

Proliferation of Digital Technology: A Road Map towards Global E-Commerce Market Place

¹Marpe Sora and ²Abhijeet Singh

¹Department of Computer Science & Engineering, Rajiv Gandhi University

Arunachal Pradesh, India

msorait@yahoo.co.in

²Department of Computer Science & Engineering, Rajiv Gandhi University

Arunachal Pradesh, India

abhijeet0001@gmail.com

Abstract. Rapid developments in digital technology have fueled the new paradigm of Electronic Commerce. The wide spread use of digital technologies enables E-commerce to grow exponentially due to reduction of costs, increase efficiencies and improve customer service. Enterprises all over the globe have either created or are in the process of creating the E-Commerce front-ends to their traditional businesses. Several new products and services are being innovated and marketed through Internet thus creating global business opportunity to the tune of millions of dollars. Since the business transactions as well as the delivery of goods are handled through electronic media, several changes in the business regulations become necessary for the smooth conduct of business and to offer consumer protection. Digital Revolution in the Marketplace Allows customization of products, services, and promotional messages like never before, enhances relationships with B2B, B2C, C2C, C2B and B2G more effectively and efficiently. The main concern of this paper is how to make digital technology which will boost up the marketplace globally. Continued growth and use of information systems and technology seem certain. Individuals, societies, and governments worldwide must confront the complex challenges that remain. Developing countries are likely to lag behind and loose out on the benefits of digital revolution and e-commerce opportunities if the policies to provide access to the technologies, education, skill development, e-commerce regulation and consumer protection are not introduced in due course of time. The objective of research is to evaluate human/technological variables affecting trade implications of continued e-commerce growth.

Keywords: E – Commerce, Digital Revolution, E – Marketplace, Trade Matrix, E – Customer, IMT, Internet, EFT.

1. Introduction

Today's consumers have the world at their fingertips. At the touch of a keyboard button, click of a mouse and mobile SMS they can not only make purchases, but also access a significant amount of information that will influence their buying decisions. With this in mind it's no surprise that many of the biggest advertising spenders are moving towards digital channels. Digital revolution has leaped forward to massive change in e-commerce business prototype. Digital revolution, here, means the use of advanced technology in marketing. Effect of digital revolution has caused a drastic change to the business environment. The recent impact of this revolution is seen by considering following points;

1. Consumers have more power than ever before.
2. Consumers have access to more information than ever before.

3. The marketers can offer more products and services than ever before.
4. The exchange between marketers and consumers will be more interactive and spontaneous.
5. Marketers can gather more information about consumers too quickly and easily.
6. The company wants consumers to know through research that has not been done before, and then produce products that consumers want or wish to have it.

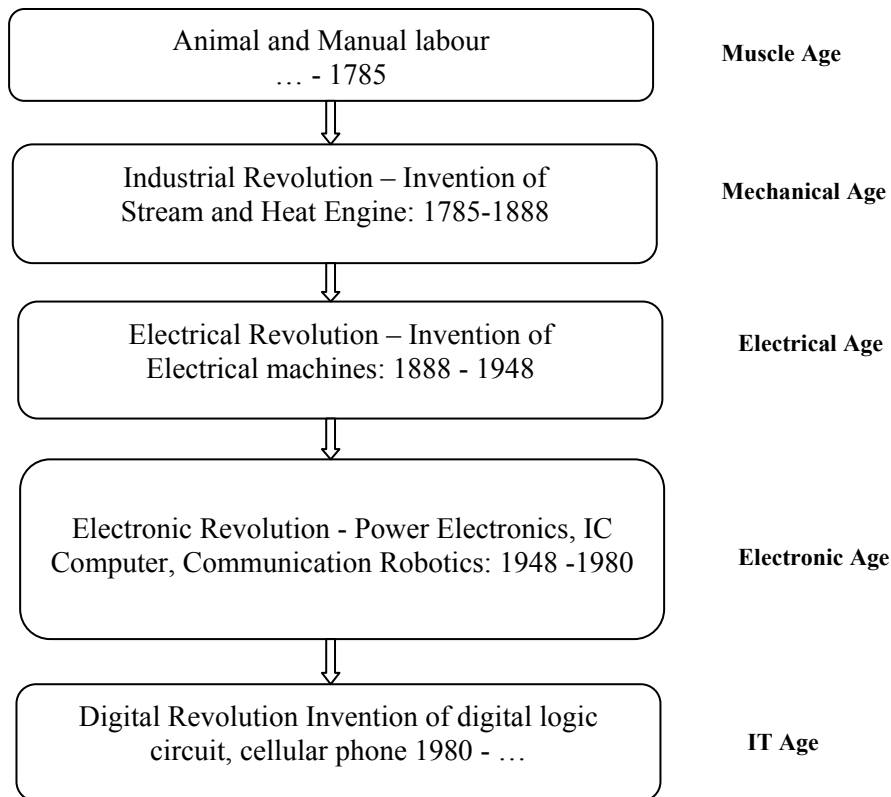


Figure 1 – Evolution of industrial civilization [1]

2. Some Scientific studies of Digital Revolution

Digital Revolution marked the beginning of the Information Age. The root of all positive impact of digital revolution is due to advancements in telecommunication. In this revolution there is mass production and widespread use of digital logic circuits, and its derived technologies, including the computer and digital cellular phone. The developments in digital technology have made a great contribution in changing the way e-customer services. At current growth rates, within five to ten years everyone in the world who wants to have a mobile phone will have one.

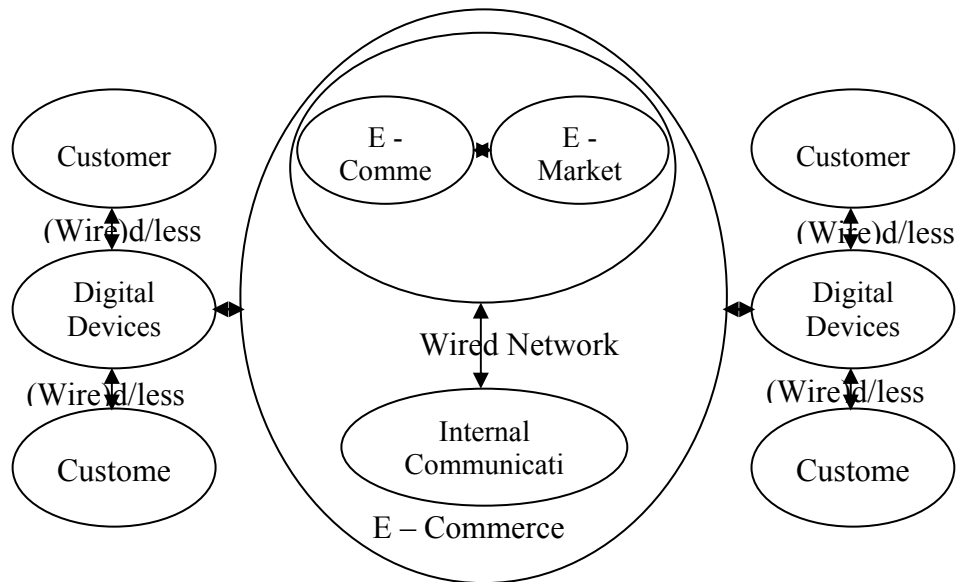


Figure 2 – Functional model for e-commerce Transaction

Today’s competitive business and work scenario require users to work and communicate at their own convenience and discretion. Wireless communication made great impact on e-commerce globally as it is evolving in several directions. The various technologies such as (2G, 3G, 4G) used in the wireless industries are aimed at different level of consumers needs. However the data speed is not comparable to many cable connections.

It took 100s of years before people accepted paper money and cheques as payment. Electronic payment system first emerged with the development of wire transfer. Now, in current scenario, electronic payment is being made using wireless communication system (IMT). EFT legal framework has no more concern for security issues. This includes better security mechanisms like NetSecure, SSL, 3D Secure etc as per the IT Act.

Table 1 – Incessant trade matrix of e – customer [2]

Buyer Type	Purchase Type	Satisfaction Level	Buying Pattern	Decision Level
Impulsive	High involvement	Supplementary	Prompt	Quick
Patient	Medium	Modest	Comparative	Delay
Analytical	Low	Constraint	Substantial Research	Hindrance

The data about the consumers and their buying habits are extremely valuable, especially when that information is carefully analyzed and used to target marketing campaigns. Customer satisfaction is the individual's perception of the performance of the product or service in relation to expectations. Maintaining customers is how to maintain that consumers remain loyal to one firm compared to other companies, almost in all business situations, more expensive to find new customers than retain existing ones. Digital media offers another dimension to the media mix and there are huge opportunities to reach and target audiences. However an effective digital marketing strategy is holistic. Marketers need to learn how to interact with consumers consistently across many different digital channels.

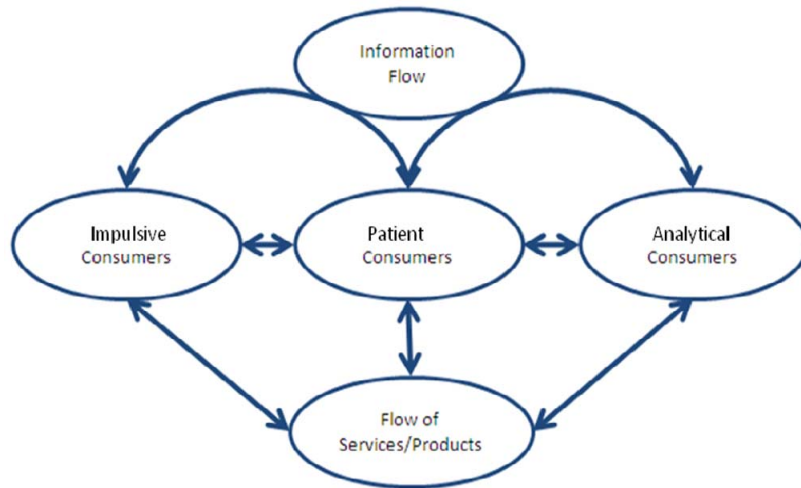


Figure 3 – Trade Matrix e-commerce

The evolution of Internet users has been driven by the growing customer expectation with the content. Thus the newer segment of Internet usage worldwide has been emerged and their lie potential users segment that are still unexplored and may emerge in the future.

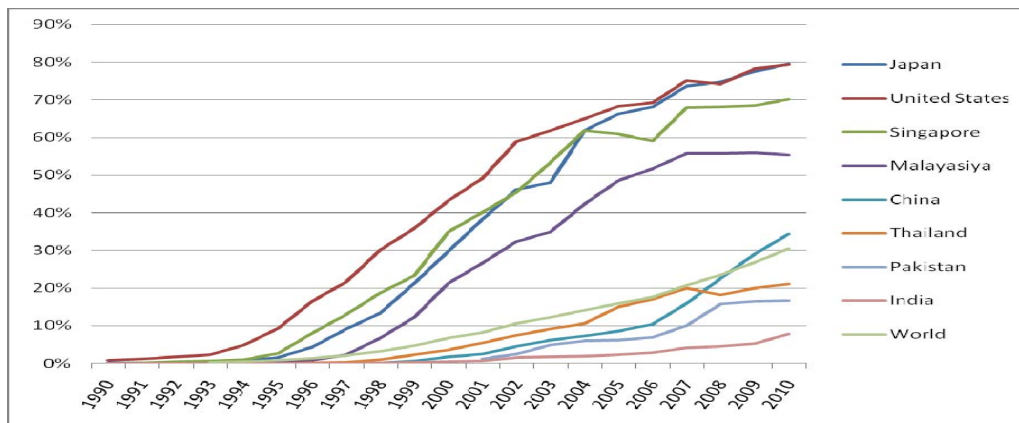


Figure 4 – Internet Users as Percentage of Population [3]

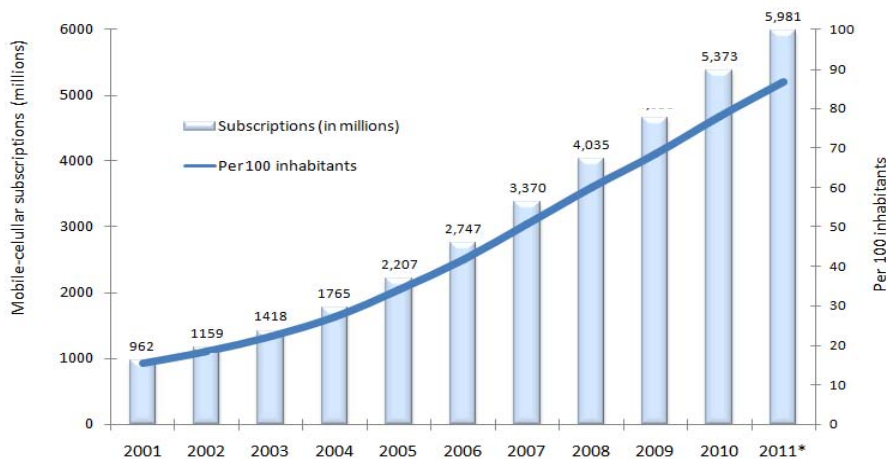


Figure 5 – Global Mobile – Cellular subscriptions, and per 100 inhabitants, 2001 – 2011

As per the report affirmed by International Telecommunication Union at the end of 2011, there were 6 billion mobile subscriptions. That is equivalent to 87 percent of the world population. It is an enormous increase from 5.4 billion in 2010 and 4.7 billion mobile subscriptions in 2009[4]. According to comScore, up to November 2011 there were 38 percent of smartphone owners have used their phone to make a purchase at least once [5].

3. Short-term measures –Improving the e-customer

E-commerce has generated new dimensions in economic growth and has helped many countries attain a higher level of development in recent years, thereby affecting the investment climate for further development. Customers, who don't know, you exist, will know about you, producers/suppliers will request you to add their items and other businesses will approach you for partnership opportunities. A number of suggestions for improving digital customer have been made from time to time. Providing unique value proposition to visitors offers a different angle or spin. Use periodic review of e- customer to influence visitors buying behavior. The consumer adopt the advantage of digital revolution today more and more for their shopping needs, it is important that the benefits exceed the costs, as we are on the verge of digital economy.

4. References

- [1] M. Sora, A. Singh. Proliferation of ICT and Their Impact on Global Warming. In: National Seminar on Climate change, Development and Social Transition in North East: Impact and Issues. 2011
- [2] M. Bhusry. e-Commerce. Firewall Media, 2006.
- [3] <http://www.google.co.in/publicdata>
- [4] <http://www.itu.int/ict/statistics>
- [5] <http://www.comscore.com>