

The Worldwide Reality of Anywhere, Anytime Communications

By G. Rittenhouse, J. Gauthier



The telecommunications industry has witnessed explosive growth over the past decade.

New technologies such as high-speed wireless data, Internet Protocol television, smart devices, as well as new business models, have created entirely new high-value service offerings. As a result, the promise of anywhere and anytime communications across a wide range of access technologies and services is

becoming a reality. The implications of this are profound. Service providers must fully comprehend how new technologies like IP Multimedia Subsystem (IMS), Internet services and wireless broadband affect their market position. Those who do not, risk losing ground to new market entrants who do offer these high-value, personalized services.

The good news is that service providers are adapting and, as a result, are unleashing the willingness-to-pay for these advanced services. In this edition of *Enriching Communications* we explore how this continued growth fuels the innovation that enhances the way people communicate, creating new challenges and opportunities for the service provider community. Our trends and market perspective articles – *Accessibility of Services and Networks and Mobile Broadband Matures* – provide a quantitative analysis of the key market forces that are changing the demand patterns and disrupting existing business models. Further, the piece on *Combining Web 2.0 and IMS: The Road to New Services and Business Models*, explicitly analyzes just how radical these changes can be as carriers join the Internet economy. We also take a close look at key imperatives that carriers should address in our article *Realizing the Converged Broadband Service Provider*.

End users today are looking for the ability to have personalized content delivered to them in a way that is intuitive, seamless and at the lowest cost, *anywhere and at anytime*. Indeed, the latest generation of users – the so-called Millennials – is rapidly changing the nature of the consumer base. You will see in the trends article *Millennials: The Future is Now*, just how disruptive this new user community can be, as they mix and match hardware, applications and network resources to get precisely the service that they want at the price they are willing to pay. This is driving the convergence of media, the Internet and telecommunications. It is also dismantling market boundaries that have existed across these different domains.

Even with these advances, however, there are still significant gaps of broadband coverage and places in the world where people cannot even make a simple phone call. In these regions, first time participation in *anywhere and anytime* communications is a real challenge. But these locations also represent a huge opportunity to create and develop a brand new customer base. One of the most exciting examples of this opportunity is India. To get a better idea of how this vibrant market is developing we chat with Frederic Rose, President of our Europe, Asia and Africa region, to shed light on how India's mobile subscriber base grows at a rate of more than 80%.

In this issue of *Enriching Communications*, we also examine the technical solutions that make the *anywhere, anytime* experience available for all, in a way that truly brings value to the end user. We are pleased to present several articles that describe next-generation services such as remote healthcare (our case study on the Visiting Nurses Association of New Jersey) and mobile video applications for consumers

(as we profile AT&T's innovative *Video Share* solution). We also look at the success of Korea's SK Telecom and its high-speed packet access (HSPA) network and the recent WiMax deployment by the Santo Domingo provider ONEMAX. In addition, there is a comprehensive summary of Fourth-Generation wireless in *Mapping the Wireless Technology Migration Path: The Evolution to 4G Systems*. This article takes a hard look at how next-generation wireless access technology will finally move the network to IP-centric access at much higher data-rates than today's networks.

Even as these technologies become available, the end user still does not enjoy a seamless, personal and intuitive anywhere and anytime experience. So the articles *Beyond Transport – Delivering Unique Network Operator Value to End Users* and *Simplifying the User Experience while Enabling the Profitable Evolution to All-IP Mobile Transport* describe the inclusion of personal presence and preferences that make the user experience truly unique with the combination of subscriber data management, unified transport and IMS. To broaden the discussion further we describe an entirely new service class based on sensor networks. Sensors have the potential to simplify the way end users interact with the network, and this article provides several life examples of how these networks are likely to appear.

In the final analysis, this dizzying array of trends in technology, changing consumer demand patterns and the acceleration of globalization, puts a serious premium on innovation. Those organizations that can quickly integrate technology and rapidly develop new business models, while forging partnerships around the world, appear to be best-positioned to serve this brave new world of telecom. It is a call to action that we at Alcatel-Lucent are very excited about. We hope the articles in this issue of *Enriching Communications* serve as the basis for ongoing dialog on how to tap into these trends so that we can jointly deliver on the great promise of global anywhere, anytime communications. ●

Gee Rittenhouse is Research Vice President Bell Labs, Murray Hill, NJ, USA.
E-mail: Gee@alcatel-lucent.com

Joëlle Gauthier has been in charge of Research and Innovation within the Chief Technology Office since the end of 2002. Very recently she took responsibility of the Payment Product Group, part of Carrier Business Group. She is based in Villarceaux, France.
E-mail: Joelle.Gauthier@alcatel-lucent.com