

## Chapter 8.6

# Motivations and Barriers to the Adoption of 3G Mobile Multimedia Services: An End User Perspective in the Italian Market

**Margherita Pagani**

*I-Lab Centre for Research on the Digital Economy,  
Bocconi University, Italy*

**Danilo Schipani**

*Valdani Vicari & Associati, Italy*

### ABSTRACT

This chapter provides an end-user perspective on mobile multimedia services that are likely to emerge with the roll out of Third Generation Mobile Services (3G). More specifically, the objectives of the study are:

- to provide an insight into current behavior in terms of attitudes towards, access and usage of multimedia mobile services by current end users;
- to establish main clusters of mobile users;
- to investigate the possible motivations and barriers of usage of new mobile multimedia services as viewed by current users.

The remainder of this chapter is organized into the following four sections. The first section provides a brief review of the literature on the technology acceptance model. Next we present our research model based on a qualitative exploratory survey conducted in six markets. Then we test the proposed model on the Italian market and present the analysis and results of our study. Finally we make conclusions by discussing the implications of our study, followed by presenting future research directions.

### INTRODUCTION

As telecommunications move into an era where the distinction between voice, video and data will be

blurred, convergence of communications, information, entertainment, commerce and computing will lay the foundation for the development of an Information Society.

Over the last five years there have been a number of significant developments in multimedia computing power, CD-ROM technology, digital television, the Internet/Intranet, IP-based services, and terrestrial and satellite mobile communications, which could have a profound impact on our society. These technologies and systems may enable dramatic changes to take place in working practices, entertainment, education and health care.

Many organizations within the computing, entertainment, and communications industries are now looking to identify and capitalize on the promise of new market opportunities in multimedia created by these developments.

However, demand for multimedia services, should they be successful, is unlikely to be constrained to the fixed network. Greater pressure on time, and the need for flexibility and responsiveness in business, will lead to a growing demand for access to these services anytime, anywhere.

In order to meet the evolving needs of customers, and to capture the opportunity which this evolution represents, the mobile industry is looking to define and develop a third generation of mobile technology that will take the personal communications user into the Information Society by delivering voice, graphics, video and other broadband information direct to the user, regardless of location, network or terminal.

The purpose of the chapter is to provide an end-user perspective on mobile multimedia services that are likely to emerge with the roll out of Third Generation Mobile Services (3G).

The remainder of this chapter is organized into the following four sections. The first section provides a brief review of the literature on the technology acceptance model. Next we present our research model based on a qualitative exploratory survey conducted in six markets. Then

we test the proposed model on the Italian market and present the analysis and results of our study. Finally we make conclusions by discussing the implications of our study, followed by presenting future research directions.

## **TECHNOLOGY ACCEPTANCE MODEL (TAM): THE THEORETICAL BACKGROUND**

Information Systems (IS) researchers have made significant efforts in building theories to examine and predict the determinant factors of information technology (IT) acceptance (Agarwal & Prasad, 1998, 1999). Existing models of IT acceptance have their foundations from several diverse theories, most noticeably innovation diffusion theory, where individuals' perceptions about using an innovation are considered to affect their adoption behaviors (Agarwal & Prasad, 1998; Moore & Benbasat, 1991; Rogers, 1995). Other important theoretical models that attempt to explain the relationship between user beliefs, attitudes, intentions, and actual system use include the theory of reasoned action (TRA) (Ajzen & Fishbein, 1980), the theory of planned behavior (TPB) (Ajzen, 1991), and the technology acceptance model (TAM) (Davis, 1989; Davis et al., 1989). Although there are numerous studies in the field of adoption and diffusion of marketing-enabling technology (Daghfous, Petrof & Pons, 1999; Holak & Lehman, 1990; Labay & Kinnear, 1981; Plouffe, Vandenbosch & Hulland, 2001; Rogers, 1995), previous work has mainly focused on the adoption of products and technology (Au & Enderwick, 2000; Davis, 1989; Eastlick & Lotz, 1999; Verhoef & Langerak, 2001). In contrast, the perspective on services and service-enabling technologies is considerably less pronounced. Despite the fact that several trend studies have been conducted regarding the potential of wireless technology and 3G services (Durlacher, 2001; UMTS Forum, 2001), there

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