

THE ELECTRONIC COMMERCE CHALLENGE IN CHINA'S ECONOMIC DEVELOPMENT

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ABSTRACT

The potential for economic development in China is great. While electronic commerce promises to figure importantly in that development, the spread of Internet infrastructure and use has not been uniform throughout the country. Business organizations in Nine different parts of China were surveyed to assess levels of Internet use in areas of high, medium, and low economic advancement.

Keywords: Chinese Internet, E-Commerce, World Trade Organization, Economic Development

INTRODUCTION

Electronic Commerce has benefited society and individuals significantly in many respects. This is one reason why Information System Technology is developing so rapidly worldwide. China has a current annual economic growth rate of 7 % [5]; as the world's most populous nation, China is experiencing both gains and pressure arising from the nation's accession to the World Trade Organization (WTO) in October, 2001.

China's accession to the WTO will bring important developmental opportunities for its economic production. Obviously, it will also bring many challenges to China's development, but opportunities always bring challenges. Discovering how to exploit the Internet for business and economic benefit is one such challenge. In particular, how can Electronic Commerce be applied in a country where the Internet is widely used in some areas but virtually unknown in others?

China is in a position to face the Electronic Commerce Challenge. China's Information Industry will increase from an anticipated 43.6 million at the beginning of 2000 to at least 228 million by the close of 2005 [2]. Joining the WTO will enable China to enjoy the various rights available to other member states, and have a say on international trade matters. It can further open its internal market, encourage competition and increase productivity. For the member states, China offers a huge potential market for investments and sales while Electronic Commerce plays a significant role in this process. In view of the fact that only a very small percentage of the Chinese population is currently using the Internet, the potential for its growth is unquestionable. Whether your company manufactures PCs or owns the truck that delivers a product purchased online, there are a number of ways that one can be involved in and gain from e-commerce in China. Doing so successfully and profitably in China, as elsewhere in the world, provides much more opportunity to develop business.

For China, however, the reality is that the legal opening of sectors related to e-commerce will only happen gradually. One advantage of new Internet and e-commerce enterprises is that they often do not initially compete directly with struggling state enterprises. Instead, they create new companies and new jobs and thus present an area where foreign investors and local entrepreneurs

can develop new markets jointly.

Statement of the Problem

China has seen rapid spread of the Internet, with an estimated 33.7 million Chinese now online, up from 620 thousand in 1997 (see Table 1) However, the development of the Internet in China is not as balanced as in some other countries. Some of the areas are developing very fast and some of them are slower. In general, the majority of Internet users are in the Beijing, Shanghai and Guangdong areas, which have benefited most from China's economic growth over the past two decades. While this observation seems intuitive, it leaves unanswered questions about how widespread Internet development and use are in China generally, as opposed to specific locales within the country.

Table 1. Internet and Computer Users in China from 1997 – 2002 [4a]

The Rate of Internet and Computer Users In China From 1997 - 2002

Date	Internet Users(Ten- Thousands)	Computer Hosts(Ten-Thousands)
October-97	62	29.9
July-98	117.5	54.2
July-01	2650	1002
January-02	3370	1254

Purpose of the Study

The purpose of this study was to assess the state of Internet use in China, particularly in areas beyond the three economic centers mentioned above. This assessment, we hope, can provide information that can be used by local government administrators and any companies that may be interested in China's budding electronic markets.

This study is an attempt to ascertain in which levels/degrees the Internet has affected existing companies' communication ability in various areas. This study is limited to the main difference among nine different geographic areas in China. Business organizations in the nine areas in China were mailed an identical questionnaire. The questions only dealt with the communication situation of these organizations in these areas. These organization's communication situations are representative of the communication abilities in these areas.

INTERNET ACCESS IN CHINA

According to a survey [8] by the China Internet Network Information Center (CNNIC) issued in July 2001, by the end of June 2000, China had 6.5 million computers connected to the Internet and the number of Internet users was 16.9 million. Before Internet Access was introduced into China, many business and government offices mainly possessed other communication tools. These tools ranged from a simple telephone and a facsimile device to telegraphs as well as letters.

E-commerce was first introduced by IT industries and the media in 1997. E-commerce sites were established. Internet Service Providers (ISP) and Internet Commerce Providers (ICP) publicized commercial content such as shopping channels and online malls in their web sites. Business sites like alibaba.com and 8848.com, both founded in March 1998, were convincing people that there were some viable ways of doing business. Alibaba.com has signed up over 1,000,000 registered members from 202 countries and territories around the world as of April 16, 2002 [1] and has thus built a large on-line community of international traders, buyers and manufactures. Alibaba is headquartered in Hong Kong and has its operational base in Hangzhou, China. In addition, Alibaba has branch offices in California, London, Seoul, Taipei, Shanghai, Beijing and over 10 regional sales offices throughout Mainland China.

Recently, China has made great progress in creating an information infrastructure. This has been accomplished in part by promoting several network-construction projects, which will bring the information technology to China by interconnecting campus networks and then connecting them to the global Internet world.

This review deals with China's Information System Technology market. In examining the literature regarding the subject of this study, according to the survey [8] done by China Internet Network Information Center (CNNIC), there were 10.02 million computers connecting to the Internet by the end of June 2001, increased by 54% than last year, and 18.5 times that of 3 years ago. There were 26.5 million Internet users by the end of June 2001, increased by 4 million in half year (Survey report on www.cnnic.net). As in other countries, with the development of Internet and increase of the Internet users, e-commerce has experienced fast development as part of the emerging new economy. E-commerce can be generally classified into business to business (B2B) and business to consumer (B2C). The huge market potential and rapid development of the Internet has brought enormous promise of business development opportunity.

The chance for foreign investors is particularly optimistic. Since 1978, there has been total of 382,930 foreign-funded enterprises with total foreign investment of 380.82 billion U.S dollars [9]. Unfortunately, the development of the Internet in China is not so balanced throughout the country. Some of the areas have developed very fast and some of them are slower; a number of these areas are barely starting to utilize Internet.

This paper will address the situation of the 180 Chinese organizations located in nine different parts of the country. This study seeks to provide information that can be used by local government administrators and investors/companies that are interested in China's Information System Technology market, which can be a proposed potential market niche for them to strengthen China's E-commerce management and application as well as development.

PROCEDURES

This section is a description of the procedures used in the study. Nine different cities were chosen based on their locations in China's high, middle and lower economic areas. Organizations in those cities were identified. Questionnaires were e-mailed to people in the organizations. Responses are described.

Population and Sample

One hundred eighty Chinese organizations/companies' email addresses were obtained through Internet and government documents. Because of the time constraints on the study and the limited survey information, a non-probability sampling design (specifically judgment sampling) was chosen as most applicable to the situation. The 180 organizations/companies are grouped into nine different regions. This sampling design reduces the generalizability of the study. However, it is a quick and effective way to obtain the needed information.

Data Collection Method

Each organization in the different regions in China was e-mailed a cover letter and a questionnaire both in Chinese and English. The questionnaire contained specific questions about communication and Internet use

Copies of the cover letter and questionnaire are available by request. The e-mailing was followed up after a week with a telephone call. However, this action was not able to remove all possibility non-response bias.

Data Analysis

Although we attempted to obtain usable responses from each organization, the response rate was less than 100%. Received responses were analyzed by dividing into three different groups according to the level of their Internet utilization and corresponding economic status.

Findings

This section is a presentation of the data obtained from responses to the questionnaire of the study. As mentioned in the introduction of this report, this study is an effort to determine whether or not the Internet provides a valuable communication tool for the 180 organizations that are grouped in nine different regions in China as follows:

Group 1: Beijing, Shanghai and Guangdong; (highly economically advanced)

Group 2: Jiangsu, Zhejiang and Shandong; (medium economically advanced)

Group 3: Ningxia, Guizhou and Qinghai; (low economically advanced)

Twenty emails were sent out to each region. The numbers of usable responses to the questionnaires are:

Group 1 Total = 49 (Beijing 18, Shanghai 16 and Guangdong 15). $49/60 = 81.6\%$

Group 2 Total = 46 (Jiangsu 15, Zhejiang 13 and Shandong 16). $46/60 = 76.7\%$

Group 3: Total = 43 (Ningxia 17, Guizhou 14 and Qinghai 12). $43/60 = 71.6\%$

Based on the 138 responses:

91.3% (126/138) were using letter, fax and telephone for communication tools before 1997.

89.8% (124/138) are using Email and Internet for their business.

94.9% (131/138) did not have Internet based home/web page before 1997.

88.4% (122/138) consider Internet is a useful site for the distribution of research findings.

92.0% (127/138) Chinese Company/organization consider Internet is a powerful/helpful media tool for its communication.

89.1% (123/138) Chinese Company/organization consider use of Internet has helped its company/organization a lot compared to before 1997.

91.8% (45/49) organizations in Group 1 have Internet based home/web page currently.

63.0% (29/46) organizations in Group 2 have Internet based home/web page currently.

41.8% (18/43) organizations in Group 3 have Internet based home/web page currently.

93.8% (46/49) organizations in Group 1 consider Computer and the Internet are becoming increasingly easier to use.

71.7% (33/46) organizations in Group 2 consider Computer and the Internet are becoming increasingly easier to use.

46.5% (20/43) organizations in Group 3 consider Computer and the Internet are becoming increasingly easier to use.

Summary of Findings

Our study shows that the most Internet users are in the Beijing, Shanghai and Guangdong areas, where the current percentage of Internet based home/web pages is 97.96 % based on the survey samples. Jiangsu, Zhejiang and Shandong (Group 2) areas have current percentage of Internet-based home/web page at 63.04 % based on the survey samples. The lowest Internet users are in Ningxia, Guizhou and Qinghai (Group 3) areas, where the current percentage of Internet-based home/web pages is 41.86 % based on the survey samples.

The results of study match the survey results from CNNIC's Domain Name and the Proportion [4c] as Geographical Distribution [4d]. In October 1997 North China, (i.e., Beijing) had 41.0% of Domain Names. Our survey shows the number of companies with current Internet based home/web pages in this area is over 97% (Group 1). NorthWest of China, (e.g. Ningxia and Qinghai) had only 1.9% of Domain Names. Our survey shows that the current Internet based home/web pages in this areas is over 41% (Group 3)

Even after nearly five years development, the South West area (e.g. Guizhou), has only 9.0% of Domain Names. Our survey shows that the current Internet based home/web pages in this areas is over 41% (Group 3)). East China, (e.g. Shanghai) has 36% of Domain. Our survey shows that the current Internet based home/web pages in this areas is over 63% (Group 2).

The Main Reason for the Difference between West and Eastern of China

Great changes have taken place in people's minds after twenty years of reform and opening-up policy to the world. However, some traditional ideas formed under the planned economy still linger. The typical example is the Group 3 areas from western part of China as we see from this study. The gap between the western (Group 3) and eastern part (Group 1) of China in using new technology, such as Electronic Commerce and Internet etc. is large. Therefore, the development of economics in the west part of China is behind of that the eastern part of China. The reason

why this situation happened can be found in several factors: first, Group 3 historically has dealt with geographic isolation from the eastern cities; second, Group 3 areas have less advanced technology and industry background; third, people in Group 3 areas sometimes discriminate against privately-owned or collective economies because historical state-owned economic system had maintained a relatively reliable living standard. Twenty years ago while government policy barely allowed people to do some private business, smart people in Group 1 areas quit their state-owned full time jobs to set up their own's business whereas most Group 3 area people thought those people's action were foolish. Now, many of the smart people who had business earlier in Group 1 area have become millionaires.

CONCLUSIONS

It is optimistic that self protectionism will be removed soon because China has joined the World Trade Organization. With huge government investments in infrastructure, the investment environment will be improving steadily. China's reform and opening-up policy over the past two decades have produced one of the most dynamic economies in its history, offering the rest of the world a huge potential market.

China has also been engaged in the promotion of economic exchanges and cooperation between Asian countries and regions, and its efforts have resulted in remarkable progress. Chinese President Jiang Zemin said in Beijing that the development of the western areas is a key strategy in realizing China's development and modernization goal [10]. The key point is that the importance of the principle of seeking truth from facts in developing the west. There must be good planning and prioritizing in choosing projects, such as Electronic Commerce, Internet information technologies

China's E-commerce infrastructure is lagging behind the rest of the industrialized world. However, the growth and potential of E-commerce in China appears promising. China's rapid economic growth and its imminent entry into the WTO pose a number of complex challenges for future economic growth. In order to keep a rapid speed for China's economic development, both enterprises and government need to take a lead in the new technology development.

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Related links:

- [Overview of China's Internet Market and Its Regulation](#)
- www.cnnic.net.cn/develst/rep200107-e.shtml
- <http://tech.sina.com.cn>
- www.cnnic.net