QR code technology is to enable a streamlined payment method to help customers opt for contactless and one-touch payment options. The merchants can integrate various bank-issued credit and debit cards to complete the POS process. The Philippines Monetary Board favors QR codes to boost financial inclusion. The country's National Retail Payment System (NRPS) model has collaborated with the PMB on this note. Interoperable QR codes are in practice, even after the lockdown has subsided.



#### 8) Over-the-counter (OTC) Payments

OTC utilizes Mobile Station international Subscriber (MSISDN), which merchants use to open temporary digital payment ledger's on behalf of the customer. This wallet does not require the consumer to have an MSISDN-enabled device (mobile phone).

OTC transfers greatly assist Philippines merchants in catering to the country's large, unbanked consumer populace. At the very least, this payment mode offers a highly fruitful alternative to shoppers and retailers to transact in a still cash-reliant Filipino society. Today, OTC payments are readily in practice at departmental POS stores. OTC payments perform better than active digital payment alternatives as consumers do not rely on eWallets and web-based payment methods for bulk monetary transactions.

#### 9) Bank transfers

With the initiation of the COVID-19 pandemic, consumers and retailers have enjoyed massive concessions on convenience fees. Bank transfers are helpful for same-day transfers for national and international payment instances.



## **Delivery Infrastructure Development**

Well-developed delivery infrastructure is central to maximizing value-added from e-commerce. Poor delivery infrastructure leads to late deliveries, damage or loss of parcels, delivery operator's negative attitude, and poor return procedures (A.T. Kearney 2011).



## **Economies of scale**

- Economies of scale and network externalities are important challenges to developing e-commerce in small developing countries.
- Large economies such as India and the PRC can offer e-commerce vendors economies of scale, allowing a wide range of affordable products to online customers. In contrast, the small number of internet users in smaller economies such as the Cook Islands and Tuvalu makes e-marketplace development difficult.



# business models

Some e-commerce players use unsustainable business models and practices. For instance, some e-commerce businesses offer heavy discounts and subsequently make losses. Also, a large proportion of small businesses in some Asia and Pacific economies use Facebook as their main storefront and tool for increasing sales and marketing reach.



\*\*\*\*The contribution of social media to establishing sustainable e-commerce business models for different industries remain yet to be examined. (Facebook Adds/Titkok)



# Legislative measures related to e-commerce

 Enacting appropriate legislative and regulatory mechanisms can lower legal barriers to ecommerce use and expand cross-border transactions.



- E-transaction facilitates e-commerce, by making paper-based and electronic forms of exchange legally equivalent;
  - Consumer protection aims to stop businesses engaging in unfair, deceptive or fraudulent practices online;
  - Data protection and privacy regulates how individual's personally identifiable information collected by any entity—such as governments, public or private organizations—can be stored and used; and
  - Cybercrime covers criminal activities where computers or computer networks are used to commit an offense (Kshetri 2009).



# Mobile e-commerce (m-commerce) refers to the use of mobile devices to enable online transactions.



# Social e-commerce is e-commerce that is enabled by social networks and online social relationships.



Local e-commerce, as its name suggests, is a form of ecommerce that is focused on engaging the consumer based on his or her current geographic location.



TYPE OF E-COMMERCE	EXAMPLE
B2C—business-to-consumer	Amazon is a general merchandiser that sells consumer products to retail consumers.
B2B—business-to-business	Go2Paper is an independent third-party marketplace that serves the paper industry.
C2C—consumer-to-consumer	Online platforms such as eBay, Etsy, and Craigslist enable consumers to sell goods directly to other consumers. Airbnb and Uber provide similar platforms for services such as room rental and transportation.
M-commerce—mobile e-commerce	Mobile devices such as tablet computers and smartphones can be used to conduct commercial transactions.
Social e-commerce	Facebook is both the leading social network and social e-commerce platform.
Local e-commerce	Groupon offers subscribers daily deals from local businesses in the form of Groupons, discount coupons that take effect once enough subscribers have agreed to purchase.

### Resources

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