### Chapter 2

# Mobile Communications and the Entrepreneurial Revolution

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#### **ABSTRACT**

It is commonly accepted that entrepreneurship is a key activity in the current economic context, and entrepreneurs create value in form of new businesses ventures, and generate new jobs by mobilizing economic resources, which in combination has a positive impact in terms of increasing productivity and economic growth, among other effects. In this chapter, the authors acknowledge the importance of innovation in the mobile industry driven by entrepreneurs and firms as a source of disruptive changes that have completely reshaped the world, by presenting the key elements of current mobile industry and the emerging areas with the highest potential to attract entrepreneurs in the upcoming years.

#### MOBILE COMMUNICATIONS AND ENTREPRENEURSHIP IN CONTEXT

It is commonly accepted that entrepreneurship is a key activity in the current economic context, and entrepreneurs create value in form of new businesses ventures, and generate new jobs by mobilizing economic resources, which in combination has a positive impact in terms of increasing productivity and economic growth, among other effects (IEG World Bank, 2013). To this respect, international institutions like the United Nations (United Nations University, 2011) or the Organization for Economic Cooperation and Development (OECD, 2014) agree on the importance of innovation and entrepreneurship in sustainable economic growth and material and non-material welfare.

This perception is even more relevant in the recent situation of economic deceleration. Since the global financial crisis broke up in 2007, access to financing, one of the most significant resources for the creation and consolidation of small and medium sized enterprises, has been significantly reduced. This fact in combination to a severe decrease in demand for goods and services and the longer payment delays, have contributed in setting barriers for entrepreneurial activity to grow (OECD, 2009).

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According to the EC High Level Expert Group on Small and Medium Enterprises and Infrastructure Financing (European Commission, 2013), project finance volumes in the EU-27 experienced a disproportionately large drop of over 40% from 2008 to 2009, slightly recovered in 2010 and 2011, before dropping by further 40% in 2012 to reach their lowest level since 2004.

Despite this difficult context, more and more stakeholders, from governments, private firms, universities, investors to academics and independent practitioners, have agreed on identifying that entrepreneurs can contribute to recover the economic growth path (World Economic Forum, 2009) and, consequently, to stimulate job creation (COADEC, 2014).

An additional commonly accepted statement is the direct connection between technology and entrepreneurial activity. In particular Information and Communications Technologies (ICT) are considered one of the main drivers to foster entrepreneurial activity according to the results of the GEM Report (GEM Consortium, 2014). Furthermore United Nations stated (United Nations Conference on Trade and Development, 2011) that ICT are a determinant factor of the overall investment willingness in entrepreneurial ventures.

Within the framework of ICT, in this Chapter the enabling role of mobile industry to boost entrepreneurial activity is acknowledged through the presentation of main recent milestones in its evolution that have turned mobile communications into a source of opportunities for innovators and entrepreneurs, as a global marketing, commercial and distribution channel, as well as a platform for experimentation in new services, applications and contents that impact people lives, among other benefits<sup>1</sup>.

Along the following sections, a set of specific paradigm shifts in mobile industry has been highlighted as main contributors to reconfigure entrepreneurial activity, as we currently know it. As a result, these disruptive changes has set the proper framework conditions for entrepreneurs to develop their ideas, using mobile technology as the entry door to other relevant industries in which innovators identify the biggest opportunities. Then, the last sections of the Chapter present some of the most appealing areas of activity for those involved in the entrepreneurial scene.

#### MOBILE INDUSTRY EVOLUTION: RECENT DISRUPTIVE MILESTONES

Following the mentioned approach, the present section cover three main milestones in the recent industry evolution that have contributed to set the appropriate conditions to create an entrepreneurial ecosystem around mobile:

- Smartphones paradigm, thanks to the massive adoption of these handsets as personal devices able
  to provide Internet connectivity and communications facilities everywhere defining a new user
  experience in mobile communications.
- Industry platformization, creating a complex ecosystem of players that compete and cooperate in contrast to the traditional mobile industry vertical integration of the value chain leaded by telecom operators.
- App Economy, acknowledging the role of entrepreneurs and software developers as third party players that stimulate the creation of new services, applications and contents in the mobile domain.

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