

# Case study: the marketing strategy for China Unicom

<sup>1</sup>Mohd Shukri Ab Yajid, Sakinah, Ali Khatibi

**Abstract---***China United Telecommunications Co., Ltd. ("China Unicom") was established on July 19, 1994 by the state Council, as the only Chinese operator that has a license to provide a full range of services, the second national carrier to provide basic and value-added service, mobile, and telecom networks such as mobile and engineering service, and to provide long distance and local phone services to the general public. The finding of this study is that there is several factors affect China Unicom marketing strategy. China became a member of the world Trade Organization (WTO), the uncertainty policy by government and the bad performance of CDMA service are main factors that affect the company's marketing strategy. This paper takes a fresh, in depth look at China Unicom and the issues it face, and provides insight into the future shape of China Unicom marketing strategy (X. Zhang & Prybutok, 2005; De Silva et al., 2018a; De Silva et al., 2018b; Nikhashemi et al., 2013).*

**Keywords---***Unicom, Marketing Strategies, telecommunication, Chines Organizations*

---

## I. Introduction

China United Telecommunications Co., Ltd. ("China Unicom") was established on July 19, 1994 by the state Council, as the only Chinese operator that has a license to provide a full range of services, the second national carrier to provide basic and value-added service, mobile, and telecom networks such as paging, mobile and engineering service, and to provide long distance and local phone services to the general public. China Unicom Limited(the Company) was incorporated in Hong Kong in February 2000.The Company was listed on the New York Stock Exchange and the Stock Exchange of Hong Kong on 21 June 2000 and 22 June 2000 respectively. On 1 June 2001, the Company was included as a constituent stock of the Hang Seng Index. China United Telecommunications Corporation ("Unicom Group") is the major shareholder of the Company. As of 31 December 2004, Unicom Group indirectly and effectively holds 57.92% of shares in the Company through China Unicom (BVI) Limited and China United Telecommunications Corporation Limited. The public investors of the A Share market in Shanghai indirectly and effectively hold 19.49% of shares in the Company. The remaining 22.59% of shares are held by public investors in Hong Kong and New York.

As to its cellular business, the Company is one of the two mobile telecommunication operators in the People's Republic of China (PRC). As of 31 December 2004, there were 112.08 million subscribers to the Company's GSM and CDMA cellular businesses. In terms of the number of subscribers, the Company was ranked as the third largest mobile telecommunication operator in the world. The number of the Company's CDMA cellular subscribers reached 27.81 million and the Company was ranked as the second largest CDMA cellular operator in the world.The Company has constructed the second largest broadband optical fiber transmission network with nationwide coverage in the PRC. This network serves as a shared

---

<sup>1</sup>Management and Science University  
[shukri@msu.edu.my](mailto:shukri@msu.edu.my)

platform, which supports the operation of cellular business, international and domestic long distance calls, data and Internet and this sound network rested companies serves as a good support for the rapid development of the Company's various businesses (J. Yu & Tan, 2005; Dewi et al., 2019; Pambreni et al., 2019; Tarofder et al., 2017).

In September 2004, China Unicom formally completed the acquisition of China Unicom International Limited ("Unicom International"), the wholly-owned subsidiary of Unicom Group. Unicom International is engaged in telecommunications businesses both in Hong Kong and USA. In March 2005, China Unicom (Macau) Limited, registered in Macau Special Administrative Region ("Macau") and invested by the Company, won the CDMA license in Macau. This is the first time that a mainland telecommunication carrier has obtained such mobile service license outside the Mainland China. In the best interests of the Company and its shareholders, the Board of Directors reviews and approves major corporate matters as business strategies and budgets, major investments, capital market operation, merger and acquisition, as well as senior officers' appointments etc. The Board also reviews and approves announcement periodically published by the Company regarding its business results and operating activities.

The Board membership maintains sufficient international and wide representation. Members of the Board consist of outstanding persons from different professions in the mainland China, Hong Kong and overseas. Members of the Board include the company independent non-executive directors, which accounted for more than one third of the board membership, and one non-executive director. All independent non-executive directors and non-executive director are influential members of the society and possess good knowledge and experience in different aspects. They make active contribution to the development of the Company. They keep close contacts with the management of the Company and always reflect fully different matters and opinions at board meetings, which are of concern to the shareholders and the capital market. These kinds of views and opinions facilitate the Board in their consideration of the shareholders best interests. All independent non-executive directors, except the shareholdings interests as disclosed in this annual report, do not have any business or financial interests with the Company, its holding company or subsidiaries, and confirmed their independence to the Company (Chen, Ma, Chen, & Fractals, 2009; Doa et al., 2019; Maghfuriyah et al., 2019; Nguyen et al., 2019).

Notices of the board meetings are delivered to the directors one month before the holding of the meetings. It is best endeavored to deliver all documents for the meetings to the directors at least one week before the holding of the meetings. All board members, including the independent non-executive directors, always visit various branches and get to know about the Company's operations. The Company always arranges relevant compliance training for the directors to be conducted by the company professional advisers, such as lawyers and accountants. Whilst the company is using their best endeavors to incubate their management expertise, a lot of emphasis has also been placed to the career development for management officers at the middle tier. In 2004, the Company has extended its Executive MBA and MBA training programs for its senior officers, and expanded training with respect to academic knowledge and further degree, participated by 25 managers. Moreover, the Company also commenced training programs for managers at branches of county level. There were a total of 190 managers at such level who had participated in training during the year. Furthermore, in order to complement with the business development of the Company, a series of training on its businesses and technologies were conducted during the year. More than 600 staff had attended such training in 2004. The Company also enhanced training for operation skill with respect to professional maintenance, and cooperated with a number of major system vendors in offering training to more than 400 network operation and maintenance staff from various provincial branches. Training for sales and marketing as well as customer services staff was included in the usual working plan for the Company. It is expected that their marketing

and sales capabilities as well as service standard will be enhanced through such training.

China Unicom is the only one full range of services provider in China telecom market. It provides basic and value-added service, mobile, and telecom networks. At present, the Company is engaged in the cellular business (both GSM and CDMA) in 30 provinces, municipalities and autonomous regions in China through China Unicom Corporation Limited and Unicom New World Telecommunications Corporation Limited, the provision of international and domestic long distance calls, data communications and Internet business, as well as other related telecommunication value-added businesses nationwide. The marketing purpose of China Unicom is maintain GSM marketing share and try using CDMA service as a strong weapon to fight with its competitors to get more total marketing share. After CDMA launched in marketing two years, the result is not as the top management's expectation. Besides that by the guarantee of opening telecom market to foreign companies and the uncertain about the standard 3G license force China Unicom to rethinking its marketing strategy (Bria Low, 2005; Pathiratne et al., 2018; Rachmawati et al., 2019; Seneviratne et al., 2019; Sudari et al., 2019; Tarofder et al., 2019).

## II. Literature Review

The Company provides high quality GSM cellular services in China, having GSM international roaming service with 211 operators in 101 countries and regions. As of 31 December 2004, the total number of GSM subscribers was 84.26 million, with a net addition of 11.69 million from 72.57 million subscribers at the end of 2003. Of this total, post-paid subscribers reached 42.84 million, representing a net addition of 3.28 million from 39.56 million subscribers at the end of 2003; pre-paid subscribers increased to 41.42 million from 33.00 million at the end of 2003, representing a net addition of 8.41 million. The proportion of pre-paid subscribers was 49.2%. In 2004, the monthly average churn rate of GSM business decreased to 2.3% from 2.6% in 2003. To obtain this service, Users need to fill in the contract, provide detailed user information, must pay monthly lease fee. They enjoy basic voice communication service, international and domestic roaming service and a number of value-added service functions provided by the company.

The telecom network consists of such parts as transport, multiplexing, switch and terminal. Among them, the three parts of transport, multiplexing and switch combined are known as "transfer mode". ATM stands for Asynchronous Transfer Mode, which integrates the strength of both circuit switch and packet switch, i.e. both flexible bandwidth allocation and elimination of complex traffic control and error control. This greatly reduces the time delay in transport and is qualified for LAN interconnection to provide real-time multimedia services with QOS guarantee. ATM is a connection-oriented communication mode. Connection orientation refers to the establishment of a connection between the sender and receiver before communication, and the message or information is continuously transferred on that connection while in communication. Therefore the routing between the sender and receiver is fixed for multiple messages or information in a single communication. ATM is a packet switch mode with fixed packet length. In traditional packet switching the length is not fixed. ATM relies on cell switching technology. ATM offers statistical multiplexing capability. ATM can integrate multiple services. Total bandwidth leased for Asynchronous Transfer Mode ("ATM") and Frame Relay ("FR") carrier operations amounted to 9007 x 2Mbps. The terminals of "Uni-Video" broadband video-telephony service accumulated to 337 thousand. As of 31 December 2004, the Company provided the "Uninet" Internet access service in 328 cities in China, having "Uninet" international roaming service with 103 countries and regions. Internet subscribers increased to 13.62 million from 12.43 million in 2003. As of 31 December 2004, the subscribers of "Ruyi Mailbox" attained 14.69 million (Xia, 2011).

Customer can dial "10011" special billing query line to obtain such free self-help services as billing query, password modification, payment/refill, and detailed bill via fax, etc. By dialing "10010" customer service hotline, customer can obtain such free services as business inquiry, service application, complaint and suggestion and other agent services. By dialing "10018" customer club hotline, customer can obtain such free services as basic membership service query, special service query, special service application and other club services. The above customer service numbers support remote service by dialing the area code before the service access number. Subscribers to China Mobile, China Telecom and China Netcom can also dial the company service numbers to experience the company quality service.

Unicom Customer Service Center accepts customer business inquiry, billing query, complaint and suggestion, service application, billing notice, emergency service, tele-retaining telemarketing and other diversified services through telephone, fax, Email, Web and letter. 10010, 10011 and 10018 are designed to meet the different communication needs of the company customers and provide them with more convenient services. Express channel and special agents are available to provide efficient and quality services to users of Unicom's mobile, data, long-distance and Internet services. The specific service center taking the request made by customer dialing "10010" shall be responsible for its handling and settlement, and shall make sure the problem is addressed and solved in pre-specified timeframe through close-loop standard processing procedures (Y. Lu, Zhang, & Wang, 2009; Nikhashemi et al., 2017; Tarofder et al., 2019; Ulfah et al., 2019; Tarofder et al., 2016; Udriyah et al., 2019).

GSM system is a TDMA-based 2G digital mobile communication system. It was first developed to promote unification and integration of telecom services within the EU. In 1987, departments in charge of telecommunications in 13 countries signed an MOU to adopt GSM standard in the whole of Europe. It has been widely put into commercial use across the world. GSM divides audio signals into certain data sequences, puts a certain length of data into channels according to a specific interval, and reorganizes sequence at the channel terminal. Unicom Operating Company's GSM network operates at the 900MHz band, and it has begun to operate GSM system at 1800MHz band in some cities to expand the existing network capacity. Unicom Operating Company has been approved to use 2x6MHz spectrum at the 900MHz band, and to use 2x10MHz spectrum at the 1800MHz band.

CDMA system is a CDMA-based 2G digital mobile communication system. It is based on IS-95 Standard. CDMA Development Organization is in charge of coordinating worldwide development of CDMA. This standard has been adopted by over 100 operators in over 60 countries and regions including Hong Kong, ROK, Canada and USA. CDMA 1X has been upgraded on the basis of IS-95, system performance greatly enhanced. Compared with IS-95, CDMA 1X has a marked advantage of higher data transmission rate (maximum rate up to 153.6Kbps), can provide subscribers with mobile Internet and other multimedia services. Moreover, CDMA 1X has other advantages such as large system capacity, backward compatibility with IS-95, and smooth transition to 3G. It has already had a large number of subscribers in the US, Japan and Korea. In March 1999, the State Council approved Unicom Group's adoption of CDMA technology to construct and operate mobile communication network. Unicom Operating Company has been approved to use 2x10MHz spectrum at the 800MHz band. The Company constantly optimized the infrastructure transmission network, strengthened network optimization and operation and maintenance management took more effort on the construction of supporting systems, such as network management and billing system. As the result, the quality of network operation had been effectively improved (Sibao & Tingjie, 2006).

The Company has a technique-advanced and reliable optical fiber transmission network with nationwide coverage (except

for Xizang). In 2004, the Company initially established operation supporting system of transmission network that covered 30 provinces in the country, realized real time control of end-to-end circuit and assured rapid and high-quality services. As of 31 December 2004, the optical fiber transmission network totaled 712 thousand km in length with coverage of 326 cities in the country, of which optical fiber backbone transmission network accounted for 120 thousand km in length. The Company actively cooperated with other operators to share and complement resources among each other. By means of mutually providing secured transmission circuit for each other, jointly constructing infrastructure and purchasing international marine cable resources, the Company reduced the costs of network construction, operation and maintenances. With the progress of phase III project of nationwide CDMA network constructed by the company Parent Company, the coverage and quality of CDMA network improved significantly. The CDMA high-quality network was basically established, providing reliable network for better marketing activities. In 2004, CDMA network wireless connection rate reached 99.6%, call drop rate was less than 0.45%.

The Company takes continuous effort to explore the potential of the exiting GSM network, and keeps on complementing, optimizing and improving the network to meet the market demand. As of 31 October 2004, the GSM network has been expanded to Tibet in trial, which means all 31 provinces in the country was connected by GSM network. In 2004, GSM network wireless system connection rate reached 98.8% and call drop rate was less than 1.0%.

Table1. Unicom Data Communication and Internet Service Technical System

Application system application system layer	Network management		Billing system	Customer service system	Information system
Network service layer	165 Internet	ATM	FR	IPVPN	Other data services
Data bearer switching layer	ATM+IP Switching Network				
Basic network layer	Long-distance OTN			Access Network	

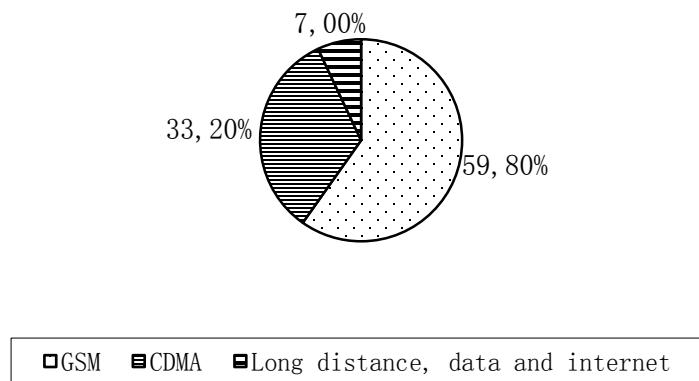


Figure 1: Revenue Consumption

Revenue from the CDMA Cellular Business grew further by the sustainable and fast growth in CDMA subscribers' base. Operating revenue from the company CDMA Cellular Business reached RMB26.34 billion in 2004, an increase of 41.8% from 2003. On a pro forma basis, the increase was 26.9%. Average revenue per user ("ARPU") for the company CDMA Cellular Business reached RMB85.3, a decrease of 32.2% from 2003 on a pro forma basis. Service revenue from CDMA Cellular Business as a percentage of the total operating revenue increased from 88.4% in 2003 to 92.0% in 2004. CDMA usage fees rose to RMB16.16 billion in 2004, representing 61.4% of its total operating revenue from CDMA Cellular Business, while monthly fee reached RMB4.64 billion in 2004, representing 17.6% of its total operating revenue from CDMA Cellular Business. CDMA interconnection revenue reached RMB0.93 billion, accounting for 3.5% of the total operating revenue from CDMA Cellular Business. Revenue from the sales of telecommunication products as a percentage of the total operating revenue from CDMA Cellular Business reduced from 11.6% in 2003 on a pro forma basis to 8.0% in 2004 (Yan & Pitt, 1999).

### III. Methodology

The methodology of this report has to a great extent been influenced by the nature of the topic.

The telecommunications industry of China is still in its infancy and thus the available literature in terms of industry findings is yet rather scarce. There are however, due to the vast potential of the Chinese market, a great number of professional consultant reports on the telecommunications market in China, which because of their exorbitant costs were prohibited from applying as a source of information. Time limitations, and well as cost issues, have made the use of personal interviews impossible.

Thus with little information in terms of regular books and conventional industry reports, the Internet has been the prime source of information gathering for this report. Although the extent of information available is enormous, it has been difficult to disseminate all this information and reach conclusive evidence, which could be verified by other means, or different web-pages. Verifying the information gathered has proved rather difficult, as the sources have different motives for their dissemination of information on the Internet, and therefore their views on the various issues of interest have often diverged.

#### Analysis

The Company has devoted a lot of efforts to develop its CDMA wireless data business, and will use its best endeavors to convert the technology and business superiority in CDMA to a competitive edge in marketing in order to enhance competitiveness. Revenue from the value-added business of CDMA Cellular Business reached RMB2.38 billion, and accounted for 9.8% of total service revenue from CDMA Cellular Business in 2004, an increase from 4.5% in 2003. Revenue from the GSM Cellular Business increased by 15.3% from 2003 and reached RMB47.47 billion in 2004, representing an increase of 2.4% on a pro forma basis. ARPU from GSM Cellular Business decreased from RMB56.3 in 2003 on a pro forma basis to RMB49.4 in 2004, down by 12.3% (Yuan et al., 2006).

Service revenue from GSM Cellular Business as a percentage of the total operating revenue from GSM Cellular Business increased from 97.9% in 2003 on a pro forma basis to 98.1% in 2004. GSM usage fees reached RMB32.00 billion in 2004, representing 67.4% of the total operating revenue from GSM Cellular Business, while monthly fee reached RMB6.92 billion in 2004, representing 14.6% of the total operating revenue from GSM Cellular Business. GSM interconnection revenue was RMB2.61 billion, accounting for 5.5% of the total operating revenue from GSM Cellular Business. Revenue from GSM value-added services of the Company reached RMB4.86 billion in 2004, representing a 10.4% share in the service revenue from GSM Cellular Business, an increase from 5.0% in 2003.

By leveraging on the technological features of the company multi-businesses integrated network platform, along with effectively expanding international and domestic call volume for PSTN and IP telephony, China Unicom have been proactively promoting distinctive services such as: “Ruyi Mailbox”, “Uni-Video” and “Unicom OneNet”. Revenue from the company Long Distance, Data and Internet Business decreased by 3.6% from 2003 and reached RMB5.53 billion in 2004, an increase of 6.2% from 2003 on a pro forma basis.

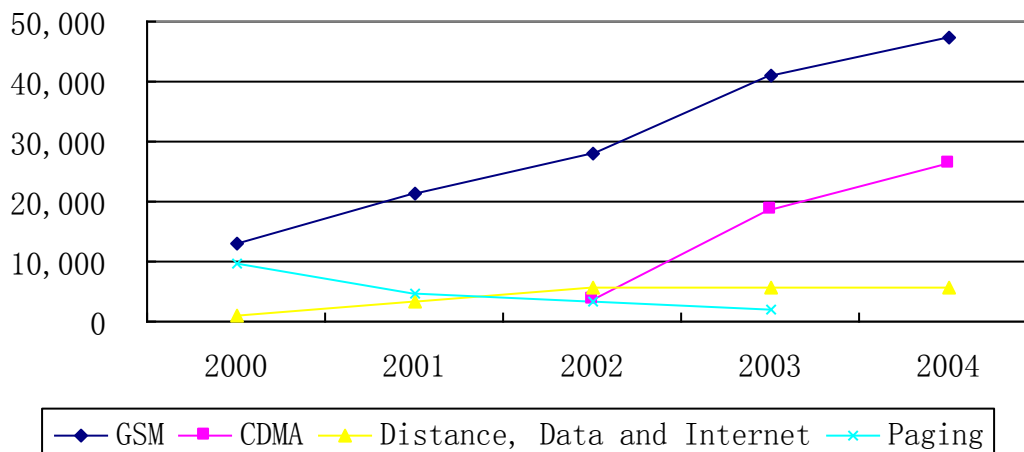


Figure 2: Main product revenue changing Graph 2000-2004

In 2004, the average MOU per subscriber per month for CDMA business were 292.3 minutes, representing a decrease of 45.0 minutes from 337.3 minutes in 2003. ARPU was RMB 85.3, representing a decrease of RMB 40.5 from RMB125.8 in 2003. In 2004, the average MOU per subscriber per month for GSM business were 188.9 minutes, representing an increase of 11.5 minutes from 177.4 minutes in 2003. ARPU was RMB 49.4, representing a decrease of RMB 6.9 from RMB 56.3 in 2003.

However, experts in the industry have predicted that the US telecommunication industry will weather through this difficult time because the economic downturn is only a period of the economic cycle and not the end of telecommunication revolution. The growth momentum for telecommunication equipment manufacturers is far from end and there are many opportunities ahead. With the emergence of many new technologies and the improved efficiency of telecommunication regulation, the telecommunication industry will maintain good impetus for growth. Though the terrorist event on September 11th, 2001 has significant negative effects on US telecommunication industry, many new business opportunities have appeared. For instance, more companies implement videoconference systems inside and the demand for communication equipment increases greatly. So we could even say that telecommunication industry benefits after the “9.11” terrorist event. And the event will have certain effect on the world telecommunication industry in a long term (L. Yu, Berg, & Guo, 2004).

Japan has the third largest telecommunication market. Mobile phone becomes one of the main driving forces for Japanese information technology revolution and the combination of wireless communication with Internet is the hotspot in the development of Japanese telecommunication industry. Japanese telecommunication operators emphasize the research and development of new technologies. They have proposed to develop “Five Sense Communication” which will transfer olfactory, tactile and gustatory information other than visual auditory information so that the communication between people becomes more natural and real. The Japanese information service industry is also very advanced. All large enterprises have established computer network within and 80% of them have connected with outside network. In government bureaus every 1.02 people own one computer and in the executive offices every 1.96 people own one. Though Japan’s Internet technology lags behind that of the United States, it is fostering strengths and circumventing weaknesses by establishing “Mobile digital communication network” to compete with US in the world information market.

The Japanese government and the industry hope that information technology can stimulate the recovery and growth of its stagnant economy. Japanese telecommunication industry has gradually opened since 1980s and experienced from wholly state-owned operation to the monopoly operation by a few enterprises. Japanese government has issued Law for Electronic Telecommunication Industry and the Restructuring of TNT which accelerate the reform of Japanese telecommunication industry. The Japanese government has decided to implement further reform in the telecommunication market according to the restructuring of the economy (J. Zhang & Liang, 2011). The three measures to promote competition are as follows. Firstly, it will deregulate, open the market further and enhance the vitality of the market; secondly, it will make use of cable TV to explore new method for low-cost local communication; thirdly, it will eliminate the limitation imposed on the percentage of foreign investment in telecommunication industry and prepare itself for the challenge of internationalization of telecommunication market.

China is closely related with Japan in business. So the telecommunication industries in these two countries are planning a series of cooperation in several fields. For instance, Japan Telecommunication Corporation and China Telecom Group has reached a cooperative agreement on the establishment of international express data transferring service system by ATM. Japan has lagged behind European and American telecommunication operators in entering Chinese telecommunication market. If in the next round of competition for Chinese market share Japanese enterprises could take first move, Japanese economy and the restructuring of Japanese overseas market will benefit greatly. It is quite possible for Japan to acquire first-move advantage since Japanese companies are eager to enter Chinese market and they are as sensitive to overseas markets as their European and American competitors. Moreover, Japanese government offers better industry policy instruction than European governments.



China Mobile Communications Group is the largest telecom operator in China. The company spun off from China Telecom in April 2000 orchestrated by the government to create a competitive environment. China Mobile has 388 billion yuan (\$46.7 billion) in asset and 121,000 employees. Revenue for 2004 was 192.4 billion yuan (\$23.2 billion), or 35.6% of total telecom revenue in China; net profit was 43.2 billion yuan (\$5.2 billion), up 15.3% from 2003. By the end of 2004, China Mobile had 204.3 million cell phone customers, about 61% of total cell phone users in China (GSM and CDMA combined). China Mobile is listed in the Hong Kong Stock Exchange with ADR trading in New York with a market cap of over \$60 billion. China Mobile competes with Unicom in cell phone services and, to a less degree, with China Telecom and Netcom which operate Xiao Ling Tong, a quasi-mobile service. China Mobile provides GSM and GPRS services its main brands include "ShenZhou Xing" ("Tour of China"), which is essentially a pre-paid service using 136 networks (136-xxxx-xxxx) and "QuanQiu Tong" ("GoTone"), a subscription service using 134, 135, 137, 138 and 139 networks. The cell phone service is available in all provinces and cities. Both services offer value-added features such as voicemail, SMS and caller ID. SMS became available between China Mobile users and Xiao Ling Tong in January 2000. GPRS has been available since 2002 which, in addition to voice service fully compatible with GSM, allows users to access the Internet for a variety of data services (GPRS handset required). GPRS is available in 160 cities and can roam in 240 cities and 44 countries (J. Lu & Weber, 2007).

China Mobile offers data services through its Monternet.com which hosts services provided by third-party service providers via WAP. By the end of 2004, China Mobile had 30 million registered WAP users. In 2003, China Mobile launched "M-Zone," a service brand on Monternet that targets young cell phone users with mobile data services like ring-tones, multimedia messaging, mobile payment and games. In June 2004, China Mobile announced "MO" (for Mobile Online), a bundled data service with express access. In addition to mobile services, China Mobile offers VoIP calling cards ("17951") and regular Internet access. In November, China Mobile completed the world's largest soft switch network and will use it to carry all of its VoIP traffic which accounts for one third of toll traffic. China Mobile also runs the largest wireless LAN in China for GPRS and laptop users. [www.chinamobile.com]

China Telecommunications Group is the largest fixed line operator in China. The company operates mainly in 21 provinces in South China as the result of industry restructuring in 2002. China Telecom has a registered capital of 158 billion yuan (\$19 billion) and 380 billion yuan (\$45.8 billion) in asset. China Telecom is the second largest operator after China Mobile in terms of revenue, 161.2 billion yuan (\$19.4 billion) in 2004, up 6.4% from 2003, and profit 28 billion yuan (\$3.4 billion), up 101.9%. China Telecom owns 70% of fixed infrastructure, including nearly 1 million kms of optical cable routes and 200 million-line switching capacity. China Telecom operates 26 international undersea cables connecting Southeast Asia, the Middle East, Europe, Russia and North America. By the end of 2004, China Telecom had 186 million fixed line customers, 42.2 million Xiao Ling Tong customers and 13.8 million broadband customers. With corporate headquarters in Beijing, China Telecom employs 300,000 people. It is often seen as a stable and most experienced operator in China with expansive infrastructure, a team of network professionals and strong R&D capabilities. China Telecom is the ninth largest operator in the world (Loo, 2004).

China Telecom service covers nearly 900 million people, including some of China's largest local markets like Shanghai, Guangdong, Zhejiang and Jiangsu. Main services include local and toll voice (including Xiao Ling Tong, a quasi mobile service), VoIP (subscription and pre-paid), and videoconferencing. Data services include packet-switching, leased line, VPN,

ChinaNet (ISP), ADSL and WLAN ("Sky Wings Link"). Other offerings include professional services, system integration, R&D, yellow pages, advertising and equipment import/export. "Vnet" is broadband service portal with over 5 million registered customers; it provides a variety of services like short messaging, streaming video, games and stock trading. China Telecom also provides limited fixed service in North China, mainly VoIP (toll) and broadband. China Telecom began testing NGN (next generation IP network) in 1999 and runs a pilot in Shanghai. [www.chinatelecom.com.cn]

China Network Communications (China Netcom) was created in 2002 by the government in an effort to break monopoly by China Telecom in the fixed line service market. Netcom is composed of three entities: China Telecom's operations in North China, Jitong Communications, a former data service operator, and the original Netcom, a broadband developer and wholesaler. Revenue for 2004 was 64.9 billion yuan (\$7.8 billion), up 8.4% from a year ago, profit 9.2 billion yuan (\$1.1 billion) compared to a net loss of 11.1 million yuan (\$1.3 million) in 2003. Netcom has over 173 billion yuan (\$20.8 billion) in asset, 27 billion yuan (\$3.2 billion) less than a year ago. Netcom has about 150,000 employees (Pitt, Levine, & Yan, 1996).

Netcom's corporate headquarters is in Beijing; most of Netcom operations are in ten provinces in North China, but it also provides services in South China and for international customers. By the end of 2004, Netcom had 80.4 million fixed line customers, 15.1 million Xiao Ling Tong customers (a quasi-mobile service), and 6.2 million broadband customers. Netcom controls 30% of national networks (70% for China Telecom), 35% of fixed line customers, and 30% of broadband customers. Netcom is the third largest operator in China (after China Mobile and China Telecom) and competes with China Telecom in fixed and broadband services and, to a lesser degree, with cell phone operators with Xiao Ling Tong service.

Netcom offers residential and business services in North China, including basic service (local and toll), broadband (called "Broadband China 169" and "116.com.cn," a service portal) with 15 million IPTV customers, VoIP (subscription and pre-paid), videoconferencing, SS#7 signaling and intelligent network (IN), ATM/frame relay and leased line services to domestic and international customers in parts of North America, Europe, Asia, Australia and Hong Kong. Netcom began WLAN service (called "MobileOffice") in 2003 targeting business users in major cities. Netcom has also deployed 3.5GHz FWA networks in 17 cities for Internet access, VPN and VoIP services. Much of Netcom traffic is routed through its DWDM ring backbone called CNCNet which has bandwidth up to 360Gbps and operates in 17 switching centers. Netcom also operates 530,000 kms of optical cable network. By the end of 2004, Netcom deployed NGN (next generation IP network) in 21 provinces, the largest commercial network in China with 100,000-line capacity. In April 2005, Netcom unveiled "CNC Max," a new broadband brand that will consolidate all of its broadband services for residents and business customers (Hongmin, 2003).

According to the commitment given by the Ministry of Foreign Trade and Economic Cooperation of China on December 11th, 2001, the schedule for opening up of China's telecommunication services sector is as follows:

- ◆ In the first year after the accession of WTO, China will gradually open network services (mainly ISP);
- ◆ In the second year after the accession, China will gradually reduce regional restrictions on value-added services.

The major area is mobile communication, wireless BP and Internet services;

- ◆ In the third year after the accession, China will begin to open its cable and optics network, eliminate totally the regional restriction on value-added services and reduce tariffs on semi-conductors, computers, computer equipment, telecommunications equipment and other high-tech products;

◆In the fourth year after the accession, China will gradually increase the sharing percentage restriction on foreign investment in primary telecommunications from 25% to 49%. In value-added telecommunications service sectors such as BP, data compression and transmission the limitation will gradually rise from 30% to 50%. 2005 is the fourth year after China becomes a member of WTO (Zhu, Ao, & Dai, 2011).

◆In the fifth year after the accession, China will gradually eliminate regional restriction on foreign investment in fields of BP, the importation of mobile phones and the domestic fixed telephone services. China will also open its network services completely.

◆In the sixth year after the accession, China will open its cable and optics network completely. The traditional monopoly structure will be broken and a competitive telecommunications market will come into being.

China is the largest developing country in the world. The population of China is more than 1.28 billion. Since 1980s, China's GDP has grown with an annual growth rate of 8%, whereas the inflation has been around 2.2%. With a GDP of US\$ 1,091 billion in 2003, China is the second biggest economy after USA. China's telecommunications market continued to stay in the center of the limelight in 2004 with a high growth rate and rapid increase in the number of telephone subscribers. China's telecommunications industry recorded USD111.8 billion in business transactions during 2004, representing an increase of 37.5% on a year-to-year basis. Telecom carriers have successfully recruited 114 million phone users in 2004, pushing the total number of Chinese telephone users to 647 million. The telephone penetration rate hit 50% by the end of the year (Gao & Lyytinen, 2000).

#### **PEST Analysis-social**

Since the start of the economic reforms in 1978, the Chinese consumers' purchasing power has increased following the rapid economic growth of 8-9% a year. Today, private consumption has become one of the most important drivers of economic growth in China and consumer spending is estimated to be even stronger than government spending to stimulate economic growth in 2003. With the increase in purchasing power, the domestic consumer market in China has become more advanced, and stronger. Chinese consumers spent 46.8 billion RMB on communication appliances. With the rapid development of China's economy and with the significant increase in national economic income, fundamental changes have taken place in the consumption market. Consumer behavior is changing. With the gradually increasing income, Chinese people have changed much in their hierarchy and composition of needs. Based on per capita annual income, all the provinces and municipal cities (excluding Taiwan and Hong Kong) are categorized into three types:

#### **SWOT Analysis-strength**

China Unicom is the only Chinese operator that has a license to provide a full range of services, and the second national carrier to provide basic and value-added service, mobile, and telecom networks such as paging, mobile and engineering service, and long distance and local phone services to the general public. CDMA -2000 is the 2.5th generation telecommunicationstechnology. It provides high quality voice and data transmission. It is lower radiation than GSM. It is a true technological advantage compared to the GSM system (Brian Low & Johnston, 2008).

#### **SWOT Analysis-weaknesses**

In order to launch CDMA, China Unicom has invested RMB65 billion. It brings financial problem to China Unicom. After launching CDMA the company is facing slowing revenue growth due to competition and market pressures and a decline in near-term demand for their services. Prices for traditional telecommunications services have declined significantly due to increased competition across customer segments and technologies. Demand for new telecom services, especially application services, remains subdued.

### **SWOT Analysis-opportunity**

There are many attractive opportunities in developing the Chinese mobile market for a company with a functioning business model. First of all, the Chinese Government has realized the importance of the mobile sector and is willing to provide the necessary infrastructure. The entry into the WTO will increase foreign interest in the market in terms of capital and know-how for alliances and partnerships since investment on a short- to middle-term basis will only be allowed up to 49%. With the help of new and improved technology, China Unicom is to be the gatekeeper between information as well as content providers and the end customers thus increasing its market profitability.

### **SWOT Analysis-threaten**

Due to the anti-monopoly policy, the Chinese government may annul the limitation to enter the telecommunications industry step by step. Strict market access restriction and high market access barrier will not exist. This is good for competition. With opportunity, there will always be risks. Those new competitors who enter market will be a threat to China Unicom's market share.

### **Recommendations**

Based on the above statement, the author would like to give some marketing strategies to China Unicom to achieve its marketing objective. China Unicom is the second telecom operator in China. Its services cover more than 300 cities in China. It has 112 million subscribers. It gives the company an opportunity to develop M-commerce. The mobile variation of the e-commerce theme, popularly known as M-commerce, is going to become a major focus for the communications industry in the years to come. Telecom operators have begun to tap into e-commerce business while they are focusing on the value-added services. This new idea is thought to bring new blood to both telecom value-added business and e-commerce market.

Telecom service and e-commerce business have been so distinct that no one had expected the two would be bundled together. However the boom and further development of value-added services and e-commerce business made the combination between them possible, and such cooperation and innovation are already under way.

The M-Commerce market players can theoretically be broken down into three types:

- ◆ Network operators,
- ◆ Suppliers, and
- ◆ Content providers,

All the three types of players have resources that can diversify into the field of M-Commerce. Network operators such as NTT DoCoMo in Japan already have an established customer base and control the networks. Suppliers include handset and network equipment manufacturers, application system developers as well as security specialists. These makers are suppliers as well as the players because they are all eager to provide necessary infrastructure elements for a stake in the M-Commerce

game. Content providers are made up of established businesses looking to add wireless access to their options or startups looking to depend on M-commerce to deliver innovation. For example, some DotComs such as Infospace are actively seeking ways to deliver their web content over wireless network. Currently, telecom operators are not the leaders in e-commerce business, but followers. The entertainment content of value-added services is still much more than that of e-commerce. But the world keeps on changing and no one can tell what e-commerce will look like in the future. From the consumers' perspective, they use messaging capabilities on their handsets in Japan, for instance, and customers of financial institutions in Europe generate much of the M-Commerce market. However, M-Commerce has the potential to eventually be part of every consumer's life, as businesses expand their IT capabilities to include M-Commerce.

## REFERENCES

- [1] Chen, F., Ma, J. H., Chen, X. Q., & Fractals. (2009). The study of dynamic process of the triopoly games in Chinese 3G telecommunication market. *Chaos, Solitons*, 42(3), 1542-1551.
- [2] Gao, P., & Lyytinen, K. (2000). Transformation of China's telecommunications sector: a macro perspective. *Telecommunications Policy*, 24(8-9), 719-730.
- [3] Hongmin, S. X. C. J. W. E. (2003). Network Externality and the Competition in China's Mobile Market [J]. *World Economy*, 4(3), 45-56.
- [4] Loo, B. P. (2004). Telecommunications reforms in China: towards an analytical framework. *Telecommunications Policy*, 28(9-10), 697-714.
- [5] Low, B. (2005). The evolution of China's telecommunications equipment market: a contextual, analytical framework. *Journal of Business Industrial marketing management*, 24(4), 13-32.
- [6] Industrial marketing management, 24(4), 13-32.
- [7] Low, B., & Johnston, W. (2008). Securing and managing an organization's network legitimacy: The case of Motorola China. *Industrial Marketing Management*, 37(7), 873-879.
- [8] Lu, J., & Weber, I. (2007). State, power and mobile communication: a case study of China. *New Media Society*, 9(6), 925-944.
- [9] Society, 9(6), 925-944.
- [10] Lu, Y., Zhang, L., & Wang, B. (2009). A multidimensional and hierarchical model of mobile service quality. *Electronic Commerce Research*, 8(5), 228-240.
- [11] Pitt, D. C., Levine, N., & Yan, X. (1996). Touching stones to cross the river: Evolving telecommunication policy priorities in contemporary China. *Journal of Contemporary China*, 5(13), 347-365.
- [12] Sibao, F., & Tingjie, L. (2006). Duopoly Market, Unwise Price Battle: China Mobile & China Unicom [J]. *Telecommunications Science*, 9(4), 67-87.
- [13] Xia, J. (2011). The third-generation-mobile (3G) policy and deployment in China: Current status, challenges, and prospects. *Telecommunications Policy*, 35(1), 51-63.
- [14] Yan, X., & Pitt, D. C. (1999). One country, two systems: contrasting approaches to telecommunications deregulation in Hong Kong China. *Telecommunications Policy*, 23(3-4), 245-260.
- [15] Yu, J., & Tan, K. H. (2005). The evolution of China's mobile telecommunications industry: past, present and future. *International Journal of Mobile Communications*, 3(2), 114-126.
- [16] Yu, L., Berg, S., & Guo, Q. (2004). Market performance of Chinese telecommunications: new regulatory policies. *Telecommunications Policy*, 28(9-10), 715-732.
- [17] Yuan, Y., Zheng, W., Wang, Y., Xu, Z., Yang, Q., & Gao, Y. (2006). Xiaolingtong versus 3G in China: Which will be the winner? *Telecommunications Policy*, 30(5-6), 297-313.
- [18] Zhang, J., & Liang, X.-J. (2011). Business ecosystem strategies of mobile network operators in the 3G era: The case of China Mobile. *Telecommunications Policy*, 35(2), 156-171.
- [19] Zhang, X., & Prybutok, V. R. (2005). How the mobile communication markets differ in China, the US, and Europe. *Communications of the ACM*, 48(3), 111-114.
- [20] Zhu, G., Ao, S., & Dai, J. (2011). Estimating the switching costs in wireless telecommunication market. *Nankai Business Review International*, 34(2), 23-27.
- [21] De Silva A.D.A., Khatibi A., Azam S.M.F. (2018a). Can parental involvement mitigate swing away from science? Sri Lankan perspectives, *Cogent Education*

- [22] De Silva A.D.A., Khatibi A., Azam, S. M. F. (2018b). Do the Demographic Differences Manifest in Motivation to Learn Science and Impact on Science Performance? Evidence from Sri Lanka, *International Journal of Science and Mathematics Education*
- [23] Delafrooz N., Paim L.H., Khatibi A. (2009). Developing an instrument for measurement of attitude toward online shopping, *European Journal of Social Sciences*
- [24] Dewi N.F., Azam, S. M. F., Yusoff S.K.M. (2019). Factors influencing the information quality of local government financial statement and financial accountability, *Management Science Letters*
- [25] Doa N.H., Tham J., Khatibi A.A., Azam S.M.F. (2019). An empirical analysis of Cambodian behavior intention towards mobile payment. *Management Science Letters*
- [26] Maghfuriyah A., Azam, S. M. F., Shukri S. (2019). Market structure and Islamic banking performance in Indonesia: An error correction model, *Management Science Letters*
- [27] Nguyen H.N., Tham J., Khatibi A., Azam S.M.F. (2019). Enhancing the capacity of tax authorities and its impact on transfer pricing activities of FDI enterprises in Ha Noi, Ho Chi Minh, Dong Nai, and Binh Duong province of Vietnam, *Management Science Letters*
- [28] Nikhashemi S.R., Paim L., Haque A., Khatibi A., Tarofder A. K. (2013). Internet technology, Crm and customer loyalty: Customer retention and satisfaction perspective, *Middle East Journal of Scientific Research*
- [29] Nikhashemi S.R., Valaei N., Tarofder A. K. (2017). Does Brand Personality and Perceived Product Quality Play a Major Role in Mobile Phone Consumers' Switching Behaviour? *Global Business Review*
- [30] Pambreni Y., Khatibi A., Azam, S. M. F., Tham J. (2019). The influence of total quality management toward organization performance, *Management Science Letters*
- [31] Pathiratne S.U., Khatibi A., Md Johar M.G. (2018). CSFs for Six Sigma in service and manufacturing companies: an insight on literature, *International Journal of Lean Six Sigma*
- [32] Rachmawati D., Shukri S., Azam, S. M. F., Khatibi A. (2019). Factors influencing customers' purchase decision of residential property in Selangor, Malaysia, *Management Science Letters*
- [33] Seneviratne K., Hamid J.A., Khatibi A., Azam F., Sudasinghe S. (2019). Multi-faceted professional development designs for science teachers' self-efficacy for inquiry-based teaching: A critical review, *Universal Journal of Educational Research*
- [34] Sudari S.A., Tarofder A.K., Khatibi A., Tham J. (2019). Measuring the critical effect of marketing mix on customer loyalty through customer satisfaction in food and beverage products, *Management Science Letters*
- [35] Tarofder A.K., Azam S.M.F., Jalal A. N. (2017). Operational or strategic benefits: Empirical investigation of internet adoption in supply chain management, *Management Research Review*
- [36] Tarofder A.K., Haque A., Hashim N., Azam, S. M. F., Sherief S. R. (2019). Impact of ecological factors on nationwide supply chain performance, *Ekoloji*
- [37] Tarofder A.K., Jawabri A., Haque A., Azam S.M.F., Sherief S.R. (2019). Competitive advantages through it-enabled supply chain management (SCM) context, *Polish Journal of Management Studies*
- [38] Tarofder A.K., Nikhashemi S.R., Azam S. M. F., Selvantharan P., Haque A. (2016). The mediating influence of service failure explanation on customer repurchase intention through customers' satisfaction, *International Journal of Quality and Service Sciences*
- [39] Udriyah, Tham J., Azam, S. M. F. (2019). The effects of market orientation and innovation on competitive advantage and business performance of textile SMEs, *Management Science Letters*
- [40] Ulfah R., Amril Jaharadak A., Khatibi A.A. (2019). Motivational factors influencing MSU accounting students to become a certified public accountant (CPA), *Management Science Letters*