

## Chapter 2.11

# Describing the Critical Factors for Creating Successful Mobile Data Services

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### ABSTRACT

Mobile operators play a central role in the development of the mobile data services market. They have primary access to the customer relationship, a key source of revenue, and are responsible for how revenue is distributed to other participants in the value chain. As a result, a successful operator-driven business model is essential to the survival of the mobile data industry. The purpose of this chapter is to describe the critical factors that have influenced the results of operators based on countries that have been at the forefront of mobile data services innovation. Then, by comparing the key characteristics of operator-driven business models in these four cases around the world, we will describe the critical factors used in designing successful mobile data services.

### INTRODUCTION

Given the high penetration of mobile phones and the PC Internet, it has long been predicted that mobile data usage would increase substantially as a result of the intersection of the two channels. Unfortunately, however, mobile data usage has been slow to materialize. Despite the business potential, entrants and incumbents alike have been confounded by a host of unexpected challenges such as insufficient demand, competition from substitutes, and, most important, lack of profitable business models. In this chapter, we will attempt to address the last issue by conducting an exploratory study of the development of business models in Japan, Western Europe, South Korea, and China in order to describe the critical factors

used in successful operator business models for mobile data services.

For the purposes of this analysis, we define *mobile data services* as any mobile non-voice service. This includes wireless data transfer technologies such as instant messaging and SMS as well as e-mail and the mobile Internet. We define *mobile Internet* as Internet access using mobile devices including but not limited to cell phones, personal digital assistants, and so forth. Moreover, since creating and capturing value is one of the most challenging issues in the mobile data services business, we shall use increased Average Revenue Per User (ARPU) as a key objective for mobile operators.<sup>1</sup>

## **ANALYSIS BY COUNTRY**

Mobile operators play a central role in the development of the mobile data services market. They have primary access to the customer relationship, a key source of revenue, and are responsible for how revenue is distributed to other participants in the value chain. As a result, a successful operator-

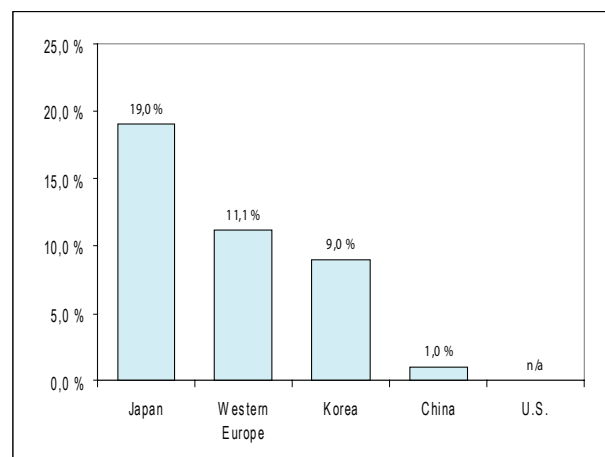
driven business model is essential to the survival of the mobile data industry. In the following four empirical cases, we will study the experiences of four operator groups that constitute some of the largest and most active mobile data service markets in the world; namely, the countries/regions of Japan, South Korea, China, and Europe.

We begin the discussion by comparing the success stories of selected operators in countries that have the highest mobile data services revenues. Mobile data revenues are the highest in Japan at 19% of total operator revenues, followed by Western Europe, where data revenues represent 11% of total revenues, most of which is SMS.<sup>2</sup> Korea comes in third with mobile data representing 9% of South Korean operators' revenues. China comes in fourth with 1% (see Figure 1).

### **Japan**

With NTT DoCoMo's launch of i-mode in February 1999, Japan became the first country to successfully introduce a mobile data service and, with the exception of countries like South Korea, has been one of the few countries able to grow

*Figure 1. Data as percentage of operator revenues*



Source: Merrill Lynch Telecom Services Research, Wireless Matrix 3Q02, 10 Dec 2002 issue

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