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**A DESCRIPTIVE STUDY OF SERVICES RENDERED BY E-COMMERCE AND THEIR INNOVATIONS IN TECHNOLOGY ADOPTION TOWARDS AGRICULTURE SECTOR.****<sup>1</sup>P. Madhu Kumar Reddy, <sup>2</sup>Dr. SK Shamshad Ahamed**<sup>1</sup>Research scholar, <sup>2</sup>Assistant Professor,

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**ABSTRACT**

*E-Commerce is commercial transactions conducted electronically on the Internet. E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. There are a lot of innovations in e-commerce which took place in recent years. The benefits of e-commerce include its around-the-clock availability, the speed of access, the wide availability of goods and services for the consumer, easy accessibility, and international reach. The technology adopted has also gone through a lot of changes. The technology advancements in e-commerce have been discussed in the study. The main objective of the study is to analyze the advantages of adopting E-Commerce in agricultural sector and to know the advancement in technology adoption. Agriculture is the cultivation and breeding of animals, plants and fungi for food, fiber, bio fuel, medicinal plants and other products used to sustain and enhance human life. As agriculture plays a major role for the country to develop. The study clearly helps farmers to farm with less input and gain adequate output using e-commerce. It helps farmers to shop online from where ever they are for irrigation like purchasing seeds, fertilizers and search for markets for their output. Descriptive type of research is used for the study. The data gathered is primary as well as secondary. Websites, books, journals are the sources used for data gathering. Formulation of hypothesis, objectives, advantages and limitations have been discussed in the study.*

**Key Words:** E-Commerce, Technology, Adoption, Agriculture sector, Innovations.

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**INTRODUCTION:**

In India, Agriculture is still a traditional procedure. But when you compare with the foreign countries, they call it as Modern Agriculture. The difference between both is the use of Technology in Agriculture. Since Technology and Modern Techniques in Agriculture has a huge scope in India, slowly there is a shift that we can observe. But still, it is not on par level when we compare with the overseas countries. The main reason behind this is the lack of awareness among the farmers.

**DEFINITION:****E-COMMERCE:**

E-Commerce or electronic commerce refers to buying and selling of goods and services electronically. The commercial transactions conducted electronically using internet is known as E-

Commerce. This is a process in which sellers and consumers buy and sell goods and services through an electronic medium

These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably. The term e-tail is also sometimes used in reference to transactional processes for online shopping.

### **ORIGIN OF E-COMMERCE:**

Electronic commerce emerged in the early 1990s, and its use has increased at a rapid rate. Today, the majority of companies have an online presence. In fact, having the ability to conduct business through the Internet has become a necessity. Everything from food and clothes to entertainment and furniture can be purchased online.

Two familiar examples of electronic commerce companies are eBay and Amazon. Both of these companies allow consumers to purchase a variety of goods and services online from businesses and other consumers, while eBay also hosts online auctions. Consumers on these sites typically have numerous payment options, as well as choices for how their products are delivered.

### **E-COMMERCE IN AGRICULTURE:**

E-Commerce has found its way to agriculture sector. Now a day's internet has become more popular among all the customers. There are people who use internet for agriculture or irrigation. People are now buying everything using internet. The basic knowledge about how to use it particularly the hardware and software. The thing which is needed is internet with both the parties' i.e. the person who is buying and the person who is selling.

### **OBJECTIVES OF THE STUDY:**

1. The main objective of the study is to analyze the advantages of adopting E-Commerce.
2. To know the advancement in technology adoption in agriculture sector.
3. To know the advantages and disadvantages of E-Commerce in agriculture.
4. To analyze the improvements and strengthening of agriculture sector
5. To know the types of E-Commerce.

### **SCOPE OF THE STUDY:**

The scope of the study is limited mainly to secondary data in analyzing the services rendered by E-Commerce to agriculture sector. Only agriculture sector is chosen for this study.

### **RESEARCH METHODOLOGY:**

#### **SOURCES OF DATA:**

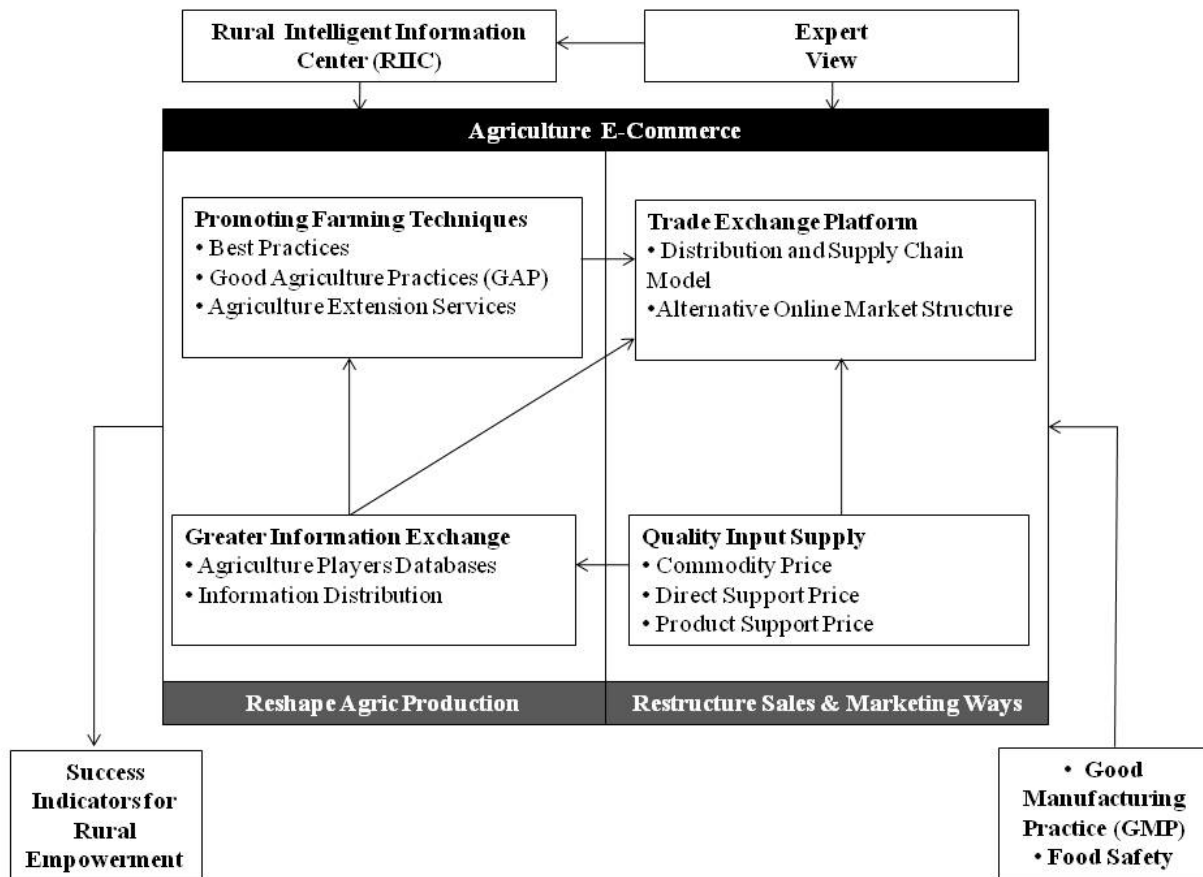
**Primary data:** Data gathered by personal interactions with the people of credit rating agencies.

**Secondary data:** Data from websites, newspapers, journals, books, credit rating agencies is used for the study.

#### **FRAMEWORK OF E-COMMERCE IN AGRICULTURE:**

Framework is further supported by two other important success factors which have significant contribution to implementation of agriculture e-commerce application. These factors are Rural

Intelligent Information Centre (RIIC) and Expert Views. Figure illustrates the e-commerce framework for agriculture sector.



This framework can be further enhanced with the ability to market the agriculture products on international market by adopting Good Manufacturing Practice (GMP) and Food Safety (FS).

By incorporating GMP and FS in e-commerce framework will improve market access and building trust of importing countries. Besides, the workable e-commerce framework can be used as a tool to identify the indicators for empowering the rural agriculture sector in India.

**REVIEW OF LITRATURE:**

1. **Arvind Panagariya (2000)** reported that access to e-commerce, which in the WTO pariance often means access to e-exports, has two components that must be distinguished sharply. Access to Internet services and access to services that can be traded electronically.
2. **Andrew D. Mitchell (2001)** examined the key issues that electronic commerce poses for Global trade, using as a starting point the General Agreement on trade in services (GATS), the World Trade Organization (WTO) agreement most relevant to e-commerce.

3. **Diana Oblinger (2001)** reported that one is that education and continuous learning have become so vital in all societies that the demands for distance and open learning will increase. As the availability of the Internet expands as computing devices become more affordable and a energy requirements and form factors shrink, E-learning will become more popular.
4. **Elizabeth Goldsmith and Sue L.T. McGregor (2000)** analyzed the impact of e-commerce on consumers, public policy, business and education. A discussion of public policy initiatives, research questions and ideas for future research are given.
5. **Jackie Gilbert Bette Ann Stead (2001)** reviewed the incredible growth of electronic commerce (e-commerce) and presented ethical issues that have emerged. security concerns, spamming, websites that do not carry an “advertising” label, cyber squatters, online marketing to children, conflicts of interest, manufacturers competing with intermediaries online and “dinosaurs” were discussed.
6. **James Christopher (2004)** examined all the best elements of ecommerce do not guarantee consumers will visit or remain loyal. But looking at what they want and their satisfaction levels of other well established e-tailors such as Amazon and eBay who have already invested significant resources to understand what consumer’s needs, wants and desires.
7. **Lucking-Reiley and Spulber (2001)** evaluated productivity gains from business to business e-commerce in four different categories: automation of transactions, the potential economic advantages of intermediation, the organization of centralized exchanges, and the reorganization of firms.
8. **Nir B. Kshetri (2001)** this paper attempts to identified and synthesized the available evidence on predictors of magnitude, global distribution and forms of e-commerce. The analysis indicated that the twin forces of globalization and major revolutions in ICT are fuelling the rapid growth of global e-commerce.
9. **Prithviraj Dasgupta and Kasturi Sengupta (2002)** reported that the recent growth of Internet Infrastructure and Introduction of economic reforms in the Insurance sector have opened up the monopolistic Indian Insurance market to competition from foreign alliances. Although the focus of e-commerce has been mainly on business to consumer (B2C) applications the emphasis is now shifting towards business to business (B2B) applications.
10. **Young Jan Choi 1, Chung Suk Suh (2005)** reported that the economic consequences of the death of geographical distance due to the emergence of e-marketplaces. It has shown that overcoming spatial barriers by means of e-marketplaces lowers the price level.

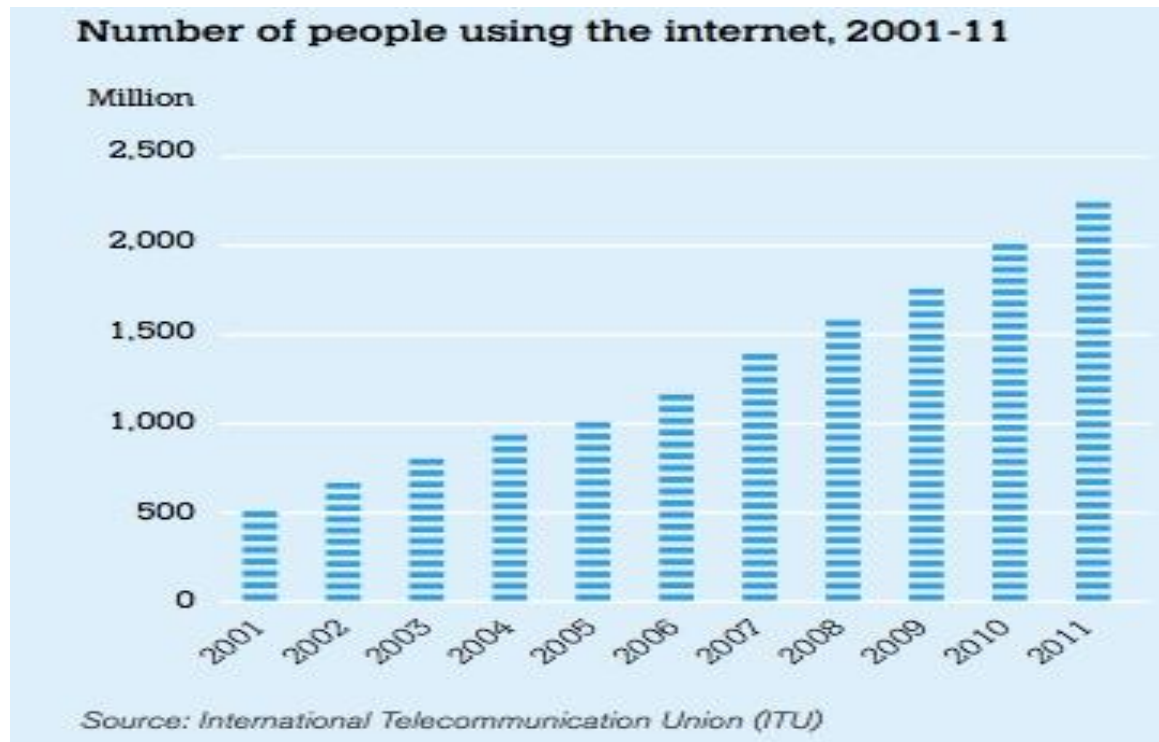
#### TYPES OF E-COMMERCE:

There are several types of electronic commerce. The most common is

1. **Business to Consumer** in which a business sells products or services directly to consumers over the Internet. An example of a business to consumer e-commerce transaction would be an individual purchasing a pair of sneakers through Nike's website.
2. **Business to Business**, where companies sell products or services to other companies over the Internet. An example would be the company Go Daddy, which sells domain names, websites, and hosting services to other businesses.

3. **Consumer to Business** electronic commerce involves consumers selling products or services to businesses. You've taken part in this form of e-commerce if you've ever completed a paid online survey where you've given your opinion about a product.
4. **Consumer to Consumer** e-commerce, which is where consumers sell products to other consumers. An example would be one consumer selling something that he or she no longer needs or wants to another consumer via a site like eBay or Amazon.

### GROWTH OF THE INTERNET AND E-COMMERCE IN AGRICULTURE SECTOR:



#### INTERPRETATION:

There is no question that e-commerce has grown rapidly since the first users started to browse the worldwide web in search of goods and services. Today, sales realized over the internet represent a significant proportion of overall commercial sales.

- In **1991**, the internet had less than **3 million users** around the world and its application to e-commerce was non-existent.
- In **1999**, an estimated **300 million users** accessed the internet and approximately one quarter of them made purchases online from electronic commerce sites, worth approximately **US\$ 110 billion**.



- According to the World Trade Commerce (WTC) report, this year, global business to consumer e-commerce sales is set to pass the US\$ 1.25 trillion mark.

### **ADVANTAGES OF ELECTRONIC COMMERCE TO AGRICULTURE:**

- Use of modern machines and technology can control the efforts of farmers.
- The time will also be saved for the farmers by using the new technology.
- Used supply water to the crops.
- Machines are very useful in sowing the seeds.
- Helps even in the transportation.
- Irrigational technology.
- Application of synthetic and organic fertilizers.
- There are different types of chemical to control pests.
- They increase the price and demand of the products.
- Better marketing and exposure to the price.
- There are many facilities in online trading and E-Commerce for farmers.
- Modern technology is even used for improving the fertility of the soil.
- Decrease the use of water, Fertilizers which keeps the prices down.
- Low run of chemicals and also waste materials into seas and water.
- With the use of modern technology there is a reduced impact on the ecosystem.

### **DISADVANTAGES OF E-COMMERCE TO AGRICULTURE:**

- The excessive use of chemicals by the help of machines reduces the fertility of the land.
- Because of lack of practical knowledge, the farmers can't handle the machines properly.
- While the cost of maintenance is very high.
- High use of machines may lead to environmental damage.
- It is efficient but has many side effects and drawbacks.
- Furthermore, Driverless agriculture machine is a liability to access the technology.
- Improve the scouting programmes.
- The robotic machine could not change their culture; we have to set their programme manually.
- Most of the farmers are illiterates so they are unable to use the modern machines.
- As the farmers are illiterates the time taken for them to understand the technology is high
- There may be chances of happening of mistakes which leads to high risk.

### **SOME OF THE BENEFITS OF ICT FOR THE IMPROVEMENT AND STRENGTHENING OF AGRICULTURE SECTOR IN INDIA ARE:**

- (a) Timely information on weather forecasts and calamities,
- (b) Better and spontaneous agricultural practices,
- (c) Better marketing exposure and pricing,
- (d) Reduction of agricultural risks and enhanced incomes,
- (e) Better awareness and information,
- (f) Improved networking and communication,

- (g) Facility of online trading and e-commerce,  
(h) Better representation at various forums, authorities and platform, etc.

### LIMITATIONS OF THE STUDY:

1. Because of lack of practical knowledge, the farmers can't handle the machines properly.
2. Even the cost of maintenance is also high
3. Most of the farmers are illiterates because of which they may not understand the technology
4. Lack of internet in villages may be an obstacle.

### CONCLUSION:

1. Every system rides drawback with it but it seen that technology gives much better advantages in 90% cases. But we can reduce gap of these drawback by implementing better platform for farmers and teach them for solution for this drawback.
2. By which we can see a drastic changes in our agriculture sector, improving the standard of living of the farmers even.
3. The commercialization of the Internet has caused agribusiness firms to rethink their distribution channel. E-commerce provides firms with the ability to reach new customers and old customers in new ways.

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