

E-COMMERCE CLASSIFICATION IN INDIA AND INDONESIA

Dini Esawaty Siregar*

ABSTRACT

India and Indonesia are following the similar trajectory in terms of their economic growth and development. They are a dominant force in their respective Economic Regions and consist of similar demographic. There is a strong engagement with the internet among the Indonesian and Indian in Urban areas. Almost every activity involves the internet and information technology. The rise of importance of Internet in our daily lives has enable business to offer products/services on internet platform, easing and improving the quality of life. E-commerce is defined as the process of purchasing, sales, transfer or exchange products, services or information via computer network over the internet. This study intends to analyze and discuss the types of e commerce business based in India and Indonesia along with the underlying theories involved related to information system.

KEYWORDS: *E-Commerce, Management Information System, User's Satisfaction, WebQual.*

Introduction

Internet or the World Wide Web (www) has changed the landscapes by inducing and synergizing technology with economic activities. Information technology has improved businesses and quality of markets. Today, Internet has become a communication mechanism that can facilitate ease of doing businesses. This phenomenon has a substantial impact in the industry. Internet offers products and services directly to the consumer markets. According to Laudon and Laudon (2009), e commerce is defined as the sale of products through electronic interface to the consumers by different companies with a computer as a point for business transaction, E commerce improves cost efficiency in terms of improving the efficacy on administration, time related to business cycles and improving the relation between business and customers, (Charles. 1998)

There are several reasons why a company runs a business by using e-commerce facilities, namely:

- They can reach a worldwide audience.
- They can conduct interactive communication with efficient cost.
- They can reach target specific consumers.
- It is easier to submit information changes such as price or information changes.
- Improve service to customers because access is available for 24 hours, seven days a week.
- Get immediate feedback from consumers.
- It is an alternative distribution channel.
- Provide cost effective and efficient dissemination of brand information

Furthermore, e-commerce means paperless transactions in which innovations such as electronic data exchanges, electronic mail, electronic bulletin boards, electronic funds transfers and other network-based technologies are applied by internet. Generally, e-commerce is a new commercial strategy leading to improved quality of products and services improvements in service provision levels

* B 23, Sujan Singh Park, New Delhi-110003.

while linking the organization, supplier, and requirements consumers towards reducing costs (Shaw, 2012). E-commerce is a new approach to business both electronically and by using networks and the Internet. This way, the selling process, purchase or exchange of products, services and information through computer communications and networks include the internet (Turban et al., 2006).

Purpose of the Research

This article aims to examine e-commerce theories to be able to classify the types of e-commerce corresponding to the theories collected from various studies. The final goal of this study is for the classification of e-commerce that can be used to explain the phenomenon of e-commerce that is India and Indonesia at this time. In addition, for this paper can be used as a reference for research in the realm of management information systems, especially in the topic of online business or e-commerce.

The scope of research

This paper is devoted to a conceptual study, in which the author examines theories collected from previous studies. After that, the set of theories will be created a new concept formulation, in which e-commerce will be grouped into several different types, in accordance with business theories and information systems. This paper may serve as a basis for further research, both in-depth assessments empirical, descriptive or conceptual.

E-Commerce

E-commerce is defined as the process of purchasing, selling, transferring or exchanging products, services or information through computer networks over the Internet. (Kozinets et al., 2010). By taking traditional forms of business processes and networking social platform through the internet, business strategies can be successful if done properly, ultimately resulting in increased customer, brand awareness and revenue. Buying decision customers are influenced by perceptions, motivations, learning, attitudes and beliefs. Perception reflected to how customers choose, organize, and interpret information to form knowledge. Motivation reflected customer's desire to meet their own needs. According to Hoffman and Fodor (2010), e-commerce can run well if based on this 4C principle: connection (connection), creation (creation), consumption (consumption) and control (control), with the active consumer participation, such as feedback or consumer reviewing, these principles aides in the Return on Investment (ROI) of marketing strategies. Therefore, the world recognizes a new concept business activity that is by way of online. One of the advantages of using the Internet to connect with customers is fast data delivery and information between the people involved (Kozinets et al., 2010). Six dimensions of a successful information system by DeLone and McLean (2004) can be applied also to the ecommerce environment is as follows:

- **Quality System in the Internet Environment**

The characteristics of e-commerce systems can be measured according to usability, availability, reliability, adaptability, and response time (e.g., download time and data processing)

- **Quality of Information in Capturing the Issue of E-Commerce Content**

The content network should be personalized, complete, relevant, easy to understand, and secure if a potential buyer or suppliers start transactions over the internet.

- **Quality of Service**

The overall support is delivered by the service provider, regardless of whether the support is delivered by the department of information systems or units new organization or may be outsourced to an internet service provider.

- **Use**

It is measured from visits to websites and navigation within the site for information search and transaction execution.

- **User Satisfaction**

This is an important way to measure customer opinions in an e-commerce system and should cover the whole that the customer experiences within purchasing cycle, payment, until acceptance of products or services.

- **Benefits**

This is also important, as it is important to capture the balance of positive impacts and negatives from e-commerce to customers, suppliers, employees, organizations, markets, industries, economy, and even society as a whole. E-commerce has been developed to make traditional business more efficient, easy and faster. The origin of the e-commerce concept is EDI (Electronic Data Interchange) allows companies to do business without hard copy paper and manual processes. Due to the special nature of e-commerce, its development is always dependent on technological developments and laws.

The first significant advancement towards e-commerce occurred in the early 1990s when the United States abolished the ban on commercial use of Internet. In 1995, IBM was the first company to actively promote-commerce solutions and also attract the interest of researchers. Amazon's success paved way e-commerce globally in 1999. However, as always with technology development, the first wave of e-commerce revolution failed because of weak business model and flawed implementation process (Rosalund, 2015). Popular Google just started a new phase of e-commerce, which still continues today. Based on such history, e-commerce is defined as an electronic transaction around the sale or purchase of goods or services between households, individuals, government and other public or private organizations, which are conducted through the network through computers. According to Vaithianathan (2010), the concept of e-commerce is not limited only to selling and buy, but also involves various factors of the enterprise value chain, such as promotion, invoices and payment systems, transaction services and customer security. Therefore-commerce can be considered as an umbrella that integrates different functions into digital form.

Measuring Performance of E-Commerce

According to Schradi (2009), there are two ways to do online marketing, passive and active. Using passive online marketing means a company builds a website which provides information to customers without doing any significant activity to reach customers. On the other hand, active online marketing does the opposite, i.e. the company is trying to reach potential buyers on the internet. By taking advantages of Internet technology, the company has the ease in promoting and conveys information about their brands (Kaplan and Haenlein, 2012).

Research Methods

To measure e-commerce performance, there are several methods that can be used, between quality website theory (website quality - WebQual), technology acceptance model (Theory Acceptance Model) and Integrated Theory of Acceptance and Use of Technology (Unified Theory of Acceptance and Use of Technology - UTAUT). In this research, descriptive analysis is used for the analysis of existing findings.

Website Quality Theory

Website quality theory (WebQual) is one of the quality measurement methods website developed by Stuart Barnes and Richard Vidgen (2000). These methods are a development of service quality measurement method (ServQual) that has been much used generally. WebQual takes the basic concept of Quality Function Deployment (QFD):

"Structured and disciplined process that provides a means to identify and carry the voice of the customer through each stage of product and service development and implementation."

The above statement can be defined as a structured and disciplined process which presents a means to identify and bring the voice of the customer through each stage of development and implementation of a product or service. From the concept of QFD Barnes and Vidgens (2000) distinguish between several categories of WebQual:

- Usability, a category based on the study of the relationship between humans and computers and studies of web usability, including the ease of navigation, the suitability of the design and the picture presented to the user.
- Information, which is a category based on the assessment of information systems in general. This category relates to the quality of the website content that is proprietary information for the purpose of the user, for example regarding the accuracy, format and relevance of that information presented.
- Service interaction, which is the category related to service interaction perceived the user when deeply involved with the website.

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) uses five main constructs, namely:

- Perceived usefulness (i.e. perceived usefulness), i.e. the extent to which a person believes that using a technology will improve the performance of its work. From the definition, known perceived usefulness is a belief (belief) about the process decision-making. Thus, if one feels confident that the system useful information then he will use it, on the contrary if one feels confident that the information system is less useful then he will not use it (Mathieson, 1991).
- Perceived ease of use, i.e. ease of use is a belief (belief) about the decision-making process. If one feels confident that the information system is easy to use, then he will use it, otherwise if one feels confident that the information system is not easy to use, then he will not use it. Venkatesh (2003) defines convenience use (ease of use) as a level where one believes that computer can be easily understood. Intensity of use and interaction between users (user) with the system can also show ease of use.
- Attitudes toward behavior (attitude towards behavior) or attitude using technology (attitude towards using technology). Attitudes toward behavior (attitude towards behavior) defined by Davis (1993) as a positive or negative feeling of a person to perform the behavior to be determined. Attitudes toward behavior are also defined by Mathieson (1991) as a user evaluation of his interest in using system (the user's evaluation of the desirability of his or her using the system).
- Behavioral behavior (behavioral intention), i.e. a desire (interest) a person to perform a certain behavior. Someone will behave (behavior) if they have a desire or interest (behavioral intention) to do so.

Integrated Theory of Acceptance and Use of Technology (UTAUT)

UTAUT (Unified Theory of Acceptance and Use of Technology) is a model that is developed by Venkatesh et al. (2003). This model describes the behavior users of information technology. The UTAUT model has the following categories:

- Performance expectancy, i.e. the degree to which a person believes that it is using the system will help it achieve performance gains in its work
- Effort expectancy, i.e. the level of ease associated with the use of the system.
- Social influence, i.e. the degree to which a person perceives that people are considered important, believing that he should use the new system.
- Facilitating conditions, i.e. the extent to which a person believes that the infrastructure organization and technical support for system usage.

Discussion

Boyd and Ellison (2007) revealed that interaction on the internet can be collaboration (e.g.: graphic designer site), content community (content community) for example: fan club / fan club sites), and virtual video game worlds (e.g.: DOTA and World of Warcraft). All kinds of participative websites have varying levels of high social presence, but is low on self-disclosure. The reason behind this is because of the users the internet does not always reveal their identity in cyberspace.

Sandhusen (2008) reveals some form of business interaction those origins from three stakeholders in the business. The first is business, in this case company. This is symbol for this element is 'B' (business). The second is the consumer, i.e. the end user goods and services described by the letter 'C'. The last is stakeholders in the form of government, which is described by the letter 'G' (government). Furthermore, the types of interactions between business actors are shown in table 1 below:

S. No	Particular	Explanation
1	B2B (Business to Business)	It involves business transactions between businesses. This include specific agreements that support the smooth functioning of business
2	B2C (Business to Consumer)	Those business activities that sell directly to the consumers
3	C2C (Consumer to Consumer)	The Business activities (sales) conducted between individuals (consumers)

4	C2B (Consumer to Business)	C2B is a business model in which consumers (individuals) create and shape the value of business processes.
5	B2G (Business to Government)	It is a derivative of B2B, the difference lies in the process occurs between the business and government agencies daily
6	G 2 C (Government to Consumer)	Is a relationship or interaction between government and society. Consumers, in this case the community, can easily reach out government so that enable ease in service

Source: Sandhusen (2008)

The growth of online shopping has also affected the business structure. E-commerce has revolutionizing the way business transacts, such as bookstores and travel agencies. Generally, large companies can use economies of scale and offer lower prices. Individuals or businesses involved in e-commerce, whether buyers or sellers rely on Internet-based technology to carry out their transactions. E-commerce has the ability to allow transactions anytime and anywhere. The power of e-commerce allows the geophysical barriers to disappear (Blut, 2015). Kim, Sohn and Choi (2011) argue that cultural contexts make use of communication technology and social networking site usage patterns. They argue that media activity can be different in different countries, according to cultural characteristics of the country respectively. Collective society, for example in Asian countries like India and Indonesia, are more dependent on social interaction than those who live in society which is individualistic-oriented (Hofstede, 2001). However, apart from some differences, the motive the underlying basis for using the internet (looking for friends, social support, entertainment, information, and convenience) can be similar between one culture with different cultures. This study links the characteristics of Indonesian and Indian society with the type's business interaction. In Table 2, there is a classification of e-commerce business variations in Indonesia and India:

Type	Explanation	Example (in Indonesia)	Example (in India)	
Advertising/ Classifieds	It functions as a platform Where individuals can advertise their goods for free. The Revenue is earned from premium advertising This type of classified ad is suitable for sellers who just want to sell goods in small quantity	OLX, beniaga.com	Quickr.com, OLX	B2B, C2C
Online Marketplace	This is a business model where the website concerned does not just help Promote merchandise only, but also facilitate money transactions online. All online transactions must be facilitated by the website concerned	Tokopedia.com, bukalapak.com	Ebay.in	C2C
Shopping Mall	This business model is similar to a marketplace, but sellers who can sell there must be a reputable seller due to a rigorous verification process	Blibli.com, zalora.com	Flipkart.com	B2B, B2C
Online stores	This business model is quite simple, i.e. an online store with a website address (domain) where the seller owns stock products and sell them online to buyers.	Lazada.com, Bhinneka.com	Myntra.com, Jabong.com	B2C
Social media online stores	Many sellers in Indonesia & India use social media sites like Facebook, Twitter and Instagram to promote their merchandise.	Anyone selling through online store	Anyone selling through online store	C2C
Online website for particular function like job search or matrimony searches	Website is used as a platform together people with same skills or for online fundraising.	Kitabisa.com, wujudkan.com	Naukri.com, matrimonialsearch.com	C2B

Source: From various secondary sources

E-commerce allows increasing the overall value of a company's business. It is, therefore, necessary to understand the different features and types of e-commerce businesses. However, opportunity costs can occur, if local strategies are not suitable for the new market, companies could lose potential customers. There are also some online businesses that use some of the various business models simultaneously. For example the types of businesses that have their B2C online store itself and the marketplace that verifies the seller first (Luckman, 2014). Comparing e-commerce sites to one another can only be done if they have a similar business model. E-commerce allows increasing the overall value of a company's business. Therefore, it is necessary to understand the features and compare e-commerce sites with each other can only be done if they have a similar business model. According to Martinsons (2008), some of the benefits to be gained with e-commerce include:

- **Globalization of Markets**

The Internet allows commodity exchange and the information is not limited by space and time. Anyone can use e-commerce services for electronic business all the time. The company can expand its business with internet to the world while consumers can buy their products.

- **Personalized Demands (can change request as you wish)**

In the e-commerce environment, customers can be satisfied more through personalize customization of the product or quality of service. Simultaneously, technological innovation can help the company's business processes by automatically providing customize user interface and the customers can get more convenient service from previous.

- **Business Integration**

This can be reflected in the integration of business processing for the companies involved. Work procedures are more regular; workmanship and electronic information processing as a whole can utilize resources human and material resources. In addition, it can help companies build close partnership with the downstream industry.

- **Business Opportunities are Evenly Distributed**

Implementing e-commerce can bring equal opportunities for anyone, also middle-class companies and small companies. As a market tends to be open, there are large expenditures of expensive advertising which many marketers do not require. Just by accessing the website or internet connection, medium company and small can earn more profit. E-commerce has revolutionized and transformed traditional and penetrating space and time limits, changes in trading patterns through diversification of logistics solutions so that many people consider the e-commerce revolution equivalent to the industrial revolution first. The most significant function of e-commerce is the ability to achieve much users quickly and with cost effective use regardless of the difference their geographic location. This greatly helps small businesses to expand their markets, without significant difficulties in the financial or organizational resources. The virtual nature of commerce has removed the traditional cost use of office and conventional workspace. Significant changes also decrease the lack of suppliers or intermediaries. In many cases, customers can be more directly related to the company. (Shaw, 2012). The strong presence of technology to support transactions allows companies to receive a better market understanding and the ability to respond more quickly to customer behavior. The e-commerce platform also allows businesses together a lot of statistics about the number of customers coming to their website, how they choose or compare alternatives, and what logic in every purchase situation. E-commerce has also increased connectivity and interactivity of the company while increasing the power of customer's thus increasing competition in the market.

Conclusion

Electronic commerce, generally written as e-commerce, is trading products or services using a computer network, particularly utilizing Internet technology. Modern electronic commerce typically uses the internet for at least one part of the transaction life cycle, although it can also use types other activities, such as operations management or conventional payments. E-commerce business in Indonesia& India can have some characteristics as follows:

- Online shopping websites for retail sales directly to consumers
- Participation in online marketplaces, which focus business-to-consumer (B2C) or consumer-to-consumer (C2C).
- Business to business (B2B) sales
- Collect and use demographic data through web contacts and social media
- Business-to-business electronic data exchange (B2B)

Managerial Implications

With e-commerce business activity, the company can expand activities and reach consumers more easily. Also the transaction process that was in its nature, conventional has become more modern with the availability of online transactions. This study provides a conceptual overview of the history, types of e-commerce and its use in Indonesia & India. For further research, there needs to be a test empirical both qualitatively and quantitatively, so that information such as types what e-commerce is most effectively used in business, or what type most used in Indonesia & India.

References

- ⇒ Barnes, S., and Vidgen, R. (2000). WebQual: an exploration of website quality. ECIS 2000 Proceedings, 74.
- ⇒ Blut, M., Frennea, C. M., Mittal, V., and Mothersbaugh, D. L. (2015). How procedural, financial and relational switching costs affect customer satisfaction, repurchase intentions and repurchase behavior: A meta-analysis. *International Journal of Research in Marketing*, 32(2), 226-229.
- ⇒ Boyd, D. M., and Ellison, N. B. (2007). *Social Network Sites: Definition, History, and*
- ⇒ Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International journal of man-machine studies*, 38(3), 475-487.
- ⇒ Hoffman, D. L., and Fodor, M. (2010). Can you measure the ROI of your social media marketing? *MIT Sloan Management Review*, 52(1), 41-49.
- ⇒ Hofstede, G. H., and Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage.
- ⇒ Kaplan, A.M and Haenlein, M. (2012). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53, 59—68
- ⇒ Kotler, P. and Zaltman, G. (1971). Social marketing: an approach to planned social change. *The Journal of Marketing*: 3-12.
- ⇒ Kozinets, R. V., De Valck, K., Wojnicki, A. C., and Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of marketing*, 74(2), 71-89.
- ⇒ Laudon, K., and Laudon, J. (2009). *Management Information Systems: International Edition*, 11/E. Pearson Higher Education, 2009.
- ⇒ Luckman, E. (2014). 5 Model E-Commerce di Indonesia, <https://id.techinasia.com/5-modelbisnis-ecommerce-di-indonesia/>
- ⇒ Martinsons, M.G. (2008). Relationship based e commerce: theory and evidence from China. *Information Systems Journal*, 18(4), 331-356.
- ⇒ Mathieson, Kieran (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information systems research*, 2(3), 173-191.
- ⇒ Rosalund, R. (2015). E-commerce value chain in Russian markets – The role of market specific factors Faculty. LUT School of Business and Management.
- ⇒ Sandhusen, R. (2008). *Marketing*. Hauppauge, N.Y: Barron's Educational Series.
- ⇒ Scholarship. *Journal of Computer-Mediated Communication*, 13(1), article 11.
- ⇒ Schradi, B. (2009): Online Marketing Internet Lexicon, http://www.symweb.de/glossar/onlinemarketing__169.htm
- ⇒ Shao, G. (2009). Understanding the appeal of user-generated media: a uses and gratification perspective. *Internet Research*, 19 (1), 7 – 25.
- ⇒ Shaw, M., Blanning, R., Strader, T., & Whinston, A. (Eds.). (2012). *Handbook on electronic commerce*. Springer Science & Business Media.
- ⇒ Turban, E., King, D., Lee, J., Warkentin, M., & Chung, M. H. (2006). E-commerce: A managerial perspective. *Low Price Edition*, 180-183.
- ⇒ Vaithianathan, S. (2010). A review of e-commerce literature on India and research agenda for the future. *Electronic Commerce Research*, 10(1), 83-97.
- ⇒ Venkatesh, V., Morris, M. G., Davis, G. B., and Davis, F. D. (2003). User Acceptance of Information Technology. *MIS Quarterly*. Vol 27, No. 3. Page. 425-478.

