# Understanding Consumers' Behaviour when Using a Mobile Phone as a Converged Device

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## ABSTRACT

*The phenomenon of convergence has caused huge impact on the digital economy. Although this concept has attracted salient interests and discussions for two decades, it lacks of conceptual framework from the consumer perspectives. On the other hand, research on the adoption of mobile devices provided little information to the understanding of individual adoption of mobile phones as converged devices, such as the use of mobile phones for personal information management (PIM), entertainment, e-mail and commerce. For developing an empirical model, this research conducted 50 personal interviews. The results indicate individuals' age and choices of device type/service plan significantly differentiate the extent use of mobile phones. The relative factors that may influence the use of mobile phones for a specific purpose are also identified. In summary, this research provides a preliminary study to the understanding of consumer behaviours and the development of convergent technologies.*

*Keywords:  Consumer Behaviour; Mobile Phone; TAM; Technology Adoption; Technology Convergence*

## INTRODUCTION

The convergence of technologies and networks is causing a huge impact on the digital economy and the industrial strategy since it was introduced over two decades ago (Katz 1996). The concept was basically derived from the integration of information, communication and entertainment industries and is radically extended to other business entities (Brand 1988; Fransman 2000; Mueller 1999). Although this phenomenon has been defined in various ways (Bohlin 2000; Fransman 2000; Mueller 1999) and is a popular subject of some publications (Lind 2004), the core concept is still vague and often causes confusions to the public from different interpretation (Katz 1996). For instance,

Rosenberg (1976) in his description of the industrial evolution, considered convergence as "*the process by which different industries come to share similar technological bases* (Gambardella & Torrisi 1998, p. 445)." From the network perspective, the European Commission (EC) in 1997 defined convergence as "*the ability of different network platforms to carry essentially similar kinds of services, or the coming together of consumer devices such as the telephone, television and personal computer*" (Bores, Saurina & Torres 2003, p. 3). Moreover, Greenstein (1997) defined convergence as "*the coming together of previously separate technologies in new products and services.*" Regardless of the various definitions found in the literature, the phenomenon of convergence is hardly conceived from the business practices and has less been analysed systematically from the research community (Lind 2004). As noted, although numerous strategic studies have been accumulated under the premises of convergence, they mostly address the impact of convergence on strategic advantage and on company welfare. As such, there is no study that has effectively explored convergence from the consumer perspective.

In order to promote convergence research from consumers' perspective, this research aims at developing an empirical model that draws from the relationship between technology convergence and consumer behaviours. According to the descriptions of Katz (1996), Rangone and Turconi (2003),

technology convergence integrates different features and services into one converged device providing the capacity to access different information resources. Although the demand for convergent device and mobile data services has yet to reveal, the diffusion and use of mobile phone have become part of an individual's daily life (Geser 2004; Grant & Kiesler 2001; Haddon et al. 2001; Palen 2002; Palen, Salzman & Young 2001). However, despite using a mobile phone for social communication, there is still a question with regard to whether consumers would respond to the changes brought about by the convergence of various features and services over the uses of mobile phones and how this would direct the way people interact with new technologies (Stipp 1999)?

Several studies have investigated individual's uses of mobile Internet as a new hybrid technology that combine the value of device capability and Internet accessibility (Chae & Kim 2003; Kim, H. & Kim 2003; Kim, H. et al. 2002; Pedersen 2005; Pedersen & Ling 2002), however, there is less research on the adoption of mobile device and online services simultaneously. In addition to using a combination of information and communication technologies as one dependent variable, research of mobile services adoption seldom consider the individual choices of device and ownership of other technology products as indicators that affect the individuals' decisions toward technology adoption (Nysveen, Pedersen & Thorbjornsen

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