

## Chapter 5.10

# Customer Perceptions Toward Mobile Games Delivered via the Wireless Application Protocol

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### ABSTRACT

The rapid uptake and increased complexity of mobile phones has provided an unprecedented platform for the penetration of mobile services. Among these, mobile entertainment is composed of a variety of services such as ringing tones, games, gambling, and so on. Games are predicted to replace ringing tones as the main driver of mobile entertainment. This chapter contributes to the development of the mobile game industry by understanding corresponding consumer perceptions towards wireless application protocol (WAP) games. A series of focus groups were conducted to gain in-depth qualitative insight of perceptions towards WAP game services. The results indicate a number of clear areas for the delivery of successful WAP game services. WAP games

were perceived as lacking complexity, but at the same time, were also seen as possessing several beneficial qualities. The chapter concludes with some recommendations and predictions regarding the future of WAP games.

### INTRODUCTION

The past decade has seen mobile phones emerge as one of the fastest adopted technologies of all time (Chen, 2000; de Haan, 2000). Mobile phones present traditional e-commerce with an abundance of possibilities for new services and paradigms (Barnes & Huff, 2003; Siau & Shen, 2003). Commonly referred to as mobile (m-) commerce, the conduct of e-commerce through Internet-enabled mobile phones allows the delivery of services be-

yond a traditional fixed-line connection (Barnes, 2003; Bergeron, 2001; Sadeh, 2002). As a result, m-commerce possesses greater ubiquity and thus market size than previous notions of e-commerce. According to a study by Telecom Trends International (2003), global revenues from m-commerce are projected to grow from US\$6.8 billion in 2003 to over US\$554 billion in 2008.

In addition to their rapid adoption and proliferation, mobile phones have progressively improved in terms of their capabilities and network connectivity. These advances have created a strong impetus for mobile entertainment, a service that has gained considerable attention for its potential to rapidly drive the adoption of m-commerce. According to the ARC Group (2001), the market for mobile entertainment will reach 1.6 billion global users by 2006, creating extraordinary opportunities to leverage m-commerce revenues.

Mobile entertainment represents a variety of services, including ringing tones, games, gambling, and many others (Baldi & Thaung, 2002). Currently, ringing tones comprise the greatest market share of mobile entertainment. However, games are predicted to overtake ringing tones within the next few years (Strategy Analytics, 2003). The significance of mobile games is already evident in some markets. In markets such as Japan and South Korea mobile games have become a killer application for m-commerce (Datacomm Research, 2002; Datamonitor, 2002). Screen Digest (2004) forecast the global market to grow more than six times to \$6.4 billion by the end of the decade.

Even though mobile games are a relatively recent phenomenon, there are now a variety of these services available in most developed markets (Vodafone, 2005). The nature of these games is heavily dependent on the boundaries created by device, network, and application. Most of the games currently available can be categorised within three mainstreams: messaging, downloadable, and online (Nokia, 2003a). In the future, the vision is for mobile games to be colour interfaced, real time,

multiplayer, and location sensitive (Choong, 2003). These are qualities that present opportunities for all three game types, but particularly for online games. The most common type of online games available in developed markets are currently based on the wireless application protocol (WAP). WAP games have the ability to provide synchronous multiplayer gaming to a global audience, to be played using location-based services, and to be easily customised to user preferences and profile. However, because WAP games are reliant upon online connectivity, they are susceptible to the limitations of current mobile networks and are as a result typically of a start-stop nature, not too dissimilar to turn-based games.

Experience in the gaming market has shown that while a game's brand may initially be able to attract consumers, it will not guarantee the success of a game. In the long-run people embrace games that deliver them value (mGain, 2003). Furthermore, games delivered over the mobile network operate in a different paradigm to those of the traditional wired Internet, as dictated by differences in infrastructure and user behaviour. Therefore, it is interesting to observe that a good part of the problem with the initial wave of unsuccessful WAP games was due to a lack of understanding of consumer needs and expectations and how these can be met over the mobile medium. Consequently, just as with any other mobile service, it is fundamental to have appreciation of corresponding consumer perceptions in order to achieve successful deployment of these types of games (Barnes, 2002; mGain, 2003).

Accordingly, there exists a stream of research dedicated to understanding consumer behaviour and perceptions towards m-commerce (Chae & Kim, 2001; Landor, 2003; Lau, 2003; Samtani, Leow, Goh, & Lim, 2003; Vrechopoulos, Constantiou, Sideris, Doukidis, & Mylonopoulos, 2003). However, none of these studies have specifically focused on the field of mobile games. By focusing on mobile games, distinctive features that would otherwise be unobserved through broad m-commerce research can be exposed.

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