

Chapter 12

Mobile Communication: A Study on Smart Phone and Mobile Application Use

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ABSTRACT

With the improvements in communication technologies and the increased need for mobile communication among users, the mobile communication industry has been faced with fast-paced developments in the last few decades. The developments in mobile communication technologies provide opportunities that cannot be provided by traditional communication tools. Mobile applications are considered examples of such opportunities. The services offered by mobile phone technologies are diversified by the mobile applications that can be downloaded through digital platforms, and with these applications smart-phone users become even more active users. The current chapter reports findings from a study that employed a structured online questionnaire with 271 smart-phone users. The findings revealed that mobile application use, either free or paid, is explained by the period of smart-phone use, attitudes toward mobile applications, financial cost, and opinion leadership. Furthermore, free applications are more frequently used when the innovativeness increases and the perceived application cost decreases. The results present important outcomes for mobile companies, the digital platform providers, as well as mobile application producers.

INTRODUCTION

Mobile phones are not the only technological devices that enable us to communicate while we are on the move; still, they are the first ones that come to mind. Portable radios, pagers, laptops,

cellular phones, tablets and many other devices are tools of mobile communication. Nevertheless, it can be stated that among these devices, mobile phones are the ones that have changed our communication habits most profoundly. As cell phone technology improved and became more

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accessible, people's attitudes and cell phone usage habits altered. Moreover, as cell phones became pervasive, new concepts and practices - such as mobile commerce, mobile marketing and mobile advertisement - emerged. Different industries expanded their communication channels by including mobile phones as a medium (Usta, 2009). As a result of the wide acceptance by the society and the embracement of the market, efforts to improve mobile phones and related technologies gained impetus.

The most recent rising phenomena resulting from the enormous progress in mobile phone technologies are the smart phones and their applications. The limits of cell phones extended as smart phones and Digital Distribution Platforms (DDP) became available for the use of consumers. Jointly, these advancements not only increased the capacity of cell phones but also turned them into even more user-friendly devices. For instance, while feature phones come with a standard and low number of applications, smart-phone users can download any application that is available to them on DDP anytime they want, and they can upgrade those applications if necessary (Sharma, 2010). This innovation turned cell phone users from passive consumers into more active users and application consumers. To put it differently, cellular phone consumers who used to only determine the model of the cell phone now can select, download and upgrade their cell phone features. In short, smart phones and DDPs shifted the relationship between cell phone and the agent to a new level.

The current chapter presents an empirical study with an attempt to explain mobile application consumption by smart-phone users. The study reports on a survey conducted with smart-phone users in Turkey, an important emerging market. With its geographical location at the interface of East and West, its young demographical structure, as well as rapid industrialization and efforts towards modernization, Turkey offers considerable potential in the area of mobile communications. Hence, understanding user purposes and consumer

dynamics enables important outcomes for both mobile communication companies and mobile application producers.

HISTORY OF THE MOBILE PHONE

Until very recently, since its invention in 1876, the telephone had always been tied to an outlet with a cable, even though it constantly continued to develop. This was troublesome for some countries such as Japan, because it is composed of small islands, and for North European countries which have hundreds of kilometers of fiords and thousands of small islands that cause difficulties in building telephone lines and other essential infrastructure. As a consequence, these countries started to look for alternative ways of communication, and similar studies emerged in other countries, such as the USA, in short order. These efforts led to the development of cellular phones and to their instant commercialization (Basaran, 2010). The first usable mobile phones were created in 1973 by Motorola, although it was not the first company to launch the mobile phone. The first commercial cell phone was released by Nippon Telegraph and Telephone, a Japanese telecommunication company, in 1979. The first GSM network was established in Finland in 1991 with the advent of second-generation phones. While the first-generation cell phones were combinations of wired phone and radio, they became more and more sophisticated and complicated within a short time period with augmented activities (Basaran, 2010). Thus, cell phones started to become more than a means of communication for their users.

Cell phone technologies are still improving very rapidly. Compared to the first cell phones, contemporary mobile phones are different not only in terms appearance but also in terms of infrastructure. Developments in cell phone infrastructure are so distinctive and so influential that they are considered milestones in cell phone history. Cell phone history is divided into three

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