

# A Comparative Study on Traditional E-Commerce V/s Cloud based E-Commerce

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## ABSTRACT

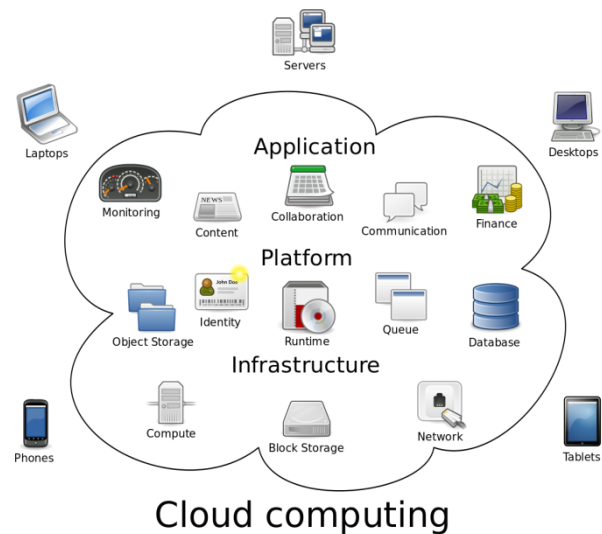
Now a day's Cloud computing is widely used and most popular topic on Information technology. It is use for resource sharing, software sharing, storage sharing and many more. Cloud computing is growing after proposed by Google in 2007. Due to providing internet resources and services it is also known as Internet computing. E-commerce has a growing business. If we merge cloud computing with E-commerce it will increase the market of E- Commerce. In this paper we discuss about Traditional E- Commerce v/s Cloud based Ecommerce.

**Keywords:** Cloud Computing, E-commerce, B2B, B2C, C2C.

## I. INTRODUCTION

### Cloud Computing

In the simplest terms, cloud computing means storing and accessing data and programs over the Internet instead of your computer's hard drive. Cloud computing is widely used and most popular topic on Information technology. It is More Popular and growing after Google proposed in 2007.



Cloud computing serves the users as “pay-as-service”, which supplies and delivers the end users with IT services based on their demand. It departs the IT service processes and transfers them to the cloud platform, which leads to the new service modes such

as IaaS (Infrastructure as a Service), PaaS (Platform as a Service) and SaaS (Software as a Service). As a new information means and mode, cloud computing is being applied to many industries creatively. E-commerce is a typical industry which is being influenced inevitably by the features of cloud computing. This paper discusses the impacts of cloud computing on the traditional E-commerce respectively from the perspective of technology, service and industry chain and presents the necessary suggestions on the development of E-commerce businesses in the cloud era.

### E-Commerce

E-Commerce is a process for buying and selling product over electronic means such as by mobile applications and the Internet. Commerce refers to both online retail as well as electronic transactions. Ecommerce has hugely increased in popularity over the last decades, and in ways, it's replacing traditional brick and mortar stores.



While most people think of ecommerce as business to consumer (B2C), there are many other types of E-Commerce. These include online auction sites, internet banking, online ticketing and reservations, and business to business (B2B) transactions. Recently, the growth of ecommerce has expanded to sales using mobile devices, which is commonly known as 'm-commerce' and is simply a subset of ecommerce.

### Definition of Traditional Commerce

Traditional Commerce or Commerce is a part of business, which encompasses all those activities that facilitate exchange. Two kinds of activities are included in commerce, i.e. trade and auxiliaries to

trade. The term trade refers to the buying and selling of goods and services for cash or kind and auxiliaries to trade, implies all those activities like banking, insurance, transportation, advertisement, insurance, packaging, and so on, that helps in the successful completion of exchange between parties.

In finer terms, commerce encompasses all those activities that simplify the exchange of goods and services, from manufacturer to the final consumer. When the goods are produced, it does not reach to the customer directly rather it has to pass from various activities, which are included under commerce. Its main function is to satisfy the wants of consumers by making goods available to them, at the right time and place.

### Definition of e-Commerce

e-Commerce or electronic commerce refers to the exchange of goods and services, funds or information, between businesses and consumers using the electronic network, i.e. internet or online social network. e-Commerce means trading and providing assistance to trading activities, through the use of the electronic medium, i.e. all the activities like purchasing, selling, ordering and paying are performed over the internet. The scope of e-commerce is discussed in the following points:

- **B2B commerce:** When the business transaction takes place between two business houses, through the electronic channel, it is called B2B commerce.
- **B2C commerce:** When the exchange of goods and service takes place between the business entity and the customer, over the internet, then it is known as B2C commerce.
- **C2C commerce:** When the buying and selling of goods and services take place between customers using electronic medium, then it is called C2C commerce

- **Intra-B commerce:** When the exchange occurs within the firm or business house, with the use of electronic media, it is called as Intra B-commerce.

### **Why E-Commerce and Cloud? (Relationship between E-Commerce & Cloud)**

#### **The Tech-Flea Market**

However, an industry cannot just go about the idea on a few measured illusions drawn from dream business stories of success. The understanding of pros and cons of the cloud computing business models helps in drawing quality business strategies. The trick is to first take a peep into your own requirements. This will help you zero in on the right model for your business needs. At a time when even Zombies are selling their fangs online, it is even more important today to expand the functionalities of the platform. The industry experts cite the latest fusion of the e-commerce industry and cloud computing as the new big thing in the technology world.

With the use of cloud computing technology, you can enhance your business with social media promotions without spending too many resources on upgrading the infrastructure. Cloud computing has turned out to be worth full business investment with its effective impact on your business. It is more cost-effective than your in-house server system.

Various technical and mobile services are providing cloud based applications and network frameworks to connect with e-commerce operations. Cloud computing applications impact your businesses in a very positive and innovative way. We take a look at a few reasons why introducing cloud computing to e-commerce industry is beneficial. So here we go:

#### **Helpful in research and development**

Research and development sections are two strong pillars behind a successful business. Effective research of the latest trend can lead your company to the new heights. In the modern era, fashion trends and

consumer preferences are changing very rapidly. It is very essential to understand these changes and produce innovative ideas to satisfy the consumer's need. Cloud computing is very helpful in the effective research and development of the company. Without understanding the market inclination growth of the company is not possible.

#### **Enhance stability in the competitive market**

A successful business survives in the market only when it is growing with the latest trends and technologies in the market. Cloud computing has become popular in a few years because of its efficiency. In this competitive world, you have to face a huge completion in every sector of life. For constantly surviving in this completion it is very necessary that you take the right decision at the right time. Everyone has limited resources in their business. It is very important to manage the resources in such a way that it is fully utilized in your business. Smart use of the technology is very helpful to last in the market. By using cloud computing technology, you can effectively manage your resources which will provide strength to your company.

#### **Supportive in business enhancement**

The proper use of cloud computing technology can take your business to a new height. Over a period of time, you will be able to spot a remarkable difference in your company's run. An industrialist must evaluate the market trends and take effective steps to capture the whole demand.

#### **Cost Efficient**

Cost efficiency is the most beneficial feature of cloud computing. As per the trend in the market you have to pay only for what you use. You can easily occupy the space you require according to the upward and downward demand in the business. On the other hand, if you are setting up a separate department to handle and maintain data, then it will be very expensive for you. So, there is no need to spend too

much money and time in organizing your data. Cloud computing is very effective in well organizing the recourses. As there is a service provider team to organize and sustain your data so you can without difficulty concentrate on the other resources of your business.

### **Evaluate New Market Opportunities**

Cloud computing is very effective in understanding the latest market trends and demands. You can take effective changes in your production according to the market tendency. The IT leaders must be well aware about the cloud base approach and their impacts, so that they can choose the perfect solution for their business needs.

### **Security**

Cloud based approaches are very secure and effective. Security issue is the major problem faced by the e-commerce industries. But the cloud technology develop very high-tech and protected path for the data management. Cloud service providers have security experts in their team, who manage the security option in the cloud applications. These professionals are more experienced than a normal IT staff of your company. So the cloud base technology is more trustworthy for data management than maintaining it yourself.

### **Adaptability**

One of the best features of cloud computing is its flexibility. By using this technology you need not to block your resources and capital for purchasing and store a huge space for your data. You can easily boost or reduce the space according the customer's demand. For example, in festive season the customer demand increases, so you can easily scale up or down the resources to cope up with the high and low demand.

### **Speed**

The speed of a site or its mobile app is the main differentiation between the successful and other e-commerce sites. It is very difficult to provide a fast site with millions of users accessing it at the same

time. Companies have to spend a lot of money to provide this kind of infrastructure. However, with the use of cloud, companies can save a huge amount of money and provide a very fast service to their users. Slow load time and down-time is the main issues of e-commerce industries, which can be reduced drastically by the help of cloud base technology. Data will be uploaded on the vendor's data center in the real time.

### **High Availability**

In the past, people would rely on the physical availability of data. However, things have changed with cloud computing providing unlimited access to your data from anywhere in the world anytime. The high technology increases the accessibility of data. It is more reliable and efficient to access data with the help of the internet at any time and any place.

### **Smooth Resource Management**

Cloud computing makes the resource management very easy and painless. As you are outsourcing this service by another IT companies, so you need not to do anything to manage your data. A well-prepared team is handling, maintaining, and upgrading your data. You just do not have to worry about the data management and improvement. You can spend your valuable time in managing the other resources of your business. It is very helpful in breaking down the obstacles of supply chain. Cloud computing develop the better interaction with the suppliers and customers.

### **Quick Response to New Market Challenges**

Cloud based e-commerce applications allow you to quickly react on the new market challenges and opportunities. By understanding the customer's reviews you can accordingly deal with them. Continuous chasing the market trends polish your skill to predict the future developments.

### **Recovery Backups**

In the e-commerce industry most activities are based on servers. Business actions are affected and bear

losses in case servers underperform. Interrupting power supply and some uncontrollable problems or any physical damage on the workplace can lead to data collapse and heavy revenue loss. However, if you are using cloud-based technology then just relax as all of your data is safe in the cloud. You can run your business in the usual manner.

### **Target the Premium Customers**

Cloud computing is helpful in finding out the premium customers. By tracking the visits on the various products, you can find the perfect taste of your customers. You can make your products according to the requirement of the customers. It will provide very positive results to your business.

### **Increase in Revenue**

Cloud computing provides incredible growth in revenue of the company. As it is very cost effective so the overall cost of your company will reduce drastically. There is no need to block the excess capital in maintaining the data. You can organize it in a very reasonable amount. In fact, you can utilise this amount in the other sectors. High speed and better accessibility will help in increasing more visits on the e-commerce sites so it will enhance the sales. It will help in increasing the overall profits of the company.

### **Globalize the Business**

Cloud computing is very useful for the expansion of a business at global level. By using internet, you can easily target the worldwide customers. It is an effective and cheaper way of business development. Customers from any area of the world can easily access the cloud.

### **Collaboration Effectiveness**

Cloud computing allows your business to share and communicate with your employees across the world. With this modern technology, you can monitor your projects without spending a huge amount. A common data, file or information can be accessed by various people on different locations at the same time. You can use cloud computing to share the information with your investors, suppliers, advisors, and accountants.

### **Automatic Updates**

Cloud computing companies are using the latest and best technologies. If you are maintaining your data with this technology then your system will be updated automatically. You can use an updated version of the software.

### **Environment Benefits**

If companies are using shared networks then it is good for the growth of our nation and industries. In the shared network paths resources are fully utilized. It will have less impact on the environment.

### **Infrastructure Support**

Storing huge data is the biggest challenge for the e-Commerce industry. In E-Commerce analyzing the data is very important to understand the customer need. Millions of users search various items daily. Picking up the trend and interest of the user is a very difficult task. Cloud computing along with modern data analyzing techniques can easily solve this problem. Lot of data mining companies are working on this model and providing their services to the big e-commerce companies. Now e-commerce companies need not to invest a big chunk of their money in infrastructure. They can take the services of cloud service providers and save a lot of money.

### **Boon for Start-Ups**

This is the era of start-ups and apps. Lots of apps are coming in the market to help the users with their day to day life. E-commerce is not just limited to the big retailers. It is moving to small businesses. Lot of ethnic designers and artists are selling their products on various e-Commerce sites. However, these start-ups do not have enough money to build and run their sites or apps. Cloud services are a boon for such start-ups. They can buy space in the cloud as much as they want. They can use software required to build software on the cloud. This is inspirational for young generation aspiring to find their ways to success.

It is very important to be innovative and updated at a time when technology changes at the blink of an eye. Running a business with old legacy systems is a pain in the back and the Cloud is proving to be the right

pain-relief spray. With the aforementioned reasons to go shopping in the Cloud, a business can easily attain success by achieving its target. The time has come when a business also has to adapt to the requirements of its customers. Cloud can make you understand you users and their needs. It is like drawing your business on the sky like a rainbow with the cloud

#### **Benefits of Cloud Computing to E-commerce**

E-commerce companies can avail various benefits by taking cloud computing SAAS.

- **Trust:** These days, cloud computing is already being used by large internet based MNCs like Amazon and Google. Businesses that work with these companies can leverage the existing cloud systems to reach out to more customers.
  - **Large Savings:** Cloud computing is extremely cost-effective; thanks to its metered approach and 'pay as you go' contracts. Virtualized servers can help companies save up to 80% of expenditure.
  - **Fast App Setup:** The speed at which e-commerce companies can make applications live on the cloud computing serve is five times faster than normal servers.
  - **Immense Company Growth:** When customers respond positively to apps that were created with the help of cloud computing, companies have an opportunity to grow their business at a much faster rate.
  - **Strong Security:** Cloud computing providers take strategic steps to ensure complete data protection. Many providers even go for ISO 27001 and various types of security audits to prove their worth to customers. Security measures can be implemented at all 3 levels– application, facility, and network.
  - **Organizational Improvement:** The use of cloud computing would open up many opportunities to improve internal organizational process. A few examples would be regulation of backend processes, more focus on core competencies, and enhancement of product development and service quality.
- The continual growth in cloud computing will result in more e-commerce communities on cloud networks.

This in turn will lead to a complete shift of working and service offering processes of e-commerce companies.

#### **Challenges in Moving to the Cloud**

Moving to the cloud can be a complex, time-consuming and costly process. Businesses should approach Cloud Consultants/Experts to avoid below pitfalls:

- Lack of Expertise and Technical Talent
- Time and Costs Required for Integrations and Customizations
- Vendor Lock-in

#### **Relationship Between E-Commerce & Cloud**

The long debated relationship between cloud computing and the e-commerce industry has gone deeper with time and, according to sources, it may surpass the magic once woven by Jack and Rose on the Titanic. Apparently, cloud computing plays a strong base for the e-commerce industry amid chaos of overnight business transformations. So considering several benefits of cloud computing on various platforms, IT industries from across the world are slowly waking up to the idea of using it in the industry effectively.

## **II. CONCLUSION**

It is clear that cloud computing is essential for e-commerce industry as it provides numerous opportunities for e-commerce industry as we discussed in this paper. Cloud services are making it possible for the e-commerce companies to reach its goals and provide a customized experience to the customers. The companies which have embraced cloud have a competitive advantage over the ones who have not adopted it yet. In the near future, the e-commerce industry may be even more tightly integrated with cloud computing since many of the e-commerce businesses sustain their competitive edge due to the benefits of cloud computing.

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