Chapter 4.31
Mobile Payment Issues and Policy Implications:
The Case of Korea

Youngsun Kwon
Information and Communications University, Republic of Korea

Changi Nam
Information and Communications University, Republic of Korea

ABSTRACT

This chapter introduces three mobile payment plans that have been launched in Korea: mobile banking service, mobile prepaid electronic cash service and mobile phone bill service. Based on the recent experiences of the Korean economy, this chapter discusses the regulatory and monetary policy issues associated with mobile payments. Mobile payments are superior to existing means of payments because of their efficiency and convenience and mobile network operators (MNOs) are on the verge of turning into non-bank financial institutions in their nature. The government needs to facilitate the crossbreed between banks and MNOs to accelerate the development of efficient payment instruments rather than hindering innovation in banking industry.

INTRODUCTION

All business transactions entail at least one method of payment. Traditionally, fiat money has been the most popular method of payment for retail business transactions. But as computer and telecommunication technologies have developed, electronic payment methods, including credit cards, debit cards and electronic payments via online banking, have appeared and are now widely used in most economies. By the latter part of the 1990s, many advanced economies, including Korea, had experienced three important changes: an electronic commerce boom, wider Internet penetration and the spread of mobile communication. As electronic commerce sales expanded, firms and customers needed new electronic payment systems that were more convenient and efficient.

As electronic commerce has grown, Internet banking in Korea also has increased rapidly since its introduction in 1999. In mid-2002, teller service was still the dominant delivery channel of banking services in Korea, with face-to-face transactions accounting for 42.4 percent of total retail banking transactions. By contrast, only 11.7 percent of retail banking transactions was delivered through Internet banking. However, the gap between traditional teller banking and Internet banking has been fast shrinking. Indeed, the number of Internet banking transactions has outgrown teller banking transactions more recently, as shown in Figure 1. The fact that the proportion of transactions done through banking call centers has been relatively stable over time suggests that Internet banking is the main substitute channel for teller service and cash dispensers (CDs)/automated teller machines (ATMs). As a result, the number of Internet

banking customers has grown from 1.2 million at the end of June 2000 to 25.4 million at the end of the third quarter 2005. In addition, daily fund transfers made through Internet banking over the same period have increased about 22 times, from 608 billion Won to 13.5 trillion Won.

However, one limitation is that Internet banking cannot fully satisfy the human desire for mobility, because it cannot provide users with a ubiquitous connection to the communication system. As a result, Internet banking has a critical drawback as a means of payment for retail business transactions because it does not accommodate human beings' mobility. In order to use an Internet banking service, customers often need to use a specific computer, usually their own, which has an authentication file. Although customers can carry their authentication file on a diskette, they have to find a computer hooked up to a network

Figure 1. Share of Korean banking service channels, 2002-2005 (Source: Bank of Korea [2005])
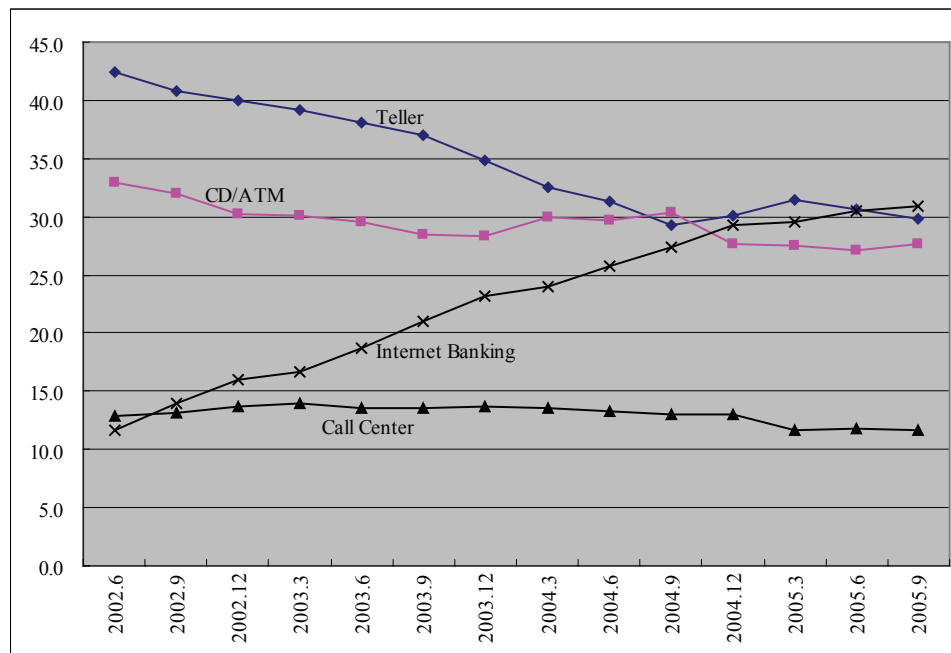
12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/mobile-payment-issues-policy-implications/26618

Related Content

Building Web Services in P2P Networks
J. Guan, S. Zhouand J. Zhou (2007). *Encyclopedia of Mobile Computing and Commerce (pp. 84-89).*
www.irma-international.org/chapter/building-web-services-p2p-networks/17057

Digital Health Literacy: A Future Healthy Choice
Cristina Vaz de Almeida (2019). *International Journal of Mobile Devices, Wearable Technology, and Flexible Electronics (pp. 1-11).*
www.irma-international.org/article/digital-health-literacy/272079

Training for Mobile Journalism
Maurice M. "Mo" Krochmal (2016). *Handbook of Research on Mobile Learning in Contemporary Classrooms (pp. 336-362).*
www.irma-international.org/chapter/training-for-mobile-journalism/157988

Ethical Ambiguities in the Privacy Policies of Mobile Health and Fitness Applications
Devjani Senand Rukhsana Ahmed (2019). *Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics (pp. 877-888).*
www.irma-international.org/chapter/ethical-ambiguities-in-the-privacy-policies-of-mobile-health-and-fitness-applications/214667

Annotation and Auto-Scrolling for Web Page Overview in Mobile Web Browsing
Yuki Arase, Takahiro Hara, Toshiaki Uemukaiand Shojiro Nishio (2010). *International Journal of Handheld Computing Research (pp. 63-80).*
www.irma-international.org/article/annotation-auto-scrolling-web-page/48504