

## **Communication Theories and e-Commerce – A Theoretical Examination**

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*Abstract:* - By referring to orthodox communication theories, this research has examined the relationships between new medium, the Internet, and its audience, the Internet surfers, in an attempt to design and implement effective e-commerce strategies based on surfers' communication needs and behaviors on the Internet that allows both uni- and bi-directional flow of information.

*Key-Words:* - Communication theories, the Internet, e-commerce, behaviors, flow of information.

### **1 Introduction**

The symmetrical-asymmetrical communication has been one of the subjects in communication research [1][2][3]. Mass communication typically has an audience that is heterogeneous and geographically dispersed, has an anonymous relationship to the senders and lacks social cohesion and organization among them [4]. The alienated audience is usually found in modern society characterized with the weakening of traditional bonds.

For the media institutions prior to the digital age dated after the World War Two, they had to ensure that the message was sent to the receivers considered as individuals directly, and the message was not spread and altered from those who received it to others. Psychological and biological aspects are important for dealing with the isolated audience.

In contrast, in the digital age, the media institutions have the obstinate audience that denotes an active mass communication audience that is selective to what the media offer [5]. Social and cultural aspects such as the use of reference groups [6] and the role of intermediates in the communication processes [7] become the focal points for media institutions. Further, the audience in the digital age is gradually affected by both the feminism that emphasizes gender relations, ideology and sexual subjectivity, and the postmodernism that calls attention to self-reflexivity, multiculturalism, and negativity [8][9].

The changing characteristics of audience, from mass audience to obstinate audience, coincide with that of the communication technology, from one way broadcasting to multiple interactive channels. The change is either technological driven, culturally motivated, or both. The changes have raised the

attention on the new relationships between the audience and the digital mass medium – the Internet. This paper attempts to pinpoint how the above new relationships may affect the design of e-commerce strategies. The findings may provide e-commerce owners and application designers new insights of winning more online customers.

### **2 The Internet**

#### **- A Digital Mass Medium**

The Internet is a global digital information exchange network and platform for individual, society, commercial and non-commercial organizations, government and non-government organizations, and more since early 1990s. The Internet has provided a universal platform for the so-called 'digital revolution'. Information is converged in the same form: 0s and 1s and manipulated digitally. Digital revolution promises 'one-stop media' [10].

Via the Internet many people have access to the same information instantaneously. When the event such as the 9/11 terrorists' attack of World Trade Centre took place, it reached the entire world via new media. Hundreds of millions of people were getting the same information live and experiencing the same emotions. It also changes our value, unites the whole world together or separates the world into different camps with different ideology. The exchange of opinions on the Internet is effortless and swift. The Internet poll even makes public opinions reflected at real time. The Internet has become a significant social institution. For business, the interconnected matrix of computers, information, and networks that reaches tens of millions of users in over one hundred

countries is a business environment free of traditional boundaries and limits [11]. It is radically changing how people live, learn, work, play, and consume as well as how we function as a society [12].

The Internet is sometimes called 'cyberspace' because it has the following traits: it does not have a specific physical form; it is powered by electricity; it has no specific boundary; it is for the public; it is a replica of real world; and it could be a virtual world. Different types of media content (news, information and entertainment) found across various types of media forms (text, images, audio, and video) are evolving converged into a single media platform through the Internet. This media convergence, and its expected synergetic benefits, has been one of the key drivers behind several recent mergers of media companies, including those of America Online-Time Warner-CNN, Viacom, and CBS.

Legal and public concerns have arisen concerning the Internet: security, privacy, pornography, taxes, crimes, and public access. These concerns can play a significant role in shaping how the Web content providers (WCPs) and the Internet service providers (ISPs) plan their website designs and accesses as well as what information and services they can offer to the Internet surfers. Standards, regulations and informal controls can all serve to impact on the Internet development.

### 3 The Audience

#### - Orthodox Media Theories

For mass communication research, the concept of audience is often characterized as people who 'have chosen voluntarily to attend to a certain content or medium', but for media institution, the audience is 'an aggregate of people one intends to reach' [4]. Windahl et al. suggests that the audience can be defined in three aspects: the sender, the audience member, and the media use.

Windahl et al. suggests that the senders should create a sense of belongings, or identity, among the audience by more than just the media content use. Further, to focus the resources on certain media channels, media institutions often categorize the audience by their media use and give it a title such as 'working mothers', 'double wages families', or 'the Internet surfers'.

Many researches have investigated the relationships between audience and the media. The following are a list of some orthodox notions and theories related to the audience. The following are some typical examples:

1. Segmentation of the audience [4][13][14][15][16][17][18].
2. The hypodermic syringe model [19].
3. The two-step flow of information model [7].
4. The model of the uses and gratifications approach [4][20][21].
5. The value-expectance theory [22][23].
6. Topology of motives [24].
7. The cognitive and cultural model [25].
8. The reception analysis [26][27].
9. The Levy-Windahl model [28].
10. The cumulative effect [29].
11. The cultivation analysis [30].
12. Social circumstances reinforcement [31][27].
13. The situational theory [32][33]
14. The emancipated audience [34]
15. A market for commercial purposes [26][35].
16. Dialogue partners for two-way communications [36].
17. Clients for services or products [25].
18. Passive receivers [36][37]
19. Active receivers [38][39][40]
20. Roles and meanings in human interaction[41][42]

### 4 Theoretical Examination

As the Internet users, or called the Internet surfers, must connect to the network for accessing information and services through ISPs, their voluntarily choice to attend to a medium has qualified them as the audience of mass communication. The followings 10 points are the results of examining the Internet, as a mass communication medium, based on mainstream audience theories listed above.

#### 4.1 Contents, Sections, Categories

The Internet users, the targets that the WCPs intend to reach, are consisted of a broad of people with different subgroups for different information and services. They are not a monolithic audience. Even they access the same website, such as Yahoo.com, it does not mean they share a social or cultural identity. For the same messages on the same website, users may form their own frames to interpret the messages in different ways [26][27]. Thus, WCPs have to categorize their contents for different Internet users. Yahoo.com for example categorized its content into different sections such as shopping, mail, finance, auction, and news. Yahoo.com also provides its

websites in local language and with local contents. To attend individual segment of the Internet users, each website is organized and presented in unique formats, texts, and images.

#### 4.2 Account, Password, Membership

Some websites use 'account and password' to distinguish between visitors and members. The membership strategy is common in most of the interactive websites. It is clear to see that the strategies of segmentation [4][13][14][15][16][17][18] are also applied on the Internet.

#### 4.3 Accessing the Internet

Since the Internet users are in control of visiting their websites by either entering their website address or clicking icons hyper-linked to their websites, the hypodermic syringe model's [19] claim that the media are seen as in the control and the audience is passively manipulated seems to be incorrect.

The two-step flow of information model [7] may somehow be meaningful here as the audience is not passive but active. The hyperlinks exist either on other websites or in someone's e-mails. For example, a recognized website, acting as an opinion leader, may direct its surfers, acting as the opinion followers, to other 'good' sites. Emails from friends or other respectable person may contain hyperlinks that direct the receivers to certain websites or messages that influence receivers' decisions or beliefs.

#### 4.4 e-mail

Further, the use of e-mail enables the users of the Internet to share and exchange experiences. The 'chat' mechanism even allows symmetric exchange of opinions. Both the 'chat' and e-mail mechanisms are examples that link the users together and work as an internal communication apparatus, an example of the emancipatory use of media [35].

#### 4.5 Mailbox and FAQs

For WCPs this e-mail system as well as their mailbox option allows two-way communication, treating the users as dialogue partners [37]. The frequently asked questions (FAQs) option, on the other hand, offers the users opportunities to solve common problems predicted and analyzed by WCPs [33][34].

#### 4.6 On-line purchase and Hits

WCPs' on-line purchase option regards users as clients for services or products [25]. Taking the Internet users as a commercial market [26][36], e-commerce has become a popular means for

organizations to reach new customers. Advertising rates for space are usually based on the number of 'hits' a Web site can claim [43].

The number of 'hits' method, used by many WCPs to measure the effectiveness of their advertisements, however, cannot explain and understand what the website visitors think and how do they react to the advertisements or web services. The selection option of the audience (the Internet users in this case) suggested by the Levy-Windahl model [28] may give WCPs a thought that the number of 'hits' may only confer limited knowledge about how successful are the advertisements on the Web. The Internet users could be passive receivers [37][38], active creators [39][40] or both.

#### 4.7 Hidden Identity

One of the features of the Internet is 'hidden identity'. As the Internet is a 'cyberspace', the user identity can be true, false or manipulated, depending on the needs and wants of the Internet users. This 'hidden identity' feature, which does not exist in face-to-face or other traditional communication practices, has raised the role-playing issue in the online interactions.

The issue of roles and meanings in human interaction was raised by Mead in the early 1930s. Mead [41], focused on micro-sociology, emphasized the fluid and open nature of social order and the capacity of individuals to create new roles and meanings. For Mead, communication is effected through 'significant gestures' and self-conscious acts and communication involves human interpretation.

Mead's approach to depict human interaction was criticized by Goffman [42] for avoiding institutional analysis and macro-sociological issues of social class and power. He pointed out that the interaction order existed in human interaction. This interaction order always involved a moral dimension, trust, and tact in encounters with others and a commitment to sustain the order itself. He argued that individuals do not have a unified self but, rather, have multiple selves in their everyday lives as they constantly move in and out of varied social and linguistic contexts. For Goffman, the interaction order is thus situational, depending on who are involved in the interaction. Interaction on the Internet often does not require the true identify of communicators and receivers.

Thus both Mead's and Goffman's theory is inadequate in this aspect. However, Goffman may be right in that the interaction order is situational, depending on who are involved in the interaction. For some Internet users, they change their identity when 'chat' or deal with different counterparts. There are no conclusions about why some users change or hide their identities on the Internet.

#### 4.8 Free-Speech, Computer Crimes and Flash Mud

The use and gratification theory [4][20][21], the value-expectance theory [22][23], and the topology of motives [24] may explain partially that the Internet users could do things for different purposes. Some users may want a 'free speech' when dealing with superiors or government. Some may do it for their privacy and safety. Computer criminals may do it intentionally. Others, such as 'flash mud' may simply wish to escape from the role assigned to them by their society and act 'wildly' on the Internet without social constraints.

#### 4.9 Cyber Game

Cyber game is increasing popular on the Internet, especially for the young. Some of them contain violence, coarse language, and sexual scenes. Like the television, it attracts some people who are heavy players and become addicted to it or believe in the 'mediated reality'.

The cultivation analysis by Gerbner [30], social circumstances reinforcement theory [31][32], and the cumulative effects [29] of watching television may be used to analyze cyber game issues in a similar way. However, the cyber game is interactive and may involve many players simultaneous which cultivation analysis does not cover.

#### 4.10 Other Uses and Behaviors

Other Web behaviors such as surfing on the Web, chatting with other people online and communicating with friends by emails may also lead to problems similar to those of playing cyber game. The Internet users may look for the usefulness of the contents on the Internet or enjoy the experiences and obtain satisfactions from the use. The former coincides with the cognitive model and the later, the cultural model proposed by McQuail [25].

### 5 Conclusions

It is clear that most audience theories can explain the communication practices on the Internet. E-commerce owners and application designers may benefit from the use of communication theories in designing their website and applications as well as communicating with their online customers. However, there are areas or questions left out of account by audience theories that call for further research. For example, recent issues on the Internet such as user privacy, the digital divide, and computer

crimes have yet been taken into account to a larger extent by most audience theories.

Aiming at raising attentions on analysing the Internet medium based on mainstream audience theories, this research has been conducted in the way of theoretical examination. However, empirical researches are required in order to verify the application of audience theories on the Internet in details.

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