Pipeline

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Multi-Player Delivery of Next Generation Services: Harnessing the Service Ecosystem
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The Impact of IP on the Service Delivery Business Model
Next generation services have often been regarded as IP versions of last generation services. The advantsges of packet-based networks are widely recognized and include: a converged infrastructure that supports data and voice services; the ability to share component technology with enterprise networks; increased application flexibility and programmability; and separation of services and applications from network infrastructure. Since their inception, packet-based networks have brought a host of advantages to Communications Service Providers (CSPs).

In addition to these technological benefits, IP has also created an opportunity to change the very nature of the service delivery business model on which all telecom has been based. The inherent flexibility in the new IP network architecture — the separation of media and control planes — means that services can be developed, owned, and deployed in a highly distributed way. In fact, CSPs can deploy their services over someone else's network infrastructure, and multiple providers can collaborate by contributing service elements to make up a final end user service.

Collaboration: The New Service Delivery Model
The concept of multiple players collaborating to deliver next generation services is the new service delivery model, and it's the simplicity of IP that's driving this fundamental change.

While most CSPs are not yet accustomed to this type of collaboration, industry evolution is forcing them to re-think their traditional approach to service assembly and delivery. Increasingly, they are moving from a vertical model where they provide all functionality to a service ecosystem model in which each contributor creates and sells functionality that leverages their particular area of expertise.

The power of this collaborative approach can already be seen on the Internet where start-up companies create widgets that are "mashed up" with other applications, such as FaceBook, to create innovative services. This all works because FaceBook has exposed their APIs and provided SDKs (software development kits) so third parties can easily incorporate new features on the FaceBook platform.

Collaboration and the Service Ecosystem
Telecom operators are beginning to harness the next generation IP network in a similar way — by exposing service elements to third parties and by using third-party elements to create their own services. This process of sharing service elements can be called "service syndication." Service syndication is an activity that involves multiple contributors who, together, create a mutually beneficial service ecosystem.

To be part of this service ecosystem, CSPs must: abstract services from the network; automate service assembly; and expose this environment to application developers and partners to enable them to create unique content. This service ecosystem is the environment in which syndicated services are created and managed.

A dynamic syndicated service environment is made possible by the increasing trend to build services from service elements. Service elements are stored in Service Catalogs. A CSP can then combine service elements into a variety of services tailored to specific markets. The component approach provides a way to coherently

design, launch, and manage increasingly complex services. The Service Catalog approach is essential to service syndication and the creation of an effective service ecosystem.

With service syndication, service elements may reside in individual Service Catalogs belonging to multiple CSPs. Some of these CSPs may provide highly specialized services while others may offer a broad spectrum of products. In the service ecosystem, a multitude of players create and sell their own functionality. Services are exchanged through a capability called "managed syndication."

Lessons Learned From the Internet

The Internet is teaching much about rapid service deployment and syndication. Consider the mash ups on Facebook and other Web 2.0 applications. Internet companies like Google are not only pursuing Web 2.0 applications vigorously, they are also beginning to offer voice, email, messaging, and other communications services. In addition, they are capable of launching new services at a rate unheard of in the telecom industry. Unless the telecom industry is to be overwhelmed by Internet players, it will have to create its own service ecosystem.

A telecom service ecosystem will likely differ from a Web 2.0 ecosystem because of its focus on customer and service assurance — particularly for business customers. This is not to say, however, that these ecosystems cannot work together. In fact, it is likely that CSPs will sell services like bandwidth to Internet companies — and at the same time — use services being offered by Internet companies.

Each ecosystem will have its own specialties and strengths. The CSP ecosystem may differentiate itself based on service quality, and the Web 2.0 ecosystem may differentiate itself through creative new applications. By using both ecosystems, CSPs and Internet providers have the potential to access opportunities that would not otherwise exist. For example, a CSP could access the vast social networking market through the Web 2.0 ecosystem, and an Internet company could use the CSP ecosystem to access the enterprise market with its requirement for service quality.

Harnessing the Service Ecosystem

Managed service syndication is an opportunity for CSPs to put themselves at the center of the service ecosystem, to open up new markets, and to increase their service revenues.

The potential of service syndication becomes apparent in the following scenario where a CSP partners with an MVNO (Mobile Virtual Network Operator) like Disney.

Disney has a wealth of compelling content but lacks delivery infrastructure. Service syndication would enable them to deliver their continually evolving content by drawing on service and technology elements from multiple players in the CSP ecosystem — all orchestrated by the CSP. And it would eliminate the need for Disney to own and run its own infrastructure, which is not a core competency. In addition, syndication would enable them to market services to a variety of distinct segments and to a multitude of device types. For example, a CSP would supply telecom services as well as service fulfillment and assurance; another player would

bring video streaming; and additional syndicators would offer their value-added services.

Together, the CSP and the other syndicators would be giving Disney the means to deliver a variety of content-based services, to distinct market segments, over an ever-growing number of mobile device types. In this scenario, service syndication has created an effective way for Disney to maintain full control of its content and to develop compelling service offerings for multiple markets — without having to invest in its own infrastructure.

This scenario also underscores the fact that the CSP ecosystem lays a foundation for a multitude of new services and business models. By harnessing the power of this ecosystem, the CSP remains a vital player in the value chain.

Conclusion

The traditional approach to creating and delivering new services involves a lengthy sequence of steps. This delays service delivery and creates the risk of missing market opportunities. On the other hand, managed service syndication speeds time to market and return on investment.

In short, the multi-player delivery of next generation services allows CSPs to harness the service ecosystem and cost-effectively and rapidly provide diverse services and applications that meet their customers' diverse, and sometimes unique, needs.

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