Chapter 106
Global Trends in Mobile:
A New Global Landscape for Supply And Demand

Giuditta de Prato
European Commission JRC IPTS, Spain

Jean Paul Simon
JPS Public Policy Consulting, Spain

ABSTRACT

This chapter aims at providing a comprehensive overview of the mobile landscape. It bridges the global trends affecting the mobile industry as a whole, with the creation and distribution of contents, emphasizing the new patterns of production and distribution. It shed light on the drivers of the changes taking place. The first part of this chapter identifies and sums up the main trends in a global landscape, namely the role of mobile communications (devices, networks) combined with the rise of the "app economy", the spread of "Big Data", and the move toward a multiscreen / cross-media paradigm. It provides a synthesis of available data. The first section tracks the evolution of the global market and the emerging geography with the rise of Asia as a leading player in the mobile world. The second section analyses the smartphone phenomenon. The third section deals with the rise of the "app economy". The fourth section reviews the new modes of data driven management, stemming from "Big Data". The fifth section follows the move a multi-screen world. The second part investigates some of the impacts of this fast evolving environment on the production of an array of mobile contents (portable movies, video, video games…) tracking the way content industries, while standing at the nexus of technology and content, are rapidly changing. The section documents the way mobile industry is indeed an innovation platform for new services. The section delineates the growing role of the consumer in a mobile world, its various modes of involvement in the production and distribution of digital content. We conclude with some elements about the new challenges brought by these trends, by the entry of new players in both the content and the mobile field.

Disclaimer: The views expressed are those of the authors and may not in any circumstances be regarded as stating an official position of the European Commission.

1. A MOBILE WORLD: SCALING UP[1,2]

In this section we set up the scene of the mobile environment focusing on some of the main trends that may open the way for new or renewed contents production and circulation. This section relies mostly in industry and consultancy data, as in such a fast changing environment official data even when accessible are in most cases too old to remain relevant to identify the trends. The figures may fluctuate from one source to another, but the direction looks clear enough. Therefore, the data used should be perceived as just signalling potential trends[3], but sufficient at the same time to give an overview of the evolution of the global mobile ecosystem.

An Impressive Growth of the Global Market

The World Bank stresses that "mobile telephony has been one of the most quickly adopted technologies of all time": it took 128 years before fixed telephone lines reached 1 billion users, mobile networks achieved this milestone in just over two decades (Minges, 2012, p. 115). The author adds: "even more astounding, mobile networks have roughly doubled in size every two years since 2002". Indeed, according to the ITU (2013, p. 1), there were, in 2013, almost as many mobile-cellular subscriptions as people in the world. Asia Pacific, the largest region in the global mobile market, accounted for almost half of all the world's unique subscribers at the end of 2013 (GSMA, Asia Pacific, 2014a: 10), as shown in Figure 1. At the end of 2003, there were a little over one billion unique subscribers, meaning that just under one in six people had subscribed to a mobile service. By the end of 2013 this figure had increased to 3.4 billion unique subscribers: equivalent to just under half of the global population. Globally there were 7 billion SIM connections at the end of 2014[4], with an average of 1.8 active SIM cards per unique subscriber (Mobile Economy 2015, p.2). The mobile services industry is one of the most globalized in the world (Minges, 2012, p. 125).

GSMA, the mobile trade association is tracking these evolutions, its research branch Wireless Intelligence (2013) forecasts 8.5 billion connections by 2017 with 50% operating under the new generation of mobile networks (3G[5]: 40%, 4G[6]: 10%). Even if the growth ratio will slow down, from a compound annual growth rate (CAGR) of 11.3% over the 2008-2013 period, to 4.2% growth rate for the next period (2014-2020), in 2020, the number of mobile connections will reach almost 9,2 billion (see Figure 1). Total operators revenues reached 1.15 in 2014 trillion US $ and will reach 1.4 trillion US $ in 2020 (GSMA, 2015, Mobile Economy, p. 4). If one considers the broader mobile ecosystem, it goes up to almost 2 trillion US $: network infrastructure (80 trillion), components (89 trillion), apps/content and advertising (205 trillion), device (436 trillion), and operators as noted a little under 1.2 trillion (GSMA, 2014b, p. 32).

This growth is almost mechanically accompanied by a growth in mobile traffic, now shifting to IP traffic. According to the Cisco Visual Networking Index (2014), for the first time in the history of the Internet, mobile and portable devices will generate more than half of global IP traffic by 2018[7]. No wonder the company may claim that (Cisco Visual Networking Index, 2013, p. 25): "Mobile data are well on its way to become necessities for most network users". Indeed, the shift to digital information is scaling up by several orders of magnitude in data volume every couple of years. Cisco (2014), forecasts global IP traffic for fixed and mobile connections between 2013 and 2018: 33 per cent of all IP traffic originated with non-PC devices in 2013, by 2018, however, that figure shoots up to 57 per cent, reaching an annual run-rate of 1.6 "zettabytes"[8] by 2018. Most of the growth will come from tablets (74 per cent CAGR in

Related Content

Efficient Compression and Storage of XML OLAP Cubes
Doulkifli Boukraa, Mohammed Amin Bouchoukhand Omar Boussaid (2015). *International Journal of Data Warehousing and Mining (pp. 1-25).*
www.irma-international.org/article/efficient-compression-and-storage-of-xml-olap-cubes/129522

A Semi-Automatic Annotation Method of Effect Clue Words for Chinese Patents Based on Co-Training
Na Deng, Chunzhi Wang, Mingwu Zhang, Zhiwei Ye, Liang Xiao, Jingbai Tian, Desheng Liand Xu Chen (2018). *International Journal of Data Warehousing and Mining (pp. 1-19).*
www.irma-international.org/article/a-semi-automatic-annotation-method-of-effect-clue-words-for-chinese-patents-based-on-co-training/215003

Opinion Mining and Product Review Summarization in E-Commerce
Enakshi Janaand V. Uma (2020). *Trends and Applications of Text Summarization Techniques (pp. 216-243).*
www.irma-international.org/chapter/opinion-mining-and-product-review-summarization-in-e-commerce/235747

Deep Learning-Based Adaptive Online Intelligent Framework for a Blockchain Application in Risk Control of Asset Securitization
Liuyang Zhao, Yezhou Sha, Kaiwen Zhangand Jiaxin Yang (2023). *International Journal of Data Warehousing and Mining (pp. 1-21).*
www.irma-international.org/article/deep-learning-based-adaptive-online-intelligent-framework-for-a-blockchain-application-in-risk-control-of-asset-securitization/323182

Constrained Density Peak Clustering
Viet-Thang Vu, T. T. Quyen Bui, Tien Loi Nguyen, Doan-Vinh Tran, Hong-Quan Do, Viet-Vu Vuand Sergey M. Avdoshin (2023). *International Journal of Data Warehousing and Mining (pp. 1-19).*
www.irma-international.org/article/constrained-density-peak-clustering/328776