Chapter 32
Exploring the Impact of Government Policies and Corporate Strategies on the Diffusion of Mobile Data Services: Case of Economies at Different Stages of Transition

Tugrul U Daim
Portland State University, USA

Jing Zhang
Beijing University of Posts and Telecommunications, China

Byung-Chul Choi
Samsung Information Systems America (SISA), USA.

ABSTRACT

We are experiencing a revolution in the mobile industry as 3G transition is being realized globally. This represents a shift from voice driven services to multimedia driven ones. Worldwide subscriber number is reported to reach 700 million. This chapter will explore how governments and businesses impact this phenomenon with their policies and strategies. To be able to understand variations and to generalize conclusions, the authors looked at economies at different stages of transition. They explored US as the major economic power and then Korea as a country that reached the status of a developed nation recently and China that has been growing at an exponential rate. The comparison results reveal that the mobile data services have been developing better in South Korea and China than in the US. Mobile data services can be a large potential market and play an important strategic role in a national economy and society. A keystone strategy is effective to promote the diffusion of contents and applications for mobile services. It is important to lead customer consumptions and reach the balance between mobile data services and voice services. The experience from the three countries can provide significant insights for mobile operators in most other counties.

DOI: 10.4018/978-1-61520-611-7.ch032
INTRODUCTION

We focused on mobile network operators (MNOs) as our cases. In China, there are only two MNOs—China Mobile and China Unicom. In the US the four nationwide MNOs, AT&T, Verizon Wireless, Sprint Nextel and T-Mobile have about 87% market share by the volume of subscription. In South Korea, three MNOs—SKT, LGT and KTF compete in the market. Since all the three countries have few major operators covering dominating market share, they are holding real power over the industry. With the infrastructure integrating the value from terminals, equipment, systems and services, they are the most important hubs and have the strongest influence in the industry. The CPs and SPs are all connected to MNOs. Therefore, in terms of description of business strategy, we expect that operator-centric perspective can be prism reflecting general tendencies of various players in mobile communication industry.

As seen in Figure 1, the U.S with the revenue of about $140 billion in 2007 has the biggest market size of mobile services in value and has reached a high penetration rate (FCC, 2008; Mintel, 2007). China has the largest subscriber base of 547 million in the world, but the market size in value was just about $50 billion in 2007 (MII, 2008). Finally South Korea, with only 42 million subscribers and $21.4 billion revenue, presents high penetration rate and active innovations (SKT, 2007).

The cell phone voice service market is highly mature in the US showing the commoditization trend. The MOU (minutes of use per subscriber per month) and monthly ARPU (average revenue per user) of mobile subscribers are much higher than other countries as shown in Fig. 3. Living in the most developed country in the world, the consumers have very strong purchasing power and mature view of consumption. Market research has found that lowest cost per minute, quality of the network and good customer service are the three leading reasons to choose mobile service provider (Mintel, 2007). Although next-generation technologies and services have been launched since 2004, the cutting-edge hardware and services were not regarded as a draw for most consumers.

Although China has the largest user base of mobile services, but the penetration rate, ARPU and MOU are the lowest among the three coun-

Figure 1. The number of subscribers and penetration rates of mobile services in the US, China and South Korea