



# Analysis of the Forces Reshaping the Mobile Internet Business

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## ABSTRACT

*This article studies the emergence of the mobile Internet business from six strategic perspectives, highlighting the ongoing transformations of the mobile industry. The article suggests that companies of the mobile industry can reconstruct their business models with six different kinds of choices: 1. Positioning differently in the value network, involving both vertical and horizontal movements. 2. Acquiring and developing critical assets and competencies to build sustaining and dynamic competitive strategies. 3. Inventing new mobile business models by utilizing the lessons from the Internet. 4. Integrating end-users in making and redefining services, optimizing pricing logic, introducing new business models with end-user originated content creation in mind, and making services easy to adopt by end-users. 5. Leveraging and focusing on disruptive, winning technologies that are changing the rules of the business. 6. Adapting to relevant policy schemes, and proactively planning and reconsidering business decisions under a dynamic regulatory environment.*

*Keywords:* Mobile Business; Mobile Internet; Mobile Services; Operator Business

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## INTRODUCTION

Mobile services constitute a growing market because of two reasons. First, mobile devices in their various forms are growing in number rapidly. In particular, advanced devices (including e.g. “smartphones”, “converged devices”, “internet tablets” and “multimedia computers”) that have built-in multimedia functionalities, Internet connectivity and modular software design (enabling user-installed applications) are increasing in penetration in developed

markets. Second, along with the diffusion of more capable mobile devices also the variety of mobile services is increasing, ranging today from mobile Internet browsing to music streaming, and from mobile gaming to various location-based services.

Technologies are available to capitalize on the mobile extensions of Internet services. These enabler technologies include e.g. wireless broadband connectivity, advanced operating systems of mobile devices, and architectures such as IMS (IP Multimedia Subsystem) and

mobile web servers (Nokia S60 Apache). Commercial challenges of WAP (wireless application protocol) and MMS (multimedia messaging service), however, suggest that the technology push model is not enough, and it is increasingly important to understand how users perceive the new services introduced. The openness provided by the mobile Internet and advanced devices is likely to shift the mobile services industry towards the pull model, in which people choose and customize themselves whatever services they prefer.

Traditionally mobile services have been provided through the “silo” model, meaning that typically one company (or a closely networked “group” of companies) provides the different elements of mobile service delivery. This delivery typically encompasses a network access solution, core network operations, service provisioning and maintenance, content creation, both service and network management functions and customer accounts (including marketing, charging and billing). The silo model has emphasized the vertical integration of the value chain (Vesa 2005; Verkasalo 2007a). Mobile operators as we know them today, including the likes of Vodafone, TeliaSonera and Sprint, have typically represented as focal actors in the delivery of mobile services. Mobile operators have managed this “silo delivery”, controlling the different layers on the supply side of the mobile services industry.

The Internet world is different in that it has little vertical integration. In rare occasions “silos” have emerged. Broadband operators have focused on their bit-pipe strategies and provisioned the network access, while the services itself (e.g. Google, Skype, Ebay) are provided by other companies on another conceptual layer, on the “edge of the Internet”, meaning the application layer of the OSI model. The Internet model emphasizes the customer pull model. For example, people visit the Internet sites they want, subscribe to blogs and social community sites they prefer the most, and choose their online stores based on price comparison engines. Technologies exist in the back-end, but end-users care only about

services and their added value. The Internet makes it easy to choose among a high number of alternative services that are independent of e.g. local broadband operators.

Now the worlds of Internet and mobile services are clashing, as wireless broadband connectivity and modular mobile platforms (the computer like evolution) are spreading rapidly and providing the push for the “horizontalization” of the mobile services business (Verkasalo 2007a). In addition, the rapid emergence of services around e.g. entertainment (digital music, blogging), productivity/office (email services, calendar) and location (Google Maps, Nokia Maps) are touching both the Internet and mobile worlds. Therefore, rather than being just an extension of the traditional “wired Internet”, the mobile Internet provides more with truly ubiquitous, location-based, personal and context-sensitive nature of mobile devices. All this spawns major transformations in the conduct of mobile business and the roles of different companies. The transformations of the mobile business have high impact, as some estimates claim that the value of the general mobile communications market will approach \$200 billion in 2009 (iSuppli 2005).

This article discusses the transformations taking place in the mobile industry. The presented approach provides an “external angle” at industry dynamics, this meaning that instead of providing tools to understand a given company’s internal operations, the article helps in understanding the dynamics in the competitive environment of the transforming mobile services industry. The main research question of the article is:

*How to model the transformations taking place in the competitive environment of the mobile services business, and to guide theoretical and empirical studies of the future with a fact-based evaluation of the current market situation?*

The article first provides background on modeling competitive business environments and business models. In addition, the specific change drivers of the mobile services industry

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