Chapter 8
The Role of Value Networks in the Design of Mobile Platforms: The Case of Apple iPhone

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ABSTRACT

Unlike the simple mobile voice service, which is normally designed and developed by the telecom itself, the development of mobile data services and platforms, due to their complexity, usually requires a collaboration and cooperation amongst many actors within and outside the mobile telecommunication industry such as mobile network operators, content providers, content aggregators, payment gateways, regulatory commissions, and others. The actors usually form the so-called value network in which each actor complements others and adds important value elements to the final value proposition given that actors have different knowledge domains, backgrounds, and expertise. Contrasting value chains where the relationships amongst different parties are to some extent simple and linear, the relationships linking actors in value networks are mainly complex and non-linear, and such relationships had led to a shift from forming value chains to creating value networks in many digital economies such as the mobile telecommunication industry. Although it is argued that designing powerful value networks is critical to the success of mobile platforms, very limited research can be found on explaining and proving this argument. As such, this chapter intuitively utilizes a methodical approach to explain the role of value networks in the design of successful mobile platforms. This chapter demonstrates, through the case of iPhone, how a powerful and well-designed value network is a critical enabler of innovations in the mobile telecommunications industry. Further, the chapter argues that cohesion, fitting network-mode, uniqueness, and dynamicity are four key value drivers of powerful value networks.

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INTRODUCTION

The mobile telecommunications industry is undergoing a revolution on the move, driven primarily by innovative technologies and other related environmental factors such as globalization and deregulation. This noteworthy revolution is touching our intimate sphere; changing personal lifestyles as well as business functions and practices. The mobile business is changing from one that was all about voice calls to one that is almost about data transmissions such as multimedia messaging service (MMS), email and Internet surfing, just to name a few. This shift is not surprising given the saturation of the voice market as well as the credit crunch. Nowadays, mobile telecommunications providers (denoted as telecoms in this Chapter) are in need to establish new revenue streams by exploiting the potential of new technologies.

Notwithstanding, creating and capturing value from mobile platforms has proven problematic. For instance, some products for mobile data services, such as Palm Foleo, had been cancelled after investing millions of dollars. Nokia is another key example when it comes to the pressure of revenue streams. For example, Mintel research on mobile Phones and network providers indicated that Nokia declared 30% fall in its third-quarter of 2008 profits (Mintel, 2008). On the other end of the spectrum is Apple’s iPhone that has found its way to success in mobile data communications. Starting from its first-generation, iPhone established its credentials as a device capable of generating huge revenue on the data side (Doyle, 2008). Just to give few indicative examples, it has been found that iPhone users surf the Web more than those making use of other Smartphones (Lind and Sundsoy, 2009). Moreover, Apple is generating more profit year-over-year from its iPhone. For example, Apple financial results for its fourth quarter ended September 26, 2009; indicates that Apple sold 7.4 million iPhones in the quarter, representing seven percent unit growth over the year-ago quarter (Apple, 2009). In its annual report for 2008, AT&T pointed out that Apple iPhone enabled AT&T to grow its wireless data revenue by 52.5% (more than $10.5 billion) as the exclusive distributor of iPhone in the United States (AT&T, 2008). In Germany, the iPhone has boosted the data traffic by 30 times for its exclusive distributor, T-Mobile (Doyle, 2008). Whilst in the United Kingdom, Telefonica O2, despite the economic downturn, has benefited from iPhone. It has been estimated that O2-iPhone users spend around 30% more time surfing the Internet per month than average users (Mintel, 2008; Al-Debei, 2010).

In the mobile telecommunications industry, it is argued that designing powerful value networks is critical to the success of mobile platforms (Tee & Gawer, 2009; Al-Debei & Fitzgerald, 2010a; Al-Debei et al., 2013). For example, Takeshi Natsuno, NTT DoCoMo’s Managing Director for i-mode mobile platform, argued that market arrangements and structure represent the main reason explaining why the i-mode platform was generating high revenues in Japan at the time when other mobile data services and platforms in Europe and USA were struggling (Natsuno, 2003). Thus, we postulate that effective and powerful value networks are key enablers of innovations in the mobile telecommunications industry and thus we argue that Apple’s value network has played a significant role in the development and success of its iPhone. However and although it is argued that designing powerful value networks is critical to the success of mobile platforms, very limited research can be found on explaining and proving this argument. As such and aiming to advance our knowledge and understanding in this domain, this chapter aims at explaining the role of Apple’s value network in developing and managing the iPhone. Furthermore, we believe that Apple’s achievement with the iPhone warrants particular attention in regards to what lessons can be derived about the future of mobile platforms as well as comprehending the underlying key value drivers behind such innovations. It is also interesting to delineate how a new entrant to the telecom industry could not