Chapter 6
Multimedia Services Offer Mixing Telco and Internet Assets

Luis Angel Galindo
Telefonica, Spain

Joaquín Salvachúa
Polytechnic University of Madrid, Spain

ABSTRACT

Traditionally, Internet has offered multimedia services independently of the services offered by companies associated to Telco (companies that traditionally offer telephony and associated services). In the last years, the technical community has assumed that the convergence of both worlds is a fact; however, there are many barriers to be removed. On one hand the emergence of cloud computing technologies will change the way of providing multimedia services. On the other hand economic issues are very important in this convergence process. In this chapter we describe how multimedia services are offered from Internet and the Telco. The convergence of Web 2.0 and Internet Protocol Multimedia Subsystem on the WIMS 2.0 initiative focuses on creating value for Internet and Telco and making multimedia services a reality for end users, independent of the underlying environment. We propose a novel strategy that uses cloud computing to facilitate the development and deployment of converged multimedia services. We also observe a sustainable business model accompanying the converged proposals to offer innovative multimedia services.

INTRODUCTION

A *Service Delivery Platform* (*SDP*) usually refers to a set of components within a telecom operator service architecture that manages easing service creation, deployment and execution utilizing enablers (network capabilities) and service capabilities. The keystone objective of a SDP would be to reduce time-to-market of a service and the key characteristic for a SDP is thus the ability to ease the integration task of application logic with the enablers and capabilities in the telecom service architecture for the delivery of a service to users. The SDP enables thus the rapid transformation of a service concept into a full product including all the related service life cycle management and commercial interactions.

While SDP is being used by Telco operators to provide any service, and in particular, multimedia services, however this approach is different from the Internet world, where it is not used a logical entity like a SDP. The convergence between Internet and Telco World is a reality; nevertheless they are very different worlds with diverse assets. This represents some barriers in the converge process. In order to remove these barriers in the convergence of both Internet and Telco worlds, a new initiative, WIMS 2.0 (WIMS 2.0 initiative, 2010), was founded in 2007. The aim of WIMS 2.0 is to create, in a collaborative way, new innovative services and a sustainable business model and ecosystem in the merge of a common world from Internet and Telco. To do that, WIMS 2.0 has defined a general architecture to be used in this convergence, contributing with it to the technical community.

The cloud computing (Marston, Li, Bandyopadhyay, Zhang & Ghalsasi,, 2010) is the extension of services, traditionally hosted in operator data centres and offered to large enterprises, to other segments in the market, like *Small and Medium Enterprises* (*SME*) and mass market that, thank to high speed access networks (Berrocal, Alvarez, Gonzalez, Perez, Roman & Vazquez, 2009) and

low cost storage infrastructures (Komorowski, 2010) are shaping a new way of offering multimedia services. Cloud computing services are strategic services for any Telco operator or Internet provider over the world; not surprisingly, these services are closely related to the interest of these actors in providing services from network. In this chapter we present some ideas about the introduction of a cloud computing model to offer multimedia services to the end user. This model will remove costly barriers for new entrants or for those companies which prefers to focus on their core business.

The theme of the chapter builds the motivation of the authors to provide a new proposal combining aspects of cloud computing and the SDP as a platform to offer multimedia services in a converged environment: the *SDPaaS* (that stand for *SDP as a Service*). This chapter does not end with the proposal of this new concept, but the authors apply it to the case of SDP defined in the WIMS 2.0 initiative, transforming this SDP in a 'Telco and Internet converged SDP in the cloud', providing a more practical proposal from the authors to the scientific community. In order to be an end to end perspective, it is commented a new economic model which is linked to the technical aspects, which has been defined and industrialized by one of the authors and currently is running in one of the biggest Telecom operators over the world. One of the most common errors is to misalign business and technical issues, so that, it is frequent to see good technologies failing due not to consider business aspects and vice versa. The business model described here is a sustainable business model based on the creation of partnerships activities.

The structure of this chapter is the following: In section 2 we show how multimedia services are supported in Internet and Telco world; section 3 covers the work did under the WIMS 2.0 initiative, while in section 4 we propose how to offer convergent multimedia services in the cloud;

Related Content

Agent Based Product Negotiation Models in Mobile Commerce
S. S. Manviand L. B. Bhajantri (2009). *Handbook of Research on Telecommunications Planning and Management for Business (pp. 820-835).*
www.irma-international.org/chapter/agent-based-product-negotiation-models/21705

Design and Implementation of a Firmware Update Protocol for Resource Constrained Wireless Sensor Networks
Teemu Laukkarinen, Lasse Määttä, Jukka Suhonen, Timo D. Hämäläinenand Marko Hännikäinen (2013). *Adoption and Optimization of Embedded and Real-Time Communication Systems (pp. 46-63).*
www.irma-international.org/chapter/design-implementation-firmware-update-protocol/74241

The TREND Meter: Monitoring the Energy Consumption of Networked Devices
Luca Chiaraviglio, Roberto Bruschi, Antonio Cianfrani, Olga Maria Jaramillo Ortizand George Koutitas (2013). *International Journal of Business Data Communications and Networking (pp. 27-44).*
www.irma-international.org/article/the-trend-meter/88940

Service Offerings for Fixed-Mobile Convergence Scenario: An Integrated Operator Case
Jarmo Harno, K.R. Renjish Kumar, Mikko V.J. Heikkinen, Mario Kind, Thomas Monathand Dirk Von Hugo (2009). *International Journal of Business Data Communications and Networking (pp. 1-16).*
www.irma-international.org/article/service-offerings-fixed-mobile-convergence/34037

On the Enabling of Efficient Coexistence of LTE With WiFi: A Machine Learning-Based Approach
Mohamed S. Hassan, Mahmoud H. Ismail, Mohamed El Tarhuniand Fatema Aseeri (2020). *International Journal of Interdisciplinary Telecommunications and Networking (pp. 44-56).*
www.irma-international.org/article/on-the-enabling-of-efficient-coexistence-of-lte-with-wifi/256187