

It's no secret that demand for bandwidth-hungry applications is on the rise. People seem to have an insatiable appetite for video, communicating with friends and colleagues, sharing their lives and their creativity and accessing their favorite entertainment on demand. They want to connect with the people and the brands they care about anytime, anywhere, on any device. As they become more immersed in this digital, mobile and social lifestyle, demand for bandwidth continues to grow.

People don't care about technology; successful application and content providers (ACPs) realize that it's the experience people are after. A host of ACPs, many of them application developers, Web start-ups and even established "household" brands, have swiftly gained popularity by combining communications, applications and content with entertainment and social networking. And they're delivering the experience people want over service providers' networks.

But it's an increasingly unsustainable model for all players (Figure 1, left side). First, service providers aren't getting commensurate compensation for their role in delivering today's experience. As a result, they're reluctant to fund the network

expansion required to keep up with bandwidth demand and to enhance the experience. Second, ACPs do not have good access to network capabilities, such as location, presence, quality of service (QoS) and trusted security, they need to enhance the consumer's experience.

Most service providers are not willing to be reduced to a dumb pipe where commoditization leads to falling revenue and an inability to differentiate in the market. A new industry vision — one that combines the trusted capabilities of the network with the speed and innovation of the Web — is needed. This is application enablement (Figure 1, right side). It creates a new, larger market space and a more stable, viable industry model by allowing all players in the telecom ecosystem to deliver innovative applications and content while simultaneously generating new revenue.

To take advantage of new business models for revenue growth, service providers must leverage their unique network capabilities.

Through secure and managed exposure of billing, location, subscriber data, messaging and other capabilities to an ACP ecosystem, service providers will be able to deliver more innovative services while increasing their relevance in the overall value chain. To be successful, service providers must:

- Implement the business model(s) best suited to their particular market and business objectives.
- Ensure they have the right capabilities and support to turn their vision for application enablement into a reality.

Choosing the Right Business Model

Finding new sources of sustainable, profitable revenue isn't an option for service providers; it's become a strategic and financial necessity. But how do service providers determine the optimal business model(s) for their market and their business objectives? One answer does not suit all.

While many service providers recognize the need to collaborate more broadly and effectively with third parties, others are looking to expand in-house capabilities. To help service providers select the appropriate business model for their market and business objectives, Alcatel-Lucent conducted dozens of in-depth interviews and analyzed hundreds of online survey responses from service providers and ACPs.

The study looked at lessons learned from Web-oriented models as well as the current state of the global market to determine how regional trends influence business models. The results: New tools for service providers to use when determining

which ACPs to collaborate with and which business models will generate the highest level of return. The research also found that emerging industry norms for working with third-party ACPs include:

- 70/30 revenue sharing between ACPs and service providers.
- Simple, published rules with limited commercial assessment.
- Greater ACP control over branding, pricing and promotion.

ACPs indicated a strong pent-up demand for network services and a willingness to pay for value-added network capabilities, such as subscriber preferences, location and QoS.

Knowledge of these emerging trends and lessons learned has allowed Alcatel-Lucent to develop a set of common questions to help service providers determine the specifics of new business model(s) between themselves and ACPs:

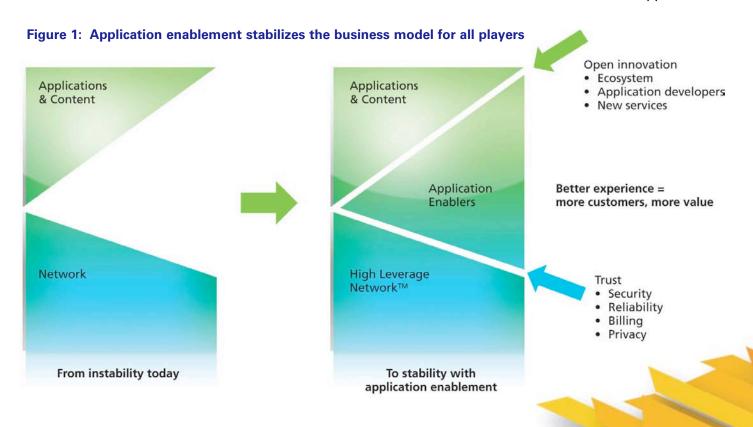
- Who owns the end customer? Is it a retail or a wholesale approach?
- Are ACPs supported using common (standard) or one-off (non-standard) approaches?
- What is the primary source of revenue generation?
- How many ACP partners will be supported?
- Does the service provider interact directly with ACPs?
- What is the service provider's level of involvement in areas, such as capability enablement, partner ecosystems and customer care?

In addition to considering which business models are most applicable and most relevant to their market and their business objectives, service providers must also explore how to turn the vision for application enablement into a reality.

Turning the Vision for Application Enablement into a Reality

Today, there's a gap between service providers and ACPs. The situation is sometimes likened to a "walled garden" where the bulk of service innovation takes place inside the service provider organization. As service providers face increasing competition and a need to create new revenue, they are beginning to see the value of working more collaboratively with ACPs and of exposing their network capabilities in a managed and controlled way. And they recognize that a more open, secure and interoperable approach will help accelerate time-to-market and increase flexibility.

One of the ways Alcatel-Lucent addresses interoperability is through support for the GSM Association (GSMA) Rich Communication Suite (RCS). Alcatel-Lucent sees RCS as an enabler of innovative applications



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and not simply as a service. By providing APIs that allow capabilities, such as presence and network address books, to be integrated with other applications, Alcatel-Lucent significantly extends the potential to innovate "on top of" RCS and enable the digital, mobile and social lifestyle people want. That potential could include the ability to publish videos to a social networking or a blog page from a smartphone while on the move, to spontaneously call friends through a contacts widget on a personal Web page or to chat with fellow players during an interactive gaming session.

Attracting and working with ACPs can be crucial to turning the application enablement vision into a reality. In order for service providers to work more closely with ACPs, they must address the ACPs' need to reach the broadest possible audience. Aggregation across service providers helps stimulate market demand. Consider, for example, Short Message Service (SMS) text messaging. It only became highly successful when it could be used across service providers. The same model applies to other network capabilities.

Alcatel-Lucent provides the platform to enable the openness needed for aggregation and is further supporting cross-service provider aggregation through the Alcatel-Lucent Open API Service. The Alcatel-Lucent Open API Service gives ACPs simplified access to rich network assets through common APIs that are based on industry standards. ACPs can write applications that include differentiating capabilities yet still have their applications work across

different networks without having to navigate complex technical and business relationships with each service provider. Alcatel-Lucent APIs will not only comply with the GSMA OneAPI initiative, they are already moving beyond to offer additional control of key capabilities, such as location accuracy and response times.

The Alcatel-Lucent Open API Service supports the most popular API, location, for the Sprint® network in North America. In its June 1, 2009 press release, Sprint explained that its platforms "protect the privacy and security of Sprint customers while offering third-party mobile, Web, WAP, SMS, and widget developers a consistent way to create applications that use the customer's location information with prior permission to provide customized information and services." Kevin Packingham, senior vice president of Product and Technology Development for Sprint, summarized the goal behind the Sprint developer program. "We want developers to have the tools they

need to create useful, engaging and exciting applications for our customers – whether they're for individuals and families or small business and enterprise customers," he said.

The possibilities for innovative applications that incorporate location are almost limitless — from location-based mobile marketing campaigns to social networking applications that help friends find friends to interactive geo-tag games. As Alcatel-Lucent adds APIs for communications, context, content and control capabilities, the potential for more personalized, targeted and appealing applications increases. The mobile concierge scenario is just one example.

As service providers adopt new business models and industry initiatives, a comprehensive set of Professional Services can help them optimize valuable resources, such as time and money. With newly gained knowledge of automated and standardized processes for

The GSMA and Its Initiatives

The GSMA is a mobile industry association composed of nearly 800 mobile operators and more than 200 companies involved in the broader mobile business. Its mission is to enable the creation of services that allow people to "readily and affordably connect to and use the services they desire, anywhere, anytime".

The goal of the GSMA RCS Project is to accelerate the introduction of IP Multimedia Subsystem (IMS) applications over mobile networks. It does not define standards or implementation. Instead, it focuses on the end-user experience, interconnection and interoperability requirements for a core set of rich communication capabilities, including enhanced address book, rich calling and rich messaging.

The GSAM OneAPI initiative aims to provide a commonly supported, lightweight Web API that will reduce the time and effort needed to create applications and content that are portable across mobile operators.

Source: http://www.gsmworld.com/



onboarding new applications and partners, service providers can manage large numbers of new applications and reduce integration times. With access to skills, ranging from solution architecture design to return on investment (ROI) analysis, testing and backoffice/IT integration, service providers gain the foundation and expertise needed to manage change.

By making the application enablement vision a reality, service providers can:

- Differentiate offerings by extending, enhancing and combining network assets to create compelling new applications. These enriched applications can be developed in-house, by a trusted partner or through a third-party ACP ecosystem.
- Attract ACPs by providing the environment they're looking for.
 Easy-to-use Web application programming interfaces (APIs), network protection, authentication, and other capabilities provide a foundation for the ACP community.
 A development environment, including a developer portal, blogs, documentation, software development kits (SDKs) and a sandbox, creates the framework.
- Promote and monetize applications by offering a marketplace that accelerates time-to-market, helps ACPs market and monetize their applications and helps people easily find, purchase and download applications. A toolkit provides out-of-the box functionality for a storefront that supports advertising and merchandising offers, content and applications management and distribution, as well as charging and settlement functions.

Mobile Concierge: At Your Service, Anywhere

What's the reality of the application enablement vision for service providers' customers? This example scenario illustrates what's possible if an airline were to subscribe to network-based service provider assets, such as an address book, location, presence and subscriber data.

Instead of having to look for signs, display terminals or an employee to get specific information, customers automatically receive a text message on their smartphone as they walk into a defined zone — an airport terminal departures area, for example. The message offers the opportunity to immediately opt-in to a mobile concierge service that provides the latest travel information and the option to speak with someone in person. Because the service knows the customer's location, their call is given higher priority than calls coming from outside the airport.

Once customers have checked in, they automatically receive a message asking if they would like to relax in the VIP lounge before their flight. Upon a positive reply, the service automatically sends a map to the lounge from the customer's location and an offer to prepare a table for the customer and his or her party.

A mobile concierge service offers numerous opportunities to engage customers. If customers are too far from the airport to comfortably make their flight, the airline can reach out to them on their smartphone to offer priority check-in or alternative travel arrangements. Or, important customers who are staying in the area can be offered promotional tickets to airline-sponsored events.

 Monitor and manage applications, devices and networks to optimize the customer experience, control customer service costs and protect the network.

A New Lifestyle: The Best of All Worlds

As people continue to eagerly adopt a digital, mobile and social lifestyle, it is increasingly important for service providers to move beyond traditional models and embrace an application enablement vision. With this approach, they can combine the quality, trust and reliability of their greatest asset — the network — with the speed and innovation of the Web.

There are a number of factors to consider when selecting and implementing new business models. Using the results from extensive primary research, Alcatel-Lucent helps service providers

identify, justify and select the appropriate model for their market and business objectives.

Alcatel-Lucent also helps service providers put the application enablement vision into practice through innovation on both their platform and on the Internet. Service providers benefit from a multivendor, horizontal approach to attract talented ACPs and give them simplified access to network capabilities. They also gain the tools needed to promote and monetize applications and to ensure visibility and management of the impact of applications on the network.

With a vision for application enablement, the right business models and the tools needed to implement, service providers can increase market relevancy and generate new revenue.