

# A STUDY ON E-COMMERCE AS UPGRADING ONLINE MARKET WITH HELP OF CLOUD COMPUTING

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**Abstract:** In today's world e-commerce is trending only because of mutual understanding and healthy trust between customer and online dealers. E-commerce (Electronic commerce) supports the customer in many aspects. It serves Range of benefits to the customer in form of availability of physical goods at minimum cost, immense choice and saves time. It involves online transactions so growth of this market increases with increase in internet users. E-commerce is mainly based on customer's requirement what they most like and what they most dislike. Now-a-days ecommerce is trending in India, America and China. Social media act as an intermediate for online dealing. This review paper includes various research studies about e-commerce, its history and need, impacts, benefits and challenges and trends of e-commerce on an upgrading online market and its growth to a global scale.

**Keywords:** E-commerce, business, customer, intermediate, online market.

## I Introduction

E-commerce provides a platform where we can buy or sell products (Web Shopping) or get services via internet across the world. Now-a-days E-commerce is very popular. we can get our desired product just by a single click. The E-commerce services are only possible because of internet which was opened in 1991 for public use. The word ecommerce was first introduced by an English inventor, innovator and entrepreneur Michael Aldrich in 1979. Now in today's time thinking of living without internet is quite difficult for everyone. As the number of user's are increasing on internet the trend of E-commerce and its impact on online business and marketing keep increasing [1]. The title E-commerce is the way of executing commercial online transaction electronically with the help of technologies such as electronic data interchange (EDI) and electronic fund transfer (EFT) which provides a platform to the user to exchange business information and to do faithful electronic transactions. Amazon and eBay are the first online retailer companies which allow people for electronic transactions. Currently the 5 most largest and famous worldwide online retailers are: Amazon, Dell, Staples, Office Depot and Hewlett Packard [2]. According to some recent survey's it is found that the most like and sold products on World Wide Web are song, Books, Computer, Office Supplies and other Consumer electronics. As we all know Amazon is mostly liked or famous E-commerce company which was founded by Jeffrey Preston Bezos and was the first American company to sell products across the world. Society, organization and customer's are the three major stakeholder impacted by e-commerce. E-commerce includes many advantages like cost savings, increase efficiency, global market place and customization. The company which provides a satisfactory product to the customer and take the proper feedback from customers will get the more advantage over the other E-commerce companies and be the market leader [3]. We need E-commerce companies in our society and daily lifestyle because by these companies the desired products are 24 hours available for us. It provides such facility to a customer that there is no need to travel to shop, to buy a product, hence traffic is reduced on road to an extent and air pollution becomes low. E-commerce also helps in reducing the cost of a particular product so that the middle class family also affords the good or desired product [4]. If you really want to spread your business over internet you have to give rights to the customer that they can familiar with our E-commerce company and they feel like - customer is the boss: E-commerce platform provides the opportunity to the customer that they can choose and buy their desired product without any external force, barrier free thinking and self-satisfactory product. 24 hours access available: it is the only platform which offers you to shop any time even when we sleep and to choose what you like.

## II Process of E-commerce

The process of e-commerce is shown in figure 1:



Figure 1 E-commerce process

- step 1: The customer visits the merchant’s website using a web browser for purchasing the desired product.
- step 2: Then consumer search for desired product and then adds it to the cart.
- step 3: Then he/she need to move for payment method.
- step 4: Order is completed and e-mail is send to both customer’s and merchant.
- step 5: Then order is send to the ware house for fulfillment.
- step 6: Shipping carrier picks up the shipment or product.
- Step 7: At last product is send to customer.

**III Type of E-Commerce [3-7]**

- 3.1 Business to Business (B2B)
- 3.2 Business to Consumer (B2C)
- 3.3 Business to Government (B2G)
- 3.4 Consumer to Consumer (C2C)
- 3.5 Government to Consumer (G2C)
- 3.6 Government to Business (G2B)

**3.1 B2B E-commerce**

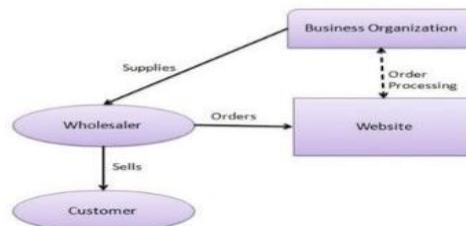


Figure 2 B2B E-commerce

It’s a platform where e-commerce is established between different companies which is shown in figure 2. B2B covers 80% part of all over e-commerce in the world.

Example: AMD selling their microprocessor to Lenovo ;Heinz selling Ketchup to Mc Donald’s.

**3.2 B2C E-commerce**

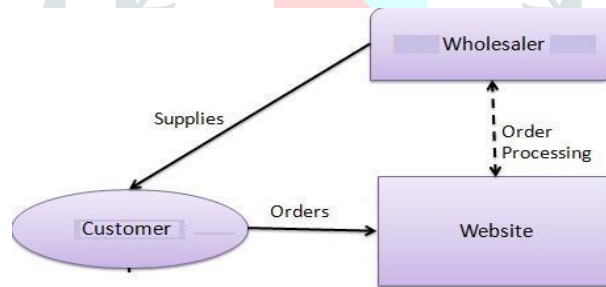


Figure 3 B2C E-commerce

This type of e-commerce is established between company and consumer as shown in figure 3. It involves purchasing of physical goods on internet.

Example: Lenovo selling me a laptop.

**3.3 B2G E-commerce**

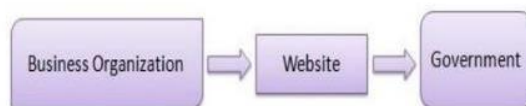


Figure 4 B2G E-commerce

This type of e-commerce is established between company and Public Sectors as shown in figure 4. It involves using internet for public fulfillment and requirement and other government services.

Example: taxes paid by business, selling goods to government agencies, file reports.

### 3.4 C2C E-commerce

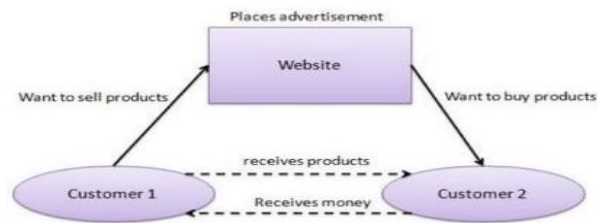


Figure 5 C2C E-commerce

This type of e-commerce is established among consumers or private individuals as shown in figure 5. Example: me selling a Air Conditioner to my friend on OLX.

### 3.5 G2C E-commerce



Figure 6 G2C E-commerce

The main moto of this type of e-commerce is to provide different things and effective services to people via use of web sites. It also involves all information of government department. citizens use different application form provided by government. The model is shown in figure 6.

### 3.6 G2B E-commerce



Figure 7 G2B E-commerce

It is a business model that introduce to government provider services or information to different business organizations. Government uses G2B model website to access Business organizations. Such website supports auction, tender and application submission functionalities. The model is shown in figure 7.

## IV Advantages and disadvantages of E-commerce [4]

### 4.1 Advantages of E-Commerce

- i It speed up the buying process and save time for customers.
- ii E-commerce company's can easily target the customers.
- iii Easier to increase an impulsive buy.
- iv Customer can give product reviews.
- v It is able to provide detailed information to the customer about specific product.
- vi It is very easy to operate a business through e-commerce.
- vii Customers are able to purchase product from different retailer without moving to the shops.

### 4.2 Disadvantages of E-Commerce

- i Lack of personal touch.
- ii Unsure about the quality of product.
- iii Security issue.
- iv Internet bandwidth.
- v Site crash issues.
- vi Everyone is not connected to the internet.
- vii It is might be possible that customer's credit card details can be theft.

## V E-commerce business using cloud computing

The cloud is a network of servers, and each and every server has a different characteristics. To run application or supply a carrier some servers used computing energy. For example - when we click or take the photos in our smartphone. The photos stores in the internal memory power of the smart phone. But when we upload those photos to the instagram then its save to the cloud and then we can excess those photos from anywhere, anytime and from any device by simply login. Now there are 4 reasons that's why cloud computing is in e-commerce-

### 5.1 Scalability

Scalability in cloud computing is the ability to quickly and easily scale up or scale down the size or power of an IT solution for example- magento with power8 is specially developed for e- commerce business to provide a feature of scalability performance. The POWER8 architecture and memory used to handle the workloads and provide desire page to the customer even in the peak loads or season.

### 5.2 Speed

Speed plays a vital role to make the customers stay tuned in the e-commerce business. For increasing the sales of e commerce it needs good speed that satisfies the customers and helps them to see the desire product and add to cart. a study by Akami technologies (famous cloud provider) found that 40% of e commerce customers leave the web page if more than 3 seconds is taken to load. The world largest e-commerce site experienced an increment of 1% in income in every 100 milliseconds, improvement in their site speed. While a sudden increase a traffic on site make it unresponsive but after using cloud services, cloud provider gives better bandwidth, power and storage.

### 5.3 Cost Reduction

The e commerce is the collaborative business and it experience some cost saving benefits. Because it uses the most collaborative tool that is cloud services .it allows people who are live in the different city and different country but still they work on the same project. In the cloud services there is a facility of paying as per use, and companies take servers according to their demand and requirement. By taking service of cloud if your business grows you don't need to be investing for hardware and software infrastructure. In 2016 snap deal launched its own private cloud" cirrus" which brings down the cost low and increase the performance of the company.

### 5.4 Redundancy in cloud services

In any virtual system, there are the chances that failure could happen.to improve this there are the needs for maintenance, upgrades and scheduled downtime. But when we use cloud computing services, a reputable cloud storage provider always secure your data at multiple machine on different data centers and you can excess your data anytime, anywhere at any device without any obstacle.

## VI Best cloud computing service provider

### 6.1 Rackspace cloud



Figure 8 Rackspace cloud

Rackspace cloud is the cloud service provider and a brand name for Rack-space hosting Inc's. Cloud files , cloud block storage and cloud Backup are included in this service. Rackspace offers many cloud services like hybrid cloud, private cloud and multi cloud .

### 6.2 IBM cloud



Figure 9 IBM Cloud

IBM cloud is also known as IBM smart cloud. It provides various services like platform as a service i.e. PAAS ,software as a service i.e. SAAS and infrastructure as a service i.e.IAAS.

### 6.3 AMAZON web services



Figure 10 AMAZON web services

Amazon web services supply on demand of cloud computing services to web sites and organizations. It is founded in 2006. Amazon web services provides an extensive range of infrastructure as a service i.e. IAAS, platform as a service i.e. PAAS and many more. Amazon web services provide a free trial plan for 12 months. After expiring your trial period you choose a paid plan or either you can cancel the subscription.

#### 6.4 Microsoft Azure



Figure 11 Microsoft Azure

IN 2010, Microsoft azure was found. The azure user can run any services on cloud or combining with any existing applications of infrastructure and data center. Microsoft Azure also offer one year free trial which includes access to all popular services.

#### 6.5 GOOGLE cloud



Figure 12 Google cloud

Google cloud platform was launch in April 2008 .google cloud service provider is the platform of Google Cloud. It offers services like IAAS (infrastructure as a service) and PAAS (platform as a service) solutions. For consistent performance this includes app engine, Container engine, computer engine, cloud storage and big query. It also provides a free trial plan for 1 year toward all services offered by google cloud platform.

### VII Analysis of E-commerce business company's

#### 7.1 Amazon



The Amazon was initiated by jeffbazon on 5th of July 1994. Initially the company name was cadbara and later on it changes to Amazon. The company's Headquarter is situated at Seattle, Washington, United State. The company initially started their business by selling books and later on they move to sell all physical goods .

Now a days it is the market leader among all the company's. According to the report of "STATISTA" Amazon is the most popular online store in the year 2017. Amazon mainly focus on what customer actually wants they also focus to make their customers happy and customize products for which the customer appeal. It always focus for long range profit not for short range. According to the latest survey of December 2017 total of 197 million people visit Amazon website for shopping purpose .

#### 7.2 eBay



eBay is an multinational e-commerce company whose headquarter is situated in San Jose , California that provide facility's for consumer-to-consumer(C2C) and business-to-consumer(B2C) via uses of their web sites . The company was established by Pierre Omidyar in 1995. By revenue it holds the position of worlds 10th biggest company on internet. It survive the "DOT COM BUBBLE" and Successfully regain online shopping . in 2012 the township of Buford in WYOMING was purchased by 2 Vietnamese which was sold on eBay.

#### 7.3 AliExpress



The company was founded by AliBaba Group in year 2010. It is the online retailer service based in china. Initially it was started as B2B (Business-to-Business) online buying and selling platform. Later on it expand to Business-to-Business (B2B)

and consumer-to-consumer (C2C) platform services. Both companies and individuals sell their product on Aliexpress. Aliexpress mainly connect Chinese business. eBay and Amazon is challenged by Aliexpress.

#### 7.4. Flip-Kart



The company flipkart was established by Sachin Bansal and Binny Bansal in October, 2007 in India. Initially only books were sold on flipkart. Flipkart was started in 2 Bedroom apartments in Bengaluru. Till now flipkart is not able to beat Amazon as Amazon provides better experience to the consumers. In 2014 motorola mobility and flipkart becomes partner for selling of Moto-G smart phone. Other world wide e-commerce companies are RAKUTAN, Inc. , B2W COMPANHIA DIGITAL, ZALANDO, Groupon, JINGDONG, SNAPDEAL, TAOBAO, MYNTRA, KOOVES etc.

### VIII Comparison between the top three online retailers

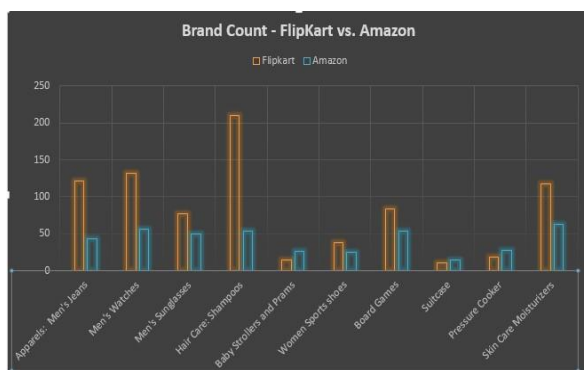


Figure 13 : Comparison between Amazon and flipkart

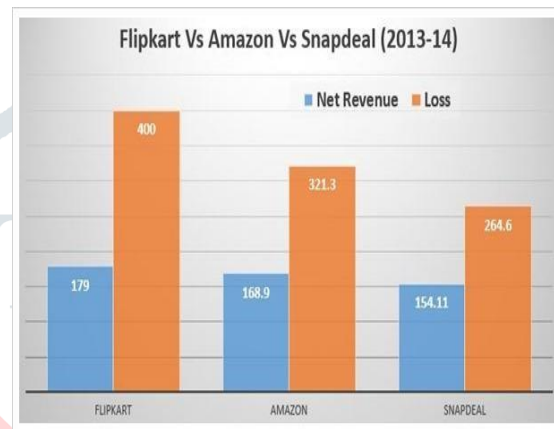


Figure 14 : Comparisons between Flipkart, Snapdeal and Amazon

### IX Conclusion

E-commerce is spreading continuously all over the world. It provides physical goods according to the need of consumer. Now a day's time is very much important for everyone and with the help of E-commerce one can easily sell or buy goods. It is good to have online business but it affects the offline business because of which small retailers are affected. Ecommerce makes people lazy because each time they buy goods online. E-commerce attracts the customer and cause rapid sell because of it customer purchase unnecessary products. The product stock is available 24/7 which makes consumer more comfortable to buy things rather than moving physically shop to shop. It also provides a vast range of choice to the customer. Till 2018, global market for cloud equipment was reaches 79.1 billion dollar. Cloud computing services are beneficial for e-commerce companies to achieve the goal and provide a good experience to the customers. The company's which adopt the cloud has advantages over the company's who did not adopt yet it. This disruptive technology changing the market from last decade and keep going on.

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