Pipeline

Knowledge Is Power

Blended Applications: Driving Innovation and Revenue

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In a world of growing competition and declining voice revenues, communications service providers (CSPs) are continually looking for ways to increase revenue. Further, as services proliferate and converge, the line between the traditional telecommunications industry and Web-based/Web 2.0 services is becoming increasingly blurred. To drive innovation and grow revenue, CSPs are looking to "blend" Web-based applications — from simple Web portals to advanced social networking tools with Web 2.0 features – with telecommunications network services, such as Voice over Internet Protocol (VoIP), messaging, location, presence, and conferencing

These blended applications, which enable converged Web-telecom services, allow CSPs to unlock the differentiating capabilities in their telecom networks – such as messaging, presence, location, and call control – to offer unique services that help them compete for subscriber mindshare and share-of-wallet against other CSPs, broadband operators, and Internet service providers (such as Google, Yahoo, and Facebook), as well as drive new business models.

Today, social networking sites like Facebook, MySpace, and other Web 2.0 services boast advanced Web features and high user rates, but do not have the telecom capabilities required to integrate features like click-to-call, presence, instant messaging, location, conferencing, or mobile messaging. It is precisely in this space that CSPs have a real opportunity to showcase their unique value to the Web world. For example, CSPs can blend social networks and online portal communities with telecom capabilities, such as the ability for online community members to send SMS messages, find each other's locations, view presence information, or initiate calls to various devices. CSPs can allow users to access these services on their PC, their mobile phone, their television, or even the dashboard of their car.

Blended applications provide myriad opportunities for CSPs to increase top-line revenue from subscribers and from different business models. However, there are several factors to consider when establishing an architecture on which to build blended applications. First, CSPs must determine whether they will take a services exposure platform (SEP) approach or pursue blended applications via next-generation networks (NGNs). Then, they must explore business models to monetize these valuable services.

Service Exposure Platform Approach

Today, many CSPs have launched service delivery platforms (SDPs) to roll out new telecom services. However, most SDPs are lacking an SEP, which allows the provider to actually open up its networks to third parties to benefit from the innovation of millions of Web developers and bring those rich

capabilities into their networks to increase revenue and drive customer loyalty. Most SDPs that do have a SEP lack the ability to offer converged services, because they only support telecom services. Therefore, a SEP that combines industry standards and protocols from both the Web world and the telecom world will enable CSPs to deliver blended applications.

SEPs allow CSPs to expose their networks to the Web developer community via simple Web services. By taking this approach, CSPs are able to tap the innovation of the Web community while remaining focused on their strengths – like messaging, presence, conferencing, subscriber profile data, and the ability to charge through their networks.

To succeed with a SEP approach, CSPs have to reach out to Web developers and offer them inexpensive and easy access to the telecom capabilities in their networks. They need to provide a secure, easy-to-use application platform that supports both IT and telecom industry standards. Further, in order to effectively compete with Internet providers, CSPs need to deploy services quickly. Some service providers that have migrated from proprietary systems to platforms based on industry standards, such as Java EE or Session Initiation Protocol (SIP), have reduced application development timeframes by more than 30%.

Several CSPs have successfully deployed blended applications commercially with the SEP approach including Telefónica O2 UK Limited, a leading communications company for consumers and businesses in the United Kingdom. The company launched its O2 Litmus project to work with developers to create a wide range of wireless and Internet-enabled applications and services and then allow O2 customers to test and rate them. Other service providers taking this approach include Telecom Italia, 3 and SingTel.

Next-Generation Network Approach

Another approach service providers can take is pursuing blended applications through NGNs, such as IP Multimedia Subsystem (IMS) or Multimedia Domain (MMD). CSPs are investing hundreds of millions of dollars into NGNs based on IP technology, with IMS being the most popular. However, many CSPs have deployed IMS services but are not generating a great deal of revenue from them, in part, because they are offering only telecom services, not converged services or blended applications. Most IMS services revolve around call control and video, such as VoIP over IMS, or video telephony

over IMS, or in some cases IPTV over IMS. But CSPs with IMS networks have not yet fully grasped the vast opportunities available in the Web domain to leverage IMS/NGN capabilities. The challenge then is to increase the development of converged Web-IMS applications, where the real-time communication and collaboration capabilities native to IMS networks and NGNs can deliver uniquely differentiating capabilities to Internet and Web 2.0 applications and services. CSPs can encourage adoption of their IMS/NGN capabilities by regional and global Web 2.0-enabled social networks, or Internet portal and commerce companies, by allowing the Internet/Web 2.0 companies to easily access and create blended applications on top of their NGNs. While this approach may involve a significant investment on the part of the Internet and Web 2.0 companies, as well as the CSPs, it allows everyone to benefit from the richness and innovation of blending the Web domain with the telecom domain. With the NGN approach, CSPs also have increased control over which Internet or Web 2.0 capabilities they would like to blend with their IMS/NGN networks, as well as the roadmap for new converged services based on blended applications.

Several service providers have launched NGN services, including SK Telecom and KTF , the two largest mobile operators in South Korea; Softbank Mobile Corp in Japan, one of the first providers to deploy an IMS network over 3G; and mobilkom austria group, a leading mobile service provider in Central and Eastern Europe. These CSPs, as well as many others who have commercially launched NGN services, will have a great opportunity to partner with their local and regional Internet/Web 2.0 powerhouses in building converged Web-NGN services from blended applications.

Monetizing Blended Applications

No matter which approach CSPs take, they must determine how to monetize their blended applications. Blended applications allow CSPs to expand average revenue per user (ARPU). For example, the converged services may warrant an additional per use or per application fee, or even a flat rate or premium services model. Ultimately, blended applications could even provide opportunities for generating revenue from users that are not subscribers. For example, CSPs may charge someone accessing the blended capabilities from their Web portal or via a car dashboard, who may not be a mobile phone subscriber.

Blended applications also offer CSPs opportunities to deploy business models that go beyond charging end users. By exposing their networks to third parties, CSPs can monetize the relationship

with business partners – whether a developer, who pays for access to the telecom capabilities in the network, or another service provider or a mobile virtual network operator (MVNO) that does not have the network capabilities the CSP does and pays a "toll fee" to offer those services to its customers. By charging for network usage, the CSP drives business-to-business (B2B) revenue. Over time, when CSPs gather hundreds, if not thousands of partners, they could generate higher margins than they do charging end users.

As these business models expand and change, the CSPs' operations support systems/business support systems (OSS/BSS) must evolve as well. Traditional OSS/BSS are implemented to support the provisioning and billing of end-user subscribers. But with the new business models enabled by service exposure platforms with third party developers, it becomes critical for CSPs to evolve their OSS/BSS to accommodate the dynamic provisioning and billing of third party partners as well. Further, since the CSPs will be providing network capabilities to their third party partners, it becomes very important for the partner charging model to focus around network capability usage and access, rather than a flat-fee charging model. The charging models will revolve more around real-time charging of third party partners, as well as end-users, rather than a prepaid or post-paid billing model. Also, the concept of network inventory will need to evolve to one focused on "capability" inventory, such that a CSP's ecosystems of hundreds or thousands of third party partners are able to pick and choose from a diverse "menu" of network capabilities exposed by the CSP, and dynamically select those network capabilities which provide the biggest business and technical value to them.

Blended applications offer CSPs many opportunities to propel innovation through services and business models, helping them to meet the challenges of today's dynamic, competitive market, while avoiding becoming a "dumb pipe." CSPs that rise to the challenge will succeed in competing with Internet service providers and driving long-term revenue growth.