Chapter 6.4
Channel Choices and Revenue Logics of Software Companies Developing Mobile Games

Risto Rajala
Helsinki School of Economics, Finland

Matti Rossi
Helsinki School of Economics, Finland

Virpi Kristiina Tuunainen
Helsinki School of Economics, Finland

Janne Vihinen
Helsinki School of Economics, Finland

ABSTRACT
In this chapter, we explore the revenue logics and related product distribution models of mobile game developer companies. Mobile gaming is facing a transformation in both technical infrastructures and business models as it grows at a very fast pace. The former change originates from the technological shift of the environment of use; for example, from specific game consoles toward mobile phone platforms. The latter change relates to the possibility of delivering and playing games online, which affects both the distribution partnerships and the revenue stream options of mobile game vendors. We present a set of possible business models for game developers and concentrate on the possible combinations of revenue logics and distribution models for different games.

INTRODUCTION
The worldwide number of digital phone (GSM and PCS) subscribers has increased from 140 million in 1996 to approximately 900 million at the end of 2002 (GSMdata, 2002). Concurrently, the number of PC users is reaching a saturation point at around 400 million. From 2002 to 2004, the difference between phones and computers has continued to diminish with the arrival of Java-enabled phones and with a larger number of phones that support Web browsing and e-mail applications.

As mobile phones are rapidly turning into software platforms capable of supporting gaming, many handset manufacturers, operators, and game developers see the opportunity for mobile games. However, the recent downturn of
investments into the enhanced cellular networks makes it challenging for companies to develop and deploy new advanced games. Furthermore, many aspects of the new business models, including revenue logics and distribution models for these new entertainment services, are still unproven. The mobile game market is expected to grow from $124 million in 2001 to exceed $4 billion in 2006 (Ovum, 2002). Today, most of the mobile gaming activity is in Asia-Pacific, particularly in Japan and South Korea, where there are tens of millions of subscribers of mobile entertainment services. However, we can expect that Europe and the US will soon see growth in these areas, as well.

Mobile games can be played with mobile phones; PDAs (Personal Digital Assistants), such as Palm or iPaq; Web-enabled phones; or other handheld game devices. In Europe, the development of mobile services has been characterized largely by technology push (Nurmi et al., 2001), but the future success of mobile services will strongly be affected by the ability of businesses to offer, already at an early stage, the right products and services to consumers (Anckar & D’Oncau, 2002). Experiences with PC-based Internet and Japanese mobile iMode services emphasize the role of entertainment services as a significant factor in the growth of mobile network usage. Games and entertainment services are important application areas for information industry as a whole (Shapiro & Varian, 1999), and, as the third generation mobile phone networks proliferate, demand for these services will increase rapidly.

In this chapter, we look at the mobile game scene and introduce a framework for analyzing software business models within it. We then develop the model further for mobile games and use it to discuss the revenue logics of mobile game developers. In the last section of this chapter, we summarize and draw conclusions on the discussed aspects of mobile games.

**TYPES OF MOBILE GAMES**

Generally, the existing games for mobile handsets are either server-based or stand-alone games. Server-based mobile games can be divided further into WAP, SMS, and Java games. Java games also can be used as stand-alone games. All of these games can be either single- or multi-player games. Multi-platform games, in turn, are a subset of games that can be played in conjunction with online, PC, and console versions.

A report of Durlacher Research (2001) suggests that mobile games can be classified by their operating and distribution platform into three types: stand-alone, server-based, and streamed. These games can be either downloadable from a server or preinstalled by a vendor or distribution partner.

- **Stand-alone games** do not require a network connection in order to play the game. As they run on mobile terminal, the user does not have to pay for data transmission after downloading the game. The games are restricted by the storage and operating capacity of mobile devices.

**An Example of Stand-Alone Games: Nokia Snake**

Snake was the first stand-alone game that was preinstalled in Nokia’s mobile handsets in 1998. Nokia owns the intellectual property rights for the application and has developed it in-house. Therefore, Nokia can install the game for free in any Nokia handset.

The idea of the original Snake was to catch more and more points with the snake steered by the player, making the snake longer and longer. At first, the player chooses the game level, which defines the speed of the snake. Finally, when the snake hits the wall or its own body, the game ends. The second version of Snake was similar to the