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Impact of Electronic commerce on Economy

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Abstract: E-commerce a technology which changes the working criteria of whole world. It changes the marketing and physical presence of commodities during buying and selling process. It made whole world connected in one soul, in one knot and make a world such a small place to travel via online. It fulfils the desire of countless people and boon the market with its immense features and its advantages. It reduces the consequences of travelling, expenses while doing purchase and sale of commodities or services.

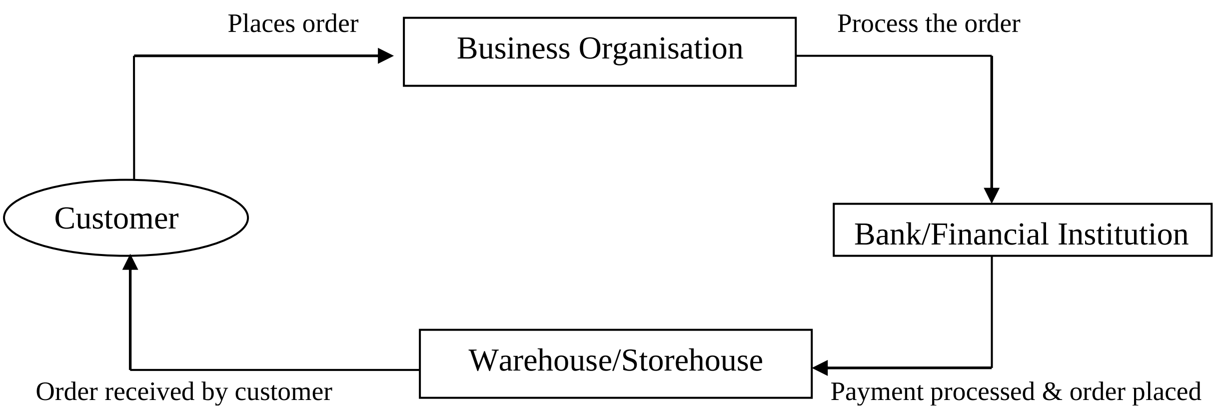
Keywords: Electronic commerce, online commerce, Internet commerce, E-business.

I. INTRODUCTION

E-commerce acronym of Electronic commerce refers to vast range of online business activities for goods and services. E-commerce is generally associated with buying and selling of goods and services over the Internet through electronic medium. The term was first coined and employed by Dr. Robert Jacobson that was the Principal Consultant to the California State Assembly's Utilities and Commerce Committee. The meaning of the term electronic commerce has changed over time to time. Originally electronic commerce meant the facilitation of commercial transactions electronically, using technology like Electronic Data Interchange to send the commercial documents like bills, invoice details electronically. E-commerce helped in connecting several businesses as well as many organisations and its branches electronically to form a single web to transact business.

II. HOW DOES E-COMMERCE WORK?

E-commerce is powered by the internet, where customers who wanted to engage in any kind of activity, here is purchase of any commodity can access any of online store to browse through, find his best suited product and place orders for products or services via electronic devices that could be through Smartphone, computer, laptop, tablet etc.



As the order is placed by the customer, the customer's web browser will communicate back and forth with the server hosting the online store's website. Data related to the order will then be relayed to a central computer termed as the order manager and then that data will be forwarded to databases that manage inventory, a merchant system that manages payment information including the credit card, debit card, net banking details and amount of product, deducted amount etc. using applications such as PayPal, PayU, PayMill and many others and a bank computer. This is to make sure that store inventory and customer funds are sufficient for the order to be processed. After the order is validated, the order manager will notify the store's web server, which will then display a message notifying the customer that their order has been successfully placed and processed by our web store. The order manager will then send order details to the warehouse or fulfilment department, in order for the product or service to be successfully dispatched from the warehouse. At this point customer's original/required product may be shipped or access to a

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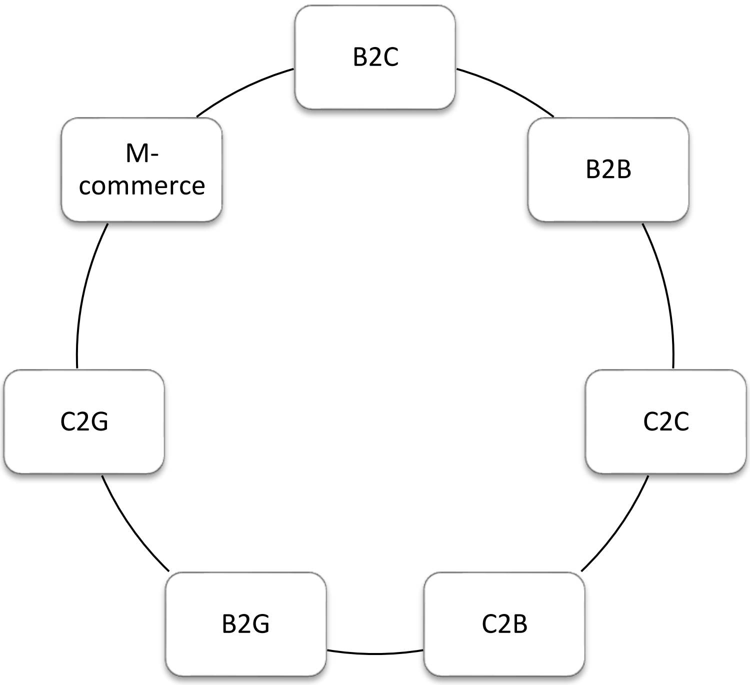
service may be granted. As and when the product is reached the billing address location it has been picked by store's delivery man to deliver the product at mentioned billing address and that's way its reach to the customer.

III. MODELS OF E-COMMERCE



(i) Business to Consumer (B2C)

As the above name suggest, this model involves business and consumer. This is most common form of E-commerce model. In this model, online business sells their goods and services to individual consumers.

The basic concept behind this model is direct online communication between seller and purchaser. It is a retail part of E-commerce over the internet where every information is already been disclosed off in front of purchaser parties before any transactions take places. There are numerous virtual stores available these days which support this model of E-commerce. The most common and recognised examples are Amazon and Myntra.

(ii) Business to Business (B2B)

It is the largest form of E-commerce involving business of trillions of dollars. In this form of E-commerce model there is no such involvement of an individual consumer. Here both the entities involved during the process of buying and selling are business. It is just like manufacturer of a particular commodity is supplying those goods to the retailer or wholesaler. It implies activities between businesses. B2B business is like SaaS. (Software as a Service)

(iii) Consumer to Consumer (C2C)

Consumer to Consumer refers to activities which facilitate the online transaction of goods and services between two people, basically both are consumer in which one is buyer and another one is seller. There will be an existence of using intermediary involved as in some cases both consumers are using any of electronic platform or third party online platform to buy or purchase a product. The most common and recognised examples are eBay. This is model is generally use as an online auction style model. This excludes business from the equation.

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(iv) **Consumer to Business (C2B)**

Consumer to Business is a type of E-commerce model in which consumers make their goods and services available online for business or companies to bid on and purchase their product or service. This is just opposite of the model of B2C.

A popular example of a C2B platform is a market that sells royalty-free photographs, images, paintings in exchange for a fee.

(v) **Business-to-Government (B2G)**

B2G refers to transactions conducted online between business and government organisation. Here business acts as a buyer and government bodies as a seller. Many sectors of government are dependent on business for e-services or products in one way or other as everything cannot be monitored or executed by government bodies. Government allows Businesses to fill and take government tender of various projects time to time and fulfil the needs of requirement mentioned by the government bodies with in time limit. B2G services have grown considerably in recent years.

(vi) **Consumer-to-Government (C2G)**

C2G refers to transactions in which consumer acts as a buyer and government bodies' acts as seller. This transaction is conducted online between these two bodies. The common examples are when consumer is asking any information RTI (filling RTI), when consumer wants to pay his bills, when a consumer want to fill his income tax form and its return.

(vii) **M-Commerce**

M-Commerce refers Mobile commerce in which buyer and seller uses the mobile devices for conducting any transaction of purchase or sale of any goods or service online. Devices here means Smart phones, tablets etc. Mobile commerce includes mobile banking, mobile shopping and many others

IV. ADVANTAGES OF E-COMMERCE

(i) **Global Market Place**– E-commerce make whole world connected so that consumers can buy from any place no matter from their actual position or physically moving from one place to another.

(ii) **Reduce Expenses** – E-commerce includes primarily usage of any electronic device through which transactions take place. So for consumers perspective there is no requirement of physically visiting to that store as consumer can buy from anywhere even while sitting at home and thus reduces expenses of consumers.

(iii) **Wide range availability** – E-commerce provide plenty of options which increase the chance on finding and getting the exact product which the customer wants to buy on an ease. E-commerce while using online provides number of products as a good option in just few click.

(iv) **Speedy Access** – E-commerce provides an fast access to the product as the store is online showing the products while when customers visit the physical store there is too hindrance of many consumer already purchasing the product on the same store, waiting for assistance and many others. These days in business, making wait to a consumer is just like equivalent to losing a customer.

(v) **Increased Potential Market Share** – E-commerce enables the business to have an access to international markets which leads to increasing their market share and also strengthen the economy.

(vi) **Employment Opportunities** – E-commerce provides the huge employment opportunities to the unemployed people. It also given the feature the many female cadres to work from home and fulfil their desire and be self dependent.

(vii) **Reduce cost** - E-commerce helps in reducing cost of starting the business as in online mode, there is no requirement of purchase of physical store, reduce the daily store rent, expenses of electricity, salary of daily working employees and many more.

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(viii) **Availability**- E-commerce is providing a facility 24X7. It allows buyers to visit it online store anytime and can do purchasing and selling as and when required except in case of site maintenance.

V. LIMITATIONS OF E-COMMERCE

(i) **Network Unreliability** – A network failure in terms of timely access to a webpage or long response time due to increased network traffic over the site or inadequate bandwidth leads to unreliability among customers. An E-commerce website that cannot serve its customers losses the faith in customer, credibility and even customer.

(ii) **Security issue** - Biggest disadvantage of E-commerce is the security issue. It cannot give assurance to the customer that the bank details or customer details shared by the customer during his online transactions is kept secured that leads a major disadvantage of E-commerce.

(iii) **Lack of feel** – E-commerce gives the facility to purchase the product online, in which customer has no feel to view the product close to his eyes, texture, material, making trial of product, hand in use and many other issues.

(iv) **Fear** – During the process and purchase of E-commerce, customer always have a sense of doubt as he cannot physically examine the product and not even sure about the product with a reason that the product he is viewing/visible on the site will be the same that is going to deliver or not.

(v) **Fake website** – In today's era, where there is thousands of E-commerce website available in the market, customer has to view the website very carefully to find whether the website is genuine or not as there are too many fake website exists. With these reason, customer has trust issue as product from fake website will never deliver and lead to fraud directly.

(vi) **Misuse of channel** – Online portal for purchase and sell of product becomes a good opportunity for cybercriminals or hackers to generate fast and instant cash just by hacking the medium/channel and getting the bank transactions details and wipe out the money in just one go.

VI. ARCHITECTURE FRAMEWORK OF E-COMMERCE

Framework of E-commerce means a group of software that provides all the facility of E-commerce at one place. It group resources like DBMS, computer languages, communication protocols, data repository, agent based transactions and many others to facilitate environment for build E-commerce applications quickly.

(i) **Application Services** – This layer of E-commerce service provides the front end of the application which will be viewed by the user or customer. This will be outcome or appearance of our application to the customer.

(ii) **Information Brokerage and Management Layer** – This layer is responsible of managing the large amount of data over the network.

(iii) **Interface and Support Services** - This layer of the framework provides interface for E-commerce applications. Interactive catalogs and directory support services are the examples of this layer.

(iv) **Secure Messaging Layer** – Security is the major issue when we talked about E-commerce. So, this layer provides the security to the important electronic messaging or an guaranteed delivery of an urgent message to the customer.

(v) **Middleware Services** – There are the needs of communication between different platforms which leads the invention of middleware services.

(vi) **Network Infrastructure** - Infrastructure is the base of linkage between the customer and the supplier through which transaction and communication take place. It is one of the preconditions of E-commerce.

VII. ELECTRONIC PAYMENT SYSTEM

The emergence of E-commerce has created many paths and ways for the developing of electronic payment system as the traditional payment system is unable to fulfil the needs of E-commerce. Electronic payment system is broadly categorised into six different ways:-

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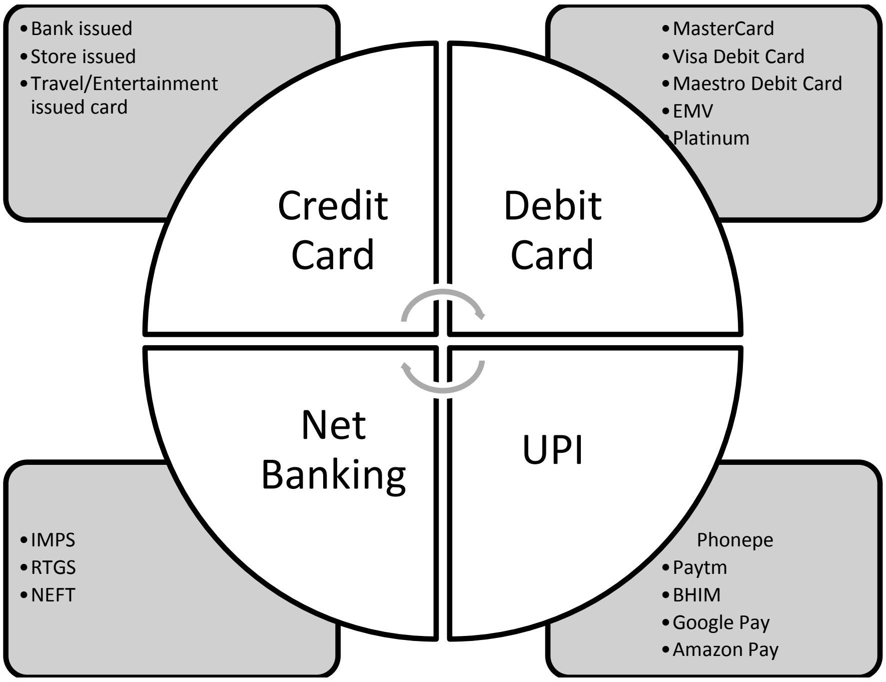

(i) **Online Credit Card Payment System**

This Credit card is usually same as debit card which is issued by any financial institutions. It is generally made of plastic containing the cardholder's name and account number. This card enables the holder to purchase any goods or services irrespective of balance available in the account. This card grants the credit limit to its different user depending upon their financial capacity/worth.

(ii) **Debit Card Payment System**

This Credit card is usually same as debit card which is issued by any financial institutions. It is generally made of plastic containing the cardholder's name and a unique number mapped with its bank account. the major difference between the credit card and debit card is as and when any transaction took place from debit card, its equivalent amount is get deducted at the same time form the debit card and debit card must have sufficient balance to perform that transaction otherwise that transaction won't take place. It also contains Card Verification Value (CVV) a three-digit numeric code mentioned at the back side of your debit card to validate any transaction. It is different from your Personal Identification Number (PIN)

(iii) **Unified Payments Interface (UPI)**

UPI is an instant payment system that powers multiple different bank accounts into a single mobile application all at one place. It is developed by National Payments Corporation of India (NPCI), an RBI regulated entity. UPI is built over the Immediate Payment Service Infrastructure that allows instant transfer of money between any two parties 'bank accounts. To use UPI, one must have a bank account with a member bank and bank should allow you to use the UPI facility. It is most commonly used Electronic Payment System these days.

(iv) **Electronic Cheque Payment System**

It is also known as e-cheque and I-cheque which is used to make electronic payment. It consists of generally three phases. In the first phase, the consumer/user make any sort of purchase of goods or services. In the second phase, the buyer/consumer sends the electronic cheque to its bank against his purchase for the redemption. In the third and last phase, the merchant's bank approaches the clearing house to en-cash the electronic cheque and credit the amount into merchant account.

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(v) Smart Cards based Electronic Payment System

Smart cards are receiving great attention as a mode of online payment. They are same as credit/debit card sized plastic cards but containing more and sensitive information. They even have memory chips attached to them and in some cases they also have microprocessors embedded in them. To maintain the security and confidentiality it also has Personal Identification Number (PIN) which is mandate for executing any transaction. To prevent any sort of data loss it also have encrypted key that is compared to a secret key contained on the user's processor to validate any transactions.

(vi) Net Banking

It is also known as online banking or Internet Banking these days. It is also a common electronic payment system offered by the banks which enables the customers to access his financial and non-financial banking products online. To get an access of net banking once has to register him for the Internet banking via physically meeting at the bank of through online process. After getting registered, user will get a unique ID and password to operate his net banking facility via website or respective bank's mobile application and then can do any type of transaction like Immediate Payment Service (IMPS), National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) etc.

VIII. CONCLUSION

Today's technologies and internet has opened many ways for E-commerce. Internet has brought new opportunities for E-commerce. It is a very wide content and the possibility of its success and growth is endless. It has totally change the perspective of people's thinking in the field of buying and selling any goods and service. It has completely changed the road side market scenario. The new era of global e-commerce would be totalling unexpected and unthinkable. It will create entirely new economy and that will tremendously impact our lives. It will reshape the competition in various industries, and alter the economy globally. With its positive impact, one should never forget the good comes with a baggage of bad ones. It also has some limitations with it. User uncertainty, loss of data, online frauds and security issues are one among them but nothing that cannot be resolved by secured medium and good business practices.

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