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Nascent Angles of E-Commerce

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ABSTRACT

The rapid diffusion of information and mobile technologies has revolutionized the manner in which we do business in our daily lives. Electronic commerce (e-commerce) hasa deep impact on business practices and has evolved as a new field of research for researchers. Social commerce is a new evolution of e-commerce that combines the commercial and social activities by deploying social technologies into e-commerce sites. Social commerce reintroduces the social aspect of shopping to e-commerce, increasing the degree of social presences in online environment. This paper provides a comprehensive outline of e-commerce, its various models, and the various security issues in e-commerce .This paper also presents a new perspective in e –commerce and the role of social aspect in shaping online purchase behaviors for the fusion of social and commercial activities.

I INTRODUCTION

With the emergence of internet and the World Wide Web (www) new methods of carrying out business transactions using the www began to be explored. Electronic Commerce emerged as a very important application of the www. Today it is difficult to find an isolated computer. Computers in an organization are interconnected to form intranets and Intranets of the cooperating organizations are interconnected to form extranet. It is cheaper and faster to carry out business transactions within an organization and among organizations electronically using the network connection. Thus it is important to understand how business transactions are carried out electronically reliably and securely. When designing information systems it is essential to understand the emerging web based transactions. A number of organizations are exploring how to carry out all day-to-day operations electronically using the intranet in a so-called paperless system. It is thus important for a student to understand how to design such systems [1].

The e-Commerce sector has seen unprecedented growth in 2014. The growth was driven by rapid technology adoption led by the increasing use of devices such as smartphones and tablets, and access to the internet through broadband, 3G, etc, which led to an increased online consumer base. Furthermore, favored demographics and a growing internet user base helped aid this growth. In terms of highlights, the growth shown by homegrown players such as Flipkart and Snapdeal and the huge investor interest around these companies displayed the immense potential of the market.

IJARSE
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II HISTORY OF E-COMMERCE

In the 1970s, the term electronic commerce, referred to electronic data exchange for sending business documents such as purchase orders and voices electronically. Later, with the development of this industry the term of electronic commerce is used to business of goods and services via the web. When the first World Wide Web was introduced in 1994 as a comprehensive, many well-known researchers have been predicated this type of business “the web-based business” will became soon an important in the world economy, but it took four years that http based protocols should be widely available to users[2].

The first electronic commerce created in USA and some European countries in 1998. These types of business are formed with beginner and unprofessional websites and it has been expanded rapidly. Electronic commerce was spread rapidly in most cities in America, Europe and East Asia in 2005. Some say dates of electronic commerce return to prior of the Internet, but due to the costs of this style of business, only business and financial institutions and corporations could use it. But with the widespread use of the Internet to all of the people and change the structure of electronic commerce, this kind of business from specific business case for a particular group out and became the industrial form [3].

III MODELS OF ELECTRONIC COMMERCE

There are many various classifies of electronic commerce and many different methods to characterize these clusters. Academics determined a number of frameworks for classifying electronic commerce but each one want to illustrate it form a unique perspective. The main different classifies of electronic commerce are Business-to-Business (B2B), Business-to-Consumer (B2C), Consumer-to-Consumer (C2C), Consumer-to-business (C2B) and Mobile Commerce (M-Commerce) [4].

- **B2B:** Business-to-Business is a type of commerce transaction that exists between businesses or a transaction that occurs between a company and other company to transfer of services and products. A possible explanation for this might be that Business-to-Business includes online wholesaling in which businesses sell materials, products and services to other businesses on the websites.
- **B2C**: Business-to-Consumer refers to transactions between a business and its end consumer and so it create electronic storefronts that offer information, goods, and services between business and consumers in a retailing transaction or it is an Internet and electronic commerce model that indicates a financial transaction or online sale between a business and consumer.
- **C2B**: Consumer-to-Business is the transfer of services, goods or information from persons to business or it is a business model where end users create products and services that are used by business and institutions.
- **C2C**: Consumer-to-Consumer is an electronic Internet facilitated medium, which involves transactions among users and it is a business model which two consumers deal business with each other directly

IJARSE
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- **M-Commerce**: The term of Mobile Commerce was invented in 1997 to aim "the buying and selling of products, information and services" via wireless handheld devices such as cellular phones, laptops and personal digital assistants. These wireless devices interact with computer networks that have the ability to conduct online merchandise purchases. Mobile commerce allows to users access to Internet and shopping in it without needing to find a place to plug in. Mobile Commerce transactions continue to improve and the phrase includes the purchase and sale of a wide range of products and services, online banking, bill payment, information delivery and so on.

IV SECURITY ISSUES IN E- COMMERCE

Security is an essential part of any transaction that takes place over the internet. Customers will lose his/her faith in e-business if its security is compromised. Following are the essential requirements for safe e-payments/transactions [5].

- **Confidentiality:** - Information should not be accessible to an unauthorized person. It should not be intercepted during the transmission.
- **Integrity**: - Information should not be altered during its transmission over the network.
- **Availability:**-Information should be available wherever and whenever required within a time limit specified.
- **Authenticity**:-There should be a mechanism to authenticate a user before giving him/her an access to the required information.
- **Non-Reputability**-It is the protection against the denial of order or denial of payment. Once a sender sends a message, the sender should not be able to deny sending the message. Similarly, the recipient of message should not be able to deny the receipt.
- **Encryption**-Information should be encrypted and decrypted only by an authorized user.
- **Auditability**- Data should be recorded in such a way that it can be audited for integrity requirements.

The various measures to enhance security features in e-Commerce are as follows

- **Encryption**- It is a very effective and practical way to safeguard the data being transmitted over the network. Sender of the information encrypts the data using a secret code and only the specified receiver can decrypt the data using the same or a different secret code.
- **Digital Signature**-Digital signature ensures the authenticity of the information. A digital signature is an e-signature authenticated through encryption and password.
- **Security Certificates**-Security certificate is a unique digital id used to verify the identity of an individual website or user.

IJARSE
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V SECURITY PROTOCOLS IN INTERNET

For enhancing the security features in e-commerce, various security protocols are being incorporated .The various popular protocols used over the internet to ensure secured online transactions are described below:

Secure Socket Layer (SSL):

It is the most commonly used protocol and is widely used across the industry. It meets following security requirements: Authentication, Encryption, Integrity, Non- reputability. "https://" is to be used for HTTP URL with SSL, whereas "http:/" is to be used for HTTP URL without SSL**.**

Secure Hypertext Transfer Protocol (SHTTP)

SHTTP extends the HTTP internet protocol with public key encryption, authentication, and digital signature over the internet. Secure HTTP supports multiple security mechanism, providing security to the end-users. SHTTP works by negotiating encryption scheme types used between the client and the server.

Secure Electronic Transaction:

It is a secure protocol developed by MasterCard and Visa in collaboration. Theoretically, it is the best security protocol. It has the following components.

- **Card Holder's Digital Wallet Software**- Digital Wallet allows the card holder to make secure purchases online via point and click interface.
- **Merchant Software**-This software helps merchants to communicate with potential customers and financial institutions in a secure manner
- **Payment Gateway Server Software**-Payment gateway provides automatic and standard payment process. It supports the process for merchant's certificate request.
- **Certificate Authority Software**-This software is used by financial institutions to issue digital certificates to card holders and merchants, and to enable them to register their account agreements for secure electronic commerce.

VI SOCIAL COMMERCE

Social commerce is a new evolution of e-commerce that combines the commercial and social activities by deploying social technologies into e-commerce sites. Social commerce reintroduces the social aspect of shopping to e-commerce, increasing the degree of social presences in online environment.A notable difference between online and offline markets is the decreased presence of human and social elements in the online environment.In order to

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eliminate social factors such as body language, the requirement of presence of human interface also imposes additional constraints in the trustworthiness of e-commerce. However, this situation has been greatly improved recently by incorporating recent multimedia services and artificial intelligence with Web 2.0 capabilities into the e-commerce website. This new evolution is commonly referred to as the birth of social commerce (SC) [6]

SC generally refers to as the delivery of e-commerceactivities and transactions via the social media environment It is viewed as a new evolution of e commerce summarized three major attributes of SC: social technologies, community interactions, and commercial activities. Thus, SCcan be considered a subset of e-commerce that involves using socialtechnologies to assist e-commerce transactions and activities.In essence, SC is a combination of commercial and social activities Traditional e-commerce sites, such asAmazon,Flipkart etc have added social applications and content tohelp people to connect where they usually buy.

Social Aspect of Online Shopping

Shopping has always been a social activity. Consumers tend tobe influenced by their social interactions with others when making purchase decisions. E-commerce focuses moreon maximizing efficiency and the one-way interactions between customers and the system. Online transactions are usually facilitated and guaranteed by structuralfactors such as escrow services and credit card guarantees. Social technologies reintroduce the social side into online purchasing process, makes onlinepurchasing a more social experience. They also greatly increase the firm ability to directly initiate and manage social interactioneither impossible or too costly in the past [7].

Thus, while e-business concentrates more on businessgoals, SC is more oriented toward social goals, such as networking,collaborating and information sharing, with a secondary focus onshopping. Online buyers are able to get access to social knowledge and experiences to support them in betterunderstanding their purchase purposes, and in making moreinformed and accurate decisions.

While prior studies offer insights on how social interactionsshape buyer behaviors, such as, word-of-mouth (WOM), observational learning, and social support, they may haveoverlooked the overall effects of the social context. In SC, buyers are able to get moresocial cues to support their purchasing decisions by collectingmore information from the communities, by observing the actionsof other buyer, or by interacting with online sellers. They argued that the key distinction between e-commerce and social commerce is that the former usually only sees anindividual layer while the latter usually sees a community built onconversation. We argue that the social design features applied inthese four layers enrich social information, make buyers feel moreconnected with others, and finally enhance a social context online.SPT has been indicated a suitable theoretical lens for understanding the social context in e commerce. SPT suggests that social presence is built upon signals transmitted in a communicationmedium, such as virtual agents.IT-enabled human-like interaction socially-rich text, personalized greetings chat or message boards.

IJARSE
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Trust in Social Commerce Marketplace

Trust is a central aspect in many economic transactions. When asocial environment cannot be regulated through rules and customs, people tend to adopt trust as a reducer of social complexity. This is especially true for online transactionsdue to the absence of effective regulation over the opportunisticbehaviors of e-vendors. Thus, trust is often considered the foundation of e-commerce and the most crucial factor for the success of e-commerce. Prior e-commerce research hasfocused on finding key antecedents of trust or disclosing the trust building mechanism. These studies focused more on the impacts offunctionality (e.g. usability, ease of use and usefulness) andinstitutional structures (e.g. structural assurance, situationalnormality and feedback mechanisms), paying very little attention to social factors except social presence ofweb interface

Trust, indeed, is built through social interactions withother people and the surrounding environment. Thus, socialcontext should be an important but neglected characteristic oftrust in prior literature.Trust is a complex and multifaceted construct. It has been conceptualized in a variety of ways. Toremove some of the conceptual confusion on trust by separatingbeliefs from intended behavior based on the theory of reasonedaction. They put trust into two broadcategories: trusting beliefs and trusting intentions and conceptualized trust as a set of specific beliefs including integrity, benevolence and ability.

This conceptualization of trust is akin to that ofother studies adopting SPT Then trustingbeliefs is conceptualized as a second-order construct in this study.Two types of trustees exist for a SC marketplace from a buyerperspective marketplace (e.g., Amazon and eBay)and sellers resided in the marketplace. Trust in online sellers isconsidered as the major construct in this study, while trust inmarketplace [8].

Social presence of interaction and trust

Online chat tools such as QQ, MSN or chat plug-ins embedded inthe website have been used for sellerbuyer interactions, throughwhich more social information will be revealed to buyers to formtheir trusting beliefs. In order to sustain a good customer relationship, several methods are often employed, such as, choosingspecial words and sending the emotional icons like smile. Forinstance, a special language style, termed “Taobao Style”, is popularin Taobao communities. Buyers are greeted with the word of “Qin”(means “my dear” and rarely used in daily communication in Chinese culture but extensively used in online context). The tradedgoods are called “Baobei” (means “treasured objects”). “TaobaoStyle”, in together with other communication methods, makesellers feel friendlier and warmer, and thereby, will help to shortenthe perceived distance between them. Thus, the CMC chat tools are also able to convey a sense of social presence. Buyers are also able tomake sense of the attitudes, benevolence, and integrity of sellersvia these compute mediated interactions, thereby forming beliefson sellers. The computer mediated interactions, such as, email andteleconference, have been argued to be able to convey SP and in turn to

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shape user beliefs. Inonline learning communities, the text-based online discussion(Medium as interaction enabling) is found to be positively correlated with the cognitive aspects of learning [9].

VII CONCLUSION

In this paper we have presented a detailed description of e- commerce, its history, the various models in implementing e-commerce and various security threats and issues. We have also discussed social commerce as a shifting paradigm in e-commerce. This paper re-conceptualizes and validates the concept of social presence as a multi-dimensional construct insocial commerce, overcoming the limitations of one-dimensionalconceptualization in previous e-commerce research. Next, it contributes a new set of social presence variables that can be exploredin future research.

REFERENCES

[1] Angehrn, A., "Designing mature Internet Business strategies, The ICDT Model," European Management Journal, Vol. 5, No. 4.

[2] Cappel, J.J. and Myerscough, M.A., "World Wide Web Uses For Electronic Commerce: Toward a Classification Scheme," 2006.

[3] Bhattacherjee, A. "An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance," *Decision Support Systems*, 32(2), pp. 201-214. (2001).

[4] Clark, B., "Welcome To My Parlor…," Marketing Management, Chicago, Vol. 5, No.4

[5] Hsu, C. L., Westland, J. C. and Chiang, C. H. "Electronic Commerce Research in Seven Maps," *Electronic Commerce Research*, 15(2), pp.147- 158. (2015).

[6] Pavlou, P. A. "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk With the Technology Acceptance Model," *International Journal of Electronic Commerce*,7(3), pp.101-134. (2003).

[7] Bonnett, Kendra, "An IBM Guide To Doing Business On The Internet," McGraw-Hill, U.S.A.

[8] Zhou, L., Zhang, P. and Zimmermann, H. D. "Social Commerce Research: An Integrated View," *Electronic Commerce Research and Applications,12*(1), pp. 61-68. (2013).

[9] Turban, E., King, D., Lee, J. K., Liang, T. P., and Turban, D. C. "Social Commerce: Foundations, Social Marketing, and Advertising," *Electronic Commerce*, pp. 309-364. (2015).