MAKERERE UNIVERSITY BUSINESS SCHOOL

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF INFORMATION SYSTEMS

E-COMMERCE

BENT III

TOPIC ONE: INTRODUCTION TO E- E-COMMERCE

Evolution of E-commerce, E-commerce, E-business, Features of E-commerce, Pure vs. Partial E-commerce,, E-commerce Framework (People, Public Policy, Marketing and Advertisement, Support Services, Business Partnerships), Types of E-commerce: B2C, B2B, C2B, C2C, M-Commerce, Social-Commerce, Benefits and Challenges in E-commerce, Status of E-commerce in Uganda

1.0 Evolution of E-commerce

The progression of e-commerce has been analyzed by various researchers and stakeholders. The rise of the Internet in the 1990s brought significant communication opportunities.

Galinari et al. (2015) note that e-commerce's origins trace back to the 1970s when large corporations used private networks and electronic fund transfers for transactions.

Albertin (2012) divides the evolution of e-commerce into four phases. The first phase involved organizations using the Internet to share information about their products and services, sparking the initial growth of e-commerce.

In the second phase, businesses started accepting orders and providing instructions for their products and services, marking logistics' initial impact.

The third phase focused on the distribution of products through Information Technology (IT), allowing for the digital sale of items like music and software.

The final phase consolidates e-commerce with direct interactions between sellers and consumers, transforming the buying process. This change enabled average internet users to become potential consumers, revolutionizing how products and services are marketed.

As a result of globalization, companies are experiencing significant structural changes, driven by increased competitiveness, the need for innovation, and growing consumer demands, leading to modern management practices.The progression of e-commerce has been examined and monitored by numerous researchers and stakeholders within the industry. With the advancements in Information Technology, particularly with the rise of the Internet in the 1990s, a wide array of opportunities emerged, especially in the realm of communication.

take place digitally.

2.1 Definition of E-business and E-commerce

Electronic Business, shortly known as e-business, is the online presence of business. It can also be defined as the business which is done with the help of internet or electronic data interchange i.e. is known as E-business. E-commerce is one of the important components of e-business, but it is not an essential part. e-business is not confined to buying and selling of goods only, but it includes other activities that also form part of business like providing services to the customers, communicating with employees, client or business partners can contact the company in case if they want to have a word with the company, or they have any issue regarding the services, etc. All the basic business operations are done using electronic media.

e-Business is the term used to describe the information systems and applications that support and drive business processes, most often using web technologies. e-Business allows companies to link their internal and external processes more efficiently and effectively, and work more closely with suppliers and partners to better satisfy the needs and expectations of their customers, leading to improvements in overall business performance. While a website is one of the most common implementations, e-Business is much more than just a web presence. There are a vast array of internet technologies all designed to help businesses work smarter not harder. Think about collaboration tools, mobile and wireless technology, Customer Relationship Management and social media to name a few.

Electronic commerce or e-commerce refers to a wide range of online business activities for products and services. It also pertains to "any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact." E-commerce is usually associated with buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network.

Though popular, this definition is not comprehensive enough to capture recent developments in this new and revolutionary business phenomenon. A more complete definition is: E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals. Here are a few examples of e-commerce:

- accepting credit cards for commercial online sales
- generating online advertising revenue
- trading stock in an online brokerage account
- driving information through a company via its intranet
- driving manufacturing and distribution through a value chain with partners on an extranet
- selling to consumers on a pay-per-download basis, through a Web site

2.1.1 Is e-commerce the same as e-business?

While some use e-commerce and e-business interchangeably, they are distinct concepts. In e-commerce, information and communications technology (ICT) is used in inter-business or inter-organizational transactions (transactions between and among firms/organizations) and in business-to-consumer transactions (transactions between firms/organizations and individuals).

In e-business, on the other hand, ICT is used to enhance one's business. It includes any process that a business organization (either a for-profit, governmental or non-profit entity) conducts over a computer-mediated network. A more comprehensive definition of e-business is: "The transformation of an organization's processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy."

2.1.3 Dimensions of E-Business

Electronic commerce can take several forms depending on the degree of digitization (the transformation from physical to digital).

- The degree of digitization relates to:
    - The product can be physical or digital
    - *The process can be physical or digital;*
    - The *delivery agent* (or intermediary) can be physical or digital

Brick-and-mortar organizations/Traditional commerce are purely physical organizations. *All dimensions are physical ie the product, process and delivery agent.*

Click-and-mortar organizations are those that conduct some e-commerce activities, yet their business is primarily done in the physical world. i.e. *Partial E-Commerce*

Pure E-Commerce/Virtual organizations are companies that are engaged only in E-commerce. *All dimensions are digital ie the product, process and delivery agent.*

2.1.4 E-commerce framework

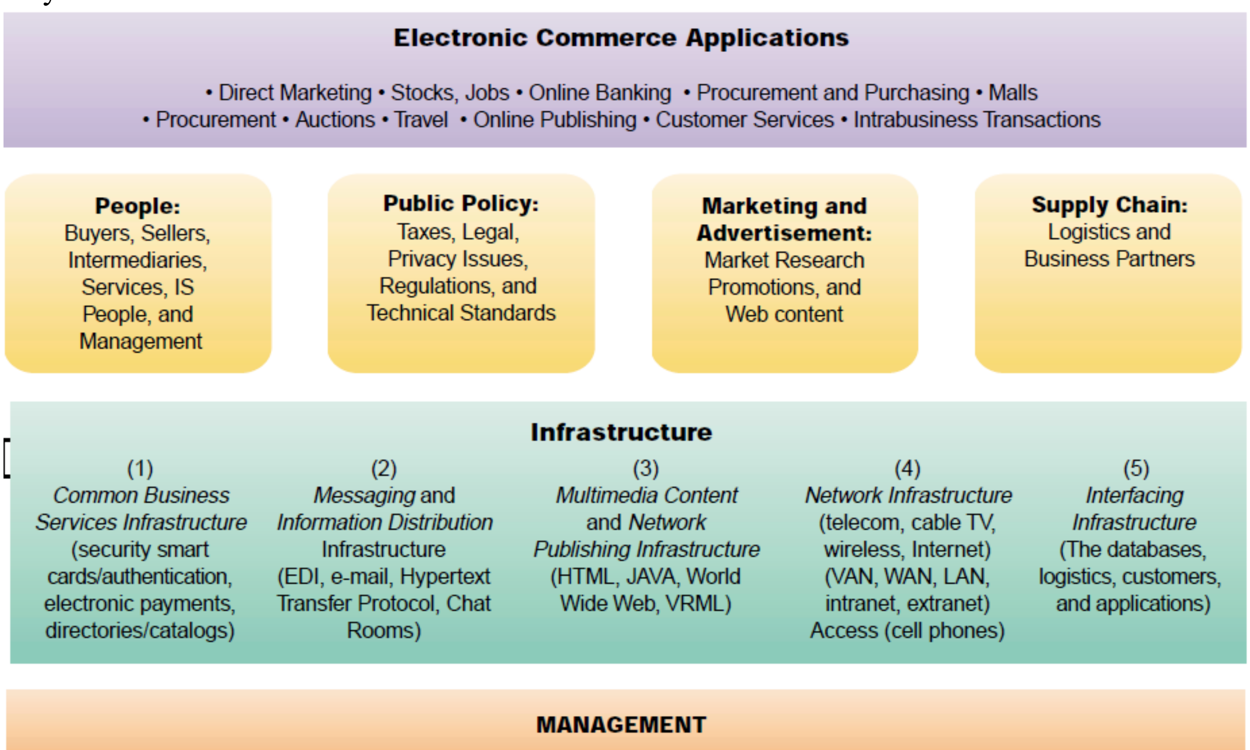
The EC field is diverse, involving many activities, organizational units, and technologies. Therefore, a framework that describes its contents can be useful. EC applications are supported by infrastructure and by the following five support areas.

- ***People*:** Sellers, buyers, intermediaries, information systems specialists and other employees, and any other participants.

- ***Public policy*:** Legal and other policy and regulating issues, such as privacy protection and taxation.

- ***Marketing and advertising***: Like any other business, EC usually requires the support of marketing and advertising.
- ***Support services***: Many services are needed to support EC. They range from payments to order delivery and content creation.
- ***Supply Chain ie Business partnerships***: Joint ventures, e-marketplaces, and partnerships are some of frequently occurring relationships in e-business.

Infrastructure describes the hardware, software, and networks used in EC. All of these components require good management practices. This means that companies need to plan, organize, motivate, devise strategy, and restructure processes, as needed, to optimize the business use of EC models and strategies. Building a successful e-commerce system is not a simple task. There are a large number of issues must be considered and the large number of companies and government agencies may be involved.



2.2 Types/ Categories of e-commerce

There are a variety of different types of e-commerce and many different ways to characterize these types;

1. **Business to Business (B2B)** — This involves companies doing business with each other. One example is manufacturers selling to distributors and wholesalers selling to retailers. Business

to Business or B2B refers to electronic commerce between businesses rather than between a business and a consumer. B2B businesses often deal with hundreds or even thousands of other businesses, either as customers or suppliers. Carrying out these transactions electronically provides vast competitive advantages over traditional methods. When implemented properly, ecommerce is often faster, cheaper and more convenient than the traditional methods of bartering goods and services. can be simply defined as the exchange of goods, services and information between companies, and is the largest form of e-commerce (80% of e-commerce is of this type) with a significant growth potential. The B2B market has two primary components, the first of which consists of a sort of e-infrastructure made up of logics, application service providers, outsourcing of functions in the process of e-commerce, auction solutions software and content management software, web-based commerce enablers. The other component is represented by e-markets, that are web sites where buyers and sellers interact in a virtual meeting place to conduct transactions. Most B2B e-commerce falls into areas like supplier management,

o inventory management, distribution management, channel management and payment management and the best examples are IBM, Cisco (where customers can buy and get technical support as well as downloads directly on line) and Dell. The impact of B2B markets on the economy can be measured in terms of:
reduction of transaction costs: first of all search costs are reduced because, due to disintermediation, buyers can count on a more efficient information channel, without the need to go through multiple intermediaries.
In addition, with B2B e-commerce there is the automation of transaction processes and so the reduction can be seen also in the cost of processing transactions, favored by online auction systems, with an optimization in logistics and inventory management;
o disintermediation: as previously mentioned, with B2B e-markets there is the elimination of intermediaries and distributors, with suppliers interacting directly with buyers. However, if intermediaries are eliminated in terms of how we have talked about, it is also true that new form of intermediaries emerge;
o transparency in pricing: buyers and sellers are gathered together in a sort of single e-community, so all price information are revealed and are accessible and available to all members. This is advantageous for buyers inasmuch can make better buying decision, besides creates conditions for participated pricing-setting among buyers and sellers;
o economies of scale and network effects: B2B e-markets allow the creation of supply-side economies of scale as a direct consequence of the reduction affecting transaction costs. In addition there are economies of scale also from a demand-side, the so called network effect, through which incremental participant in the market creates value. In that way it forms the basis for a bandwagon effect, because the network becomes more valuable over time and more people join it.

2. **Business to Consumer(B2C)** — B2C consists of businesses selling to the general public through shopping cart software, without needing any human interaction. This is what most

people think of when they hear "e-commerce." An example of this would be Amazon. B2C is the second largest form of e-commerce, in which online businesses sell to individual customers in areas like purchasing products and information and personal finance management. The most important company we can find in this category is Amazon in the USA that, started in a garage by Jeff Bezos in 1995, has become the largest and profitable Internet retailer with the highest levels of customer satisfaction and the fastest revenues growth rates. In addition to online retailers, there are six additional types of business models belonging to B2C e-commerce and they are portals, content providers, transaction brokers, market creators, service and community providers. Also in the case of B2C, as well as for B2B, there is a reduction in transaction costs as a consequence of the fact that consumers have an easier access to information. Beyond this, there is a lowering in the entry barriers, since costs of creating and maintaining an e-commerce site are cheaper than the ones of installing a brick-and-mortar business.

3. **Consumer 2 Business (C2B)** — (C-to-B): is a form of e-commerce based on consumers driving the transaction for the exchange of products/services or information to business. In C2B e-commerce, consumers post a project with a set budget online, and companies bid on the project. The consumer reviews the bids and selects the company. Elance is an example of this.

4. **Consumer to Consumer (C2C)** — (C-to-C): is the type of e-commerce in which consumers interact directly with other consumers. It is characterized by the growth of electronic marketplaces and online auctions; in that way, also if we have little information available about the size of this type of e-commerce, the amount of sales produced by C2C sites like eBay make us think that the market is quite large. The three forms of C2C e-commerce are auctions facilitated at portals such as eBay6, peer-to-peer systems such as Napster7 and classified ads at portal sites. Thanks to these forms of e-commerce, consumers take advantage of reduced costs, as they can post directly for free the items they want to sell on the C2C website, and relies on the market maker so that they can be easily displayed and discovered. The result is the creation of a perfect platform of buyers and sellers, less expensive and easier to maintaining compared to a physical shop. However this type of e-commerce has the disadvantage of requiring the cooperation between buyers and seller, which in reality does not happen very often, leading to situations of online frauds and lawsuits, as well as hampering the C2C website's reputation. This takes place within online classified ads, forums or marketplaces where individuals can buy and sell their goods. Examples of this include Craigslist, eBay and Etsy.

5. **Business-to-Government (B-to-G):** it can be considered a sort of B2B in which the government is seen as a business that acts as a procurer of goods/services. The size of this form of e-commerce is literally insignificant, if seen as a portion of the total e-commerce. Anyhow wanting to give a definition, we can say that B2G is the online exchange of information, goods and services between business organizations and the public sector.

Specifically B2G refers to the use of Internet technologies for public procurement, licensing, and other government-related operations in which the government assumes an active and leadership role. Notwithstanding B2G systems remain undeveloped while ensuring transparency of processes, with relative reduction of the risk of irregularities.

6. **Consumer-to-Government (C-to-G):** it is the case of consumers providing services to government yet to be implemented, so it could be better understood subsequently with the Government-to-Business e-commerce.

7. **Other Types of E- Commerce**

Collaborative commerce (c-commerce). In this type of EC, business partners collaborate electronically. Such collaboration frequently occurs between and among business partners along the supply chain.

Mobile commerce (m-commerce). When e-commerce is done in a wireless environment, such as using cell phones to access the Internet, we call it m-commerce.

Social Commerce (s-commerce). Social commerce is defined as applying social media applications to shape business, hence transforming a market for goods and services into socially centered user-driven marketplaces.

Facebook Commerce. F-commerce is the use of Facebook as a platform for facilitating and executing sales transactions, either on Facebook itself or externally via the Facebook Open Graph. F-commerce is a form of social commerce, the use of social media, online media that support social interaction and user contribution, to assist the online buying and selling of products and services.

2.2.1 E-Government

E-Government refers to the application **of e-commerce technologies** to government and public services. The use of Internet Technology in general and e-commerce in particular to deliver information about public services to citizens (called Government-to-citizen [G2C EC], business partners and suppliers (called government-to-business [G2B EC]). G2C and G2E involve interaction and cooperation between government and individuals, G2B and G2G deal with the relationship between government and organizations. G2C and G2B involve external interaction and collaboration between government and outside institutes, such as individual citizens and businesses; G2E and G2G involve the internal interaction and cooperation between governments and their employees, as well as between governments at different levels and distributed locations.

In the same way that e-business can be understood as transactions with customers (citizens), suppliers and internal communications, e-government covers a similar range of applications:

1. *Citizens* – facilities for dissemination of information and use of online services at local and national levels. For example, at a local level you can find out when refuse is collected and at national level it is possible to fill in tax returns.
2. *Suppliers* – government departments have a vast network of suppliers. The potential benefits (and pitfalls) of electronic supply chain management and e-procurement are equally valid for government.
3. *Internal communications* – this includes information collection and dissemination and e-mail and workflow systems for improving efficiency within government departments. E-government is now viewed as important within government in many countries.

- **G2G : Government to Government interaction involving sharing of data and** conduct of electronic information exchange amongst various government departments and other entities. This exchange could be both intra and interagency at the National level as well as exchanges among the national, provincial and local levels.

- **G2C : Government to Citizen interaction where electronic dissemination of** information and electronic delivery of services takes place, fulfilling the primary objective of e-government. Initiatives in this form of interaction attempt to make transactions such as obtaining certificates, renewing licenses, paying taxes/bills and applying for government schemes less time consuming and convenient. Also included is the key component of citizen participation in the processes and policy formulation by the government.

- **G2B : Government to Business interaction involving improved and efficient** procurement of goods and services by the government from the commercial business entities. It also includes sale of government goods to the public and has the potential for reducing costs through improved procurement practices and increased competition. Further, this type of interaction involves the transaction and exchange between the government and the businesses regarding licenses, taxation and policies issued for various sectors.

- **G2E : Government to Employee interaction covering employment opportunities,** work guidelines, rules & regulations, benefits and pay structures for the government employees, employee welfare schemes, work rules and regulations, government housing etc.

2.3 E-Commerce Seven Unique Features

E-commerce is characterized by the ubiquity, that is to say the capacity of being everywhere and especially at the same time. This liberates the physical barriers of the marketplace, typical of traditional commerce, giving birth to a marketspace extended beyond any boundaries. The result is that the customer can go shopping every moment and in every place, from his desktop at home or at university, or simply in its car thanks to mobile commerce. Thus ubiquity reduces customers' costs of participating in a market (transaction costs) and lowers the so called cognitive energy, by which we mean the mental effort required to complete a task. Breaking down the physical barriers of traditional commerce, e-commerce allows transactions all over the world, widening the potential market size.

In fact unlike traditional commerce that is local or regional, e-commerce can count on a global reach, because the number of customers/users corresponds to the world's online population.

The rich audience meets also a reach message, in which video, audio and text merge together in order to deliver a powerful marketing message. This is not of course the case before the development of the web, when ruled a tradeoff between richness and reach, whereby the larger the audience reached and the less rich the message. So information become more plentiful, because with e-commerce there is an increase in the information density, namely the amount and quality of information available to all market participants. In this way prices, markets and costs became more transparent: consumers can find out all prices available on the market but also costs merchants pay for products, and, at the same time, merchants are able to segment the market into groups according with prices they're able to pay (price discrimination), offering products differentiated in terms of cost-brand-quality.

But all that is possible exclusively because Internet, and therefore e-commerce, is based on the use of universal standards, standards that are shared by all nations around the world, contrarily to standards used by traditional commerce that differ from one nation to another. The resulting benefits are many, for both merchant and consumer: the former can count on low market entry costs to bring goods on the market, instead for consumers there are reduced search costs needed to find more suitable products.

Therefore, given the fact that through universal standards everyone use the same technology, Internet users can experience network externalities, together with a simpler and more accurate price discovery. Again, another feature of e-commerce is the interactivity, since, unlike television and other traditional form of commerce, it allows a two way communication similar to a face-to-face experience but with a greater level of engagement. Given this interactivity between merchants and consumers and the increase in information density, merchants can gather much more information about consumers and preferences, as well as about their past purchases. This leads to a great level of personalization and customization: customers are targeted by messages adjusted accordingly with customers' name and interests and the same apply for delivered products/services.

Summarizing, e-commerce technologies bring a shift into the world of commerce, reducing information asymmetry among all market participants. Thanks to the general level of transparency and interactivity, consumers know about prices and products of different sellers available on the market; on the other hand, sellers know about customers' preferences and attitudes, as well as about all the other existent sellers.

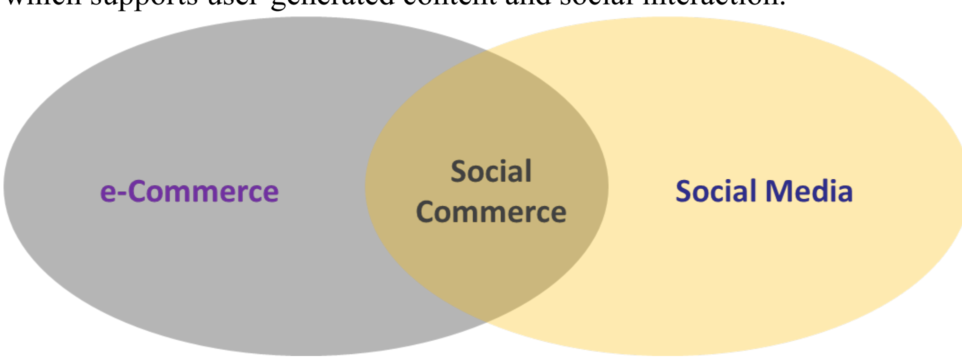
Seven unique features of e-commerce summarised as shown below:

1. Ubiquity: e-commerce is available everywhere and at all times;
2. Global reach: it reaches customers across national boundaries;
3. Universal standards: it use standards shared by all nations;
4. Richness: it shares messages that are rich in terms of complexity and content;
5. Interactivity: it is characterized by a two way communication between customer and merchant;
6. Information density: it increases the amount of information available;
7. Personalization/Customization: e-commerce allows the delivery of services and messages that perfectly fit with customer's interest and preferences.

Social commerce

Social commerce has been defined as "the use of social technologies to connect, listen, understand, and engage to improve the shopping experience" (Cecere et al, 2010). It can build brand equity by adding to the brand value proposition with socially-powered applications.. One increasingly popular strategy has been to monetize social media with e-commerce. Social commerce is the fusion of social media with e-commerce. More fully, social commerce is a subset of electronic commerce that uses social media, online media that supports social interaction and user contributions, to enhance the online purchase experience. Social commerce is not itself new, what is new is the social media and e-commerce technology, such as social media stores and portable social graphs, that have opened up a new range of opportunities for the monetization of social media with e-commerce.

Social commerce sometimes presented as a subset of e-commerce; combines two essential elements: social media and commercial activities. Stephen and Toubia defined the concept as a form of Internet-based social media which enables the selling and marketing of products and services in online communities and marketplaces. Social commerce is the marriage of e-commerce and electronic word-of-mouth, while Marsden and Chaney see it as selling with social media, which supports user-generated content and social interaction.



There are two types of social commerce:

(1) Social networking sites that incorporate commercial features to allow transactions and advertisements; and

(2) Traditional e-commerce websites that add social tools to facilitate social interaction and sharing. Traditional e-commerce websites such as Amazon as practicing a form of social

commerce when they feature online consumer reviews. Group shopping websites are also considered a form of social commerce where people form groups to purchase products with price incentives. Social commerce is the “exchange-related activities that occur in, or are influenced by, an individual's social network in computer-mediated social environments, where the activities correspond to the need recognition, pre-purchase, purchase, and post-purchase stages of a focal exchange”. This definition introduces two building blocks of the concept: (1) exchange-related activities, which include various stages of consumers’ decision-making; and (2) computer-mediated social environments, where meaningful personal connections and sustained social interactions exist among network members.

Social media platforms play an essential role in the modern economy. While these platforms began as niche websites for interacting with friends, they have become ubiquitous and transformed how people interact and communicate. In 2023, there were 4.76 billion social media users worldwide, comprising 60% of the world population and over 90% of internet users (Kemp, 2023). Internet users spend almost 2.5 hours daily on social media platforms, more than any leisure or media activity besides television (Kemp, 2023). The mass adoption of these applications has resulted in a speed and range of information flow that is unprecedented in history. Businesses, organizations, and politicians use social media to directly connect with individuals, target users with ads, and offer algorithmically curated content to the most relevant consumers.

M-Business, M- Commerce

Mobile Business is often referred to as “***M-Business***” or “***mBusiness***”. Mobile Business is often described as an extension of the traditional Electronic Business to wireless devices or as an additional channel for it.

Kalakota and Robinson (2002) claimed that m-business should combine Internet, wireless technologies, and e-business indicating that m-business includes aspects of information, services, and products with mobile devices on wireless network infrastructures.

What is M-Commerce? Mobile commerce or simply M-Commerce means engaging users in a buy or sell process via a mobile device. For instance, when someone buys an Android app or an iPhone app, that person is engaged in m-commerce. There are a number of content assets that can be bought and sold via a mobile device such as games, applications, ringtones, subscriptions etc.

Mobile Commerce is an extension of e-commerce conducted over wireless devices such as smartphones or tablets. It presents a new business model, that provides more ubiquity and accessibility to the users, and MC can allow the consumer to conduct online transactions at “anytime” and “anywhere” (Yan, 2017).

Mobile commerce is not the next big thing; it is a phenomenon that is already happening. It is neither a new technology nor a trend but an extension of electronic commerce that has been around for more than two decades now. The increased penetration of smartphones has not only changed the way people reach out to one another but also their purchasing behavior, which has drawn the attention of consumer behavior scholars. According to Statista (2022) [1], the number of smartphone subscriptions worldwide today surpasses six billion, translating to about 80% of the world's population. Further, this number is forecasted to grow by several hundred million in the next few years. This increase in smartphone penetration and strong internet connectivity drive m-commerce growth [2].

Difference between "Electronic" and "Mobile" Aspects

To understand the difference between Electronic- and Mobile Commerce or between Electronic- and Mobile Business it is essential to understand the similarities and differences between the terms "***electronic***" and "***mobile***". The adjective "electronic", used within the specific contexts of "***Electronic Business***" or "***Electronic Commerce***", signifies an "anytime access" to business processes managed by computer-mediated networks. Furthermore, the access to such networks is, in this case, stationary. The services are, therefore, not available independent of the geographic location.

The adjective "***mobile***", used within the specific contexts of "***Mobile Commerce***" or "***Mobile Business***", signifies an "anytime *and* anywhere access" to business processes managed by computer-mediated networks. The access takes place using mobile communication networks, making the availment of these services independent of the geographic location of the user.

While e-commerce is the umbrella term that refers to the sale and purchase of goods and services over the internet, m-commerce is the extension of e-commerce where the transaction is made using mobile devices such as smartphones and tablets with wireless internet connection.

M-commerce has changed the face of retailing as a new business model with unique advantages that create new value for customers. "This is due to its distinctive features such as mobility and flexibility, which makes it usable anywhere, anytime without space or time limits" .

The benefits of convenience, personalized offers, and faster shopping experiences have prompted shoppers to prefer mobile shopping over other modes of shopping. Further, the digital wallets embedded in the mobile shopping app have an extra layer of security and authentication to keep financial information secure, such as Face Id and Touch ID, which are largely absent in desktop computer-mediated shopping. Owing to these advantages, numerous m-commerce applications have emerged, such as mobile payment, mobile health, mobile entertainment, mobile ticket booking/vacation/travel assistance, mobile learning, mobile financial applications (Fintech), and e-governance through mobile apps. Moreover, the biometric technologies enabled in mobile commerce apps allow firms to identify and profile customers based on their search and purchase history.

2.4 Benefits of E-commerce

Benefits of implementing e-commerce

1. e-Commerce is a method for reducing administrative costs and cycle time, reorganising improving relationships between both business partners and customers.

An effective e-Commerce solution can extend business by increasing opportunities with customers, suppliers, and other business partners. Organizations that compete effectively in the e-Commerce arena are able to make better decisions, which can enhance market position and, ultimately, profitability.

2. e-Commerce techniques allow small businesses to have access to the same markets as larger businesses.

Small organizations can have instant access to international markets. Customers all over the world can access your web site and buy your products whether your company has one full-time person or one thousand full-time employees.

Small businesses can grow very quickly and even take on larger businesses; they may also be able to provide personalized services to customers, who visit their web site, more easily than larger businesses, as the latter have to deal with the bureaucracy involved in service organisation and provision.

3. Electronic sign offs can prevent inappropriate business transactions that can be missed in a paper-based system.

Business rules can be implemented electronically so that systems won't accept transactions that have incorrect codes or insufficient electronic authorization. Buying patterns can be tracked as well, which allows organizations to make better decisions about the product and service delivery. Giving the right information to the right people at the right time can dramatically improve the company's ability to compete in its marketplace.

4. Organizations, which use e-Commerce techniques and technology, are likely to attract additional consumers because of a higher level of customer service.

Organizations, which move to the web, will be able to help their customers resolve problems faster. This may lead to better customer relations and increase of the number of customers.

Organizations that modify the interactions of both vendors and customers will appear to be more attractive business partners. This ultimately enhances their market position.

Some organizations will find that the majority of their customers prefer to conduct business via the web rather than traditional methods, which means that organizations that can't keep up with the technology will find themselves in trouble.

Tangible Benefits Of E-Business/E-Commerce

- Increased sales from new sales leads giving rise to increased revenue from:
    - New customers, new markets
    - Existing customers
        - Marketing cost reductions from:
    - Reduced time in customer service
    - Online sales
    - Reduced printing and distribution costs of marketing communications
- Supply-chain cost reduction from:
    - Reduced levels of inventory
    - Increased competition from suppliers
    - Shorter cycle time in ordering
    - Administrative cost reductions from more efficient routine business processes such as recruitment, invoice payment and holiday authorization.

Intangible Benefits Of E-Business /E-Commerce

- Corporate image communication
- Enhance brand
- More rapid, more responsive marketing communications including PR
- Faster product development lifecycle enabling faster response to market needs
- Improved customer service
- Learning for the future
- Meeting customer expectations to have a website
- Identify new partners, support existing partners better
- Better management of marketing information and customer information
- Feedback from customer on products

2.5 Limitations of E-Business/ E-Commerce

E-businesses may experience both technical and non-technical limitations. According to the "Houston Chronicle," online security threats remain a major risk factor for all e-businesses. The level of vulnerability for e-businesses poses possible security risks to the company and its customers around the clock. If a technical problem occurs and a website server malfunctions, consumers who are looking for products may choose to go into a local store instead of waiting. It is crucial for e-businesses to maintain their websites and necessary technologies to ensure that technical difficulties do not occur, and when they do occur, that they are fixed promptly. Some customers feel that e-businesses are less personal and riskier than other types of businesses, which can also limit the consumer base of an e-business. Consumers who are not computer savvy or lack access to the Internet may avoid shopping with e-businesses altogether. As technology improves, some of the limitations that e-businesses face will dwindle.

technological dependence and minimal consumer interaction. Many consumers enjoy the thrill of shopping inside a store and being able to touch, see, smell and taste items of their choice, but an e-business blocks sensory consumer interactions. An e-business's heavy dependence on technology poses the threat of sudden technical difficulties that can hinder business flow at any time.

One of the big differences between technical and non-technical limitations is that technical limitations can be solved (most of the time) by spending enough money - whereas non-technical limitations are things that are more difficult to change since they involve things that cannot be changed easily - like people's attitude, lack or trust, resistance to change, faceless transactions, etc.

EC has some limitations, both technical and non-technical, which have slowed its growth and acceptance.

Technical Limitations:

- Expensive and/or inconvenient Internet accessibility for many would-be users.
- Security:- the security risk in e – commerce can be-client / server risk, data transfer and transaction risk and virus risk.
- High start up cost:- The various components of cost involved with e – commerce are (1)connection:- connection cost to the internet, (2) hardware / software:- this includes cost of sophisticated computer, modem, routers, etc and (3)maintenance:- this include cost involved in training of employees and maintenance of web-pages.
- There can be lack of system security, reliability or standards owing to poor implementation of e-Commerce.
- Software development industry is still evolving and keeps changing rapidly.
- In many countries, network bandwidth might cause an issue as there is insufficient telecommunication bandwidth available.
- Special types of web server or other software might be required by the vendor setting the e-commerce environment apart from network servers.
- Sometimes, it becomes difficult to integrate E-Commerce software or website with the existing application or databases.
- There could be software/hardware compatibility issue as some E-Commerce software may be incompatible with some operating system or any other component.

Non-technical limitations:

- Cost and justification The cost of developing EC in-house can be very high, and mistakes due to lack of experience may result in delays.
- There are many opportunities for outsourcing, but where and how to do it is not a simple issue. Furthermore, to justify the system one must deal with some intangible benefits (such as improved customer service and the value of advertisement), which are difficult to quantify.
- Security and privacy. These issues are especially important in the B2C area, especially security issues which are perceived to be more serious than they really are when appropriate encryption is used. Privacy measures are constantly improved.
- Yet, the customers perceive these issues as very important, and, the EC industry has a very long and difficult task of convincing customers that online transactions and privacy are, in fact, very secure.
- Lack of trust and user resistance Customers do not trust an unknown faceless seller (sometimes they do not trust even known ones), paperless transactions, and electronic money. So switching from physical to virtual stores may be difficult.
- Other limiting factors. Lack of touch and feel online. Some customers like to touch items such as clothes and like to know exactly what they are buying.
- Many legal issues are as yet unresolved, and government regulations and standards are not refined enough for many circumstances. · Electronic commerce, as a discipline, is still evolving and changing rapidly. Many people are looking for a stable area before they enter into it.
- There are not enough support services. For example, copyright clearance centers for EC transactions do not exist, and high-quality evaluators, or qualified EC tax experts, are rare.
- In most applications there are not yet enough sellers and buyers for profitable EC operations.
- Electronic commerce could result in a breakdown of human relationships.
- Accessibility to the Internet is still expensive and/or inconvenient for many potential customers. (With Web TV, cell telephone access, kiosks, and constant media attention, the critical mass will eventually develop.)
- Perception that EC is expensive and unsecured.
- An insufficient number of sellers and buyers exists for profitable EC operations.
- Lack of skilled personnel:- there is difficulty in finding skilled www developers and knowledgeable professionals to manage and a maintain customer on line.
- Uncertainty and lack of information:- most of the companies has never used any electronic means of communication with its customers as the internet is an unknown mode for them.
- Some business process may never be available to e – commerce:-Some items such as foods, high cost items such as jwellery may be impossible to be available on the internet.

- User resistance: User may not trust the site being unknown faceless seller. Such mistrust makes it difficult to make user switch from physical stores to online/virtual stores.
- Security/ Privacy: Difficult to ensure security or privacy on online transactions.
- E-Commerce applications are still evolving and changing rapidly.
- Internet access is still not cheaper and is inconvenient to use for many potential customers like one living in remote villages.

2.6 Conclusion

In general, today's businesses must always strive to create the next best thing that consumers will want because consumers continue to desire their products, services etc. to continuously be better, faster, and cheaper. In this world of new technology, businesses need to accommodate to the new types of consumer needs and trends because it will prove to be vital to their business' success and survival. E-commerce is continuously progressing and is becoming more and more important to businesses as technology continues to advance and is something that should be taken advantage of and implemented.

From the inception of the Internet and e-commerce, the possibilities have become endless for both businesses and consumers. Creating more opportunities for profit and advancements for businesses, while creating more options for consumers. However, just like anything else, e-commerce has its disadvantages including consumer uncertainties, but nothing that can not be resolved or avoided by good decision-making and business practices.

There are several factors and variables that need to be considered and decided upon when starting an e-commerce business. Some of these include: types of e-commerce, marketing strategies, and countless more. If the correct methods and practices are followed, a business will prosper in an e-commerce setting with much success and profitability.

STATUS OF E-COMMERCE IN UGANDA

•The Ugandan economy continues to grow at an average of 5% p.a.

•E-commerce provides the promise for a faster economic transformation and the achievement of macro-economic goals

•Several sectors have joined the E-commerce and e-business arena in Uganda

•More business leaders are now looking at the more available internet for greater business opportunities online.

Consumers/buyers; individual and corporate buyers;

•**Manufacturers**; UMA members, importers and exporters;

•**Logistics Service providers**; delivery firms, transporters, bonded warehouses e.g car bonds;

•**Financial intermediaries**; banks, MFIs, insurance firms;

•**Government systems**; tax bodies/ URA, ministries, agencies, law enforcement agencies;
•**Social commerce players**; social entrepreneurs, social activists, Go-fund me players;
•**Mobile sector players**; Mobile Network Operators, ISPs, govt, the public, private businesses.

Though loosely regulated and informal, eCommerce continues to rapidly grow in Uganda due to the widespread use of “mobile money” (telephone-based financial transfers) and the rapid growth of mobile phone usage. While there are only 19 million bank accounts in Uganda, there are about 26 million active mobile money accounts.

In May 2021, the BOU took over the regulating of all payment systems, including fintech’s and mobile money transactions. The act gives the BOU broad oversight authority, including the power to block eCommerce and mobile money transactions when it deems necessary. The BOU generally cautions against transactions using cryptocurrencies, often warning that some of these could be scams.

B2B/B2C sellers typically market their goods and services online, with consumers and sellers connecting first by phone and then by physical meeting. Payments are typically made in cash or by mobile money transfers. Although shopping directly from a website is a relatively new phenomenon in Uganda, it is fast growing. One key advantage for eCommerce in Uganda is the expanding middle class with a growing taste for U.S. consumer items (regarded as being of superior quality than those from China and other countries). Young people (18 to 30) constitute the bulk of online sellers and buyers.

Advertising in Uganda’s eCommerce market remains largely unsophisticated and is mainly limited to social media platforms. Facebook, WhatsApp, Instagram, TikTok and Twitter are the most used online platforms in Uganda. After Facebook removed certain accounts affiliated with ruling National Resistance Movement (NRM) party officials for coordinated inauthentic behavior in the leadup to the January 2021 elections, the Ugandan government ordered all Internet service providers operating in Uganda to block access to Facebook; the platform remained blocked as of October 2023 but still receives heavy traffic from Ugandans with access to virtual private networks (VPNs).

Ugandan law provides for the protection of intellectual property rights (IPR), but enforcement mechanisms are weak. The country particularly lacks the capacity to prevent piracy and counterfeit distribution. As a result, theft and infringement of intellectual property rights is common and widespread. Uganda does not track seizures of counterfeit goods or prosecutions of IPR violations.