Chapter 11
Regional Innovation Systems and Revolutionary Business Modelling:
The Network-Based Innovation Model

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ABSTRACT

Mobile gaming and digital music industries' innovation dynamics and growth show high potential of value network and induce new ways of designing and developing competitive value propositions throughout disruptive network-based innovation strategies. These network-based innovative strategies and processes rely on a large number of heterogeneous players that have the potential to lead to design and development of new products and services, throughout a network of capabilities set, by combining games with music contents, revolutionizing the current media entertainment sector and creating value and disruptive innovation. In view of that, mobile gaming sector dynamics and global market potential were analyzed throughout a wide set of analytical frameworks. Finally, there were discussed industrial integration and innovation processes, industrial clustering and agglomeration economics, which drive into regional innovation systems, economic knowledge, and R&D spillovers, that, ultimately, support blue ocean opportunities, while benefiting customers and key stakeholders through and societal impacts for the future.

1. INTRODUCTION: THE INNOVATION POTENTIAL WITHIN THE MOBILE-GAMING AND MUSIC SECTOR

The mobile gaming and digital music industries' innovation dynamics and growth show high potential of value network and collaborative network advantages, which lead to new ways of designing and developing competitive value propositions throughout disruptive network-based innovation strategies. Hence, the overarching research question is centred in *what is the market potential and the environmental context for the development and implementation of a blue ocean opportunity within the mobile-gaming and music sector?*

Subsequently, in order to completely answer this question, other sub-questions were analysed, namely: *what is the current state of mobile-casual games and digital music industries?; how did these industries evolved and in which aspects there are common links?; what is the market potential in geographical terms?; which are the major trends expected in both industries?; what are the general characteristics of mobile gamers?; who are the main players of industry?; how will the mobile games industry be affected by the music integration?; and finally, which are the critical success factors for this network-based innovation business model?*

2. LITERATURE REVIEW: MOBILE-CASUAL GAMES INDUSTRY AND MARKET POTENTIAL

Innovative mobile-casual games[1] are leading to include the well-known sector, mostly because of the convergence of innovative technologies that induces new consumer "wants" and encompasses the comprehension of the key stakeholders' ecosystem.

A. Ecosystem and Industry Outlook

The evolution of mobile-casual games industry arose in the early 1990s when calculator producers, like Texas Instruments, decided to include the well-known "Snake" game in their devices. The game had such a success among consumers that Nokia decided to introduce it in its devices, opening a new window of opportunity for mobile companies and game developers (Entertainment Software Association [ESA], 2012). Still, it was only in 2002, when operators began to sell devices capable of downloading games from their own portals, that these games became a world phenomenon (C. Feijoo et al., 2012).

Until 2007, game developers were limited in the design and complexity of the game due to the restricted graphic and processing capabilities of mobile devices (Feijoo, Gomez-Barroso, Aguado & Ramos, 2012). However, in 2007, the possibilities changed and once again a new window of opportunity arose with the creation of the smartphone and the widespread of broadband connections. Once more, Nokia was the first mover to this new market but it was only the introduction of the iPhone that radically changed the mobile gaming industry (Feijoo et al., 2012). The combination of new possibilities in the device and the global connection to the network allowed many innovations. The main creations were the application stores and social platforms that became new channels of distribution, widening the possibilities for both consumers and publishers.

Nowadays, these games are an important component of entertainment for the generation of connected consumers and downloading from different app stores or browsing from mobile devices is now the standard behaviour of a mobile gamer (Feijoo et al., 2012).

The mobile-gaming ecosystem follows the three-stage model for digital mass consumption[2], composed by (1) content creation, (2) distribution and (3) consumption and interaction.

Thus, this industry is constituted by three main groups: the content creators, divided in developers and publishers, the distributors and the gamers (Feijoo et al., 2012). The developers are responsible for game concept design, optimization and maintenance whereas the publishers are responsible for the process of distribution, negotiating with the diverse group distributors. The latter is divided in three segments: application stores, portals and aggregation platforms. In addition, aggregators and middleware companies are also involved in the ecosystem. The first are intermediaries between developers, publishers and distributors whereas the middleware companies

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