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The New Frontier: Enabling Web 2.0 for Service Provider Success

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Web 2.0 refers to a large set of ideas and techniques behind many new Web sites and services that encourage user interaction, communication, and collaboration. Communication service providers (CSPs) can take advantage of this new breed of web-based communities and hosted services known as Web 2.0 to enable more flexible service delivery mechanisms and greater revenue opportunities.

In order for CSPs to gain a competitive advantage and monetize these new services, a next generation OSS solution that is Web 2.0 enabled with catalog management and order handling is critical for success. Faced with an exponential increase in back-office complexity due to next-generation services, CSPs cannot remain dependent on a cookie-cutter approach to order fulfillment. They must create an order management strategy that incorporates new service capabilities available in the rich experience of Web 2.0 to drive order fulfillment and orchestration across multiple networks and systems.

As the industry continues to immerse itself in the world of Web 2.0, it is essential that CSPs leverage the capabilities offered in Web 2.0 to drive and extend order fulfillment capabilities for their customers. To do this, CSPs need to refresh interaction points with end users to enable a rich Web 2.0 experience. Using Web 2.0 capabilities to drive a self-service environment can effectively reduce the time-to-market needed to introduce and enable rapid product adoption and customization. By enabling smoother order fulfillment and orchestration to support the customer's dynamic product lifecycle management (PLM) needs, CSPs can successfully keep up with the demands of a rapidly evolving telecom industry while maintaining a competitive advantage in a crowded market.

Creating a Self-Service Environment

Creating existing enablers for customers helps drive new customized services and revenue opportunities. CSPs can help customers leverage 2.0 capabilities by creating a self-service environment based on technology that enables a rich Web 2.0 experience. Examples of this includes using an enabling technology such as GWT / AJAX, and utilizing a portal, complete with underlying order configuration

and catalog browsing portlets in order to facilitate a self-service environment.

The ability to generate a multitude of new service bundle offerings adds to the complexity in back-end management. In order for end users to manage the complexity of this next-generation ecosystem, they need to have the ability to package and configure their own solution from a set of underlying services in the form of a centralized product catalogue that establishes customer-facing product orders. CSPs need to deliver product offerings and features that customers are actually willing to pay for in order to ensure that they are not commoditizing services amidst the explosion in new bundled offerings.

To accomplish this, CSPs can utilize Web 2.0 to create a self-service environment that delivers a broad, customized portfolio that blends access, services, products, applications and content. These services may be a collection of CSP-hosted services, or services provided by suppliers. Given the evolving environment, the set of services offered are dynamic, resulting in a much shorter product life cycle than previous versions of bundled services.



Optimizing Service Catalogs for Web 2.0

With customers browsing CSP websites for existing and potential services, it is vital to tailor additional services and bundled offerings to optimize the user experience based on the end user's history and preferences. Using a full-service product catalog that is user and channel-aware provides the ability to consume real-time web services from the CSP's back-end systems to compile a full profile of the end user. This helps create individualized offerings unique to the customer.

A catalog manager that provides product, service, and resource catalogs is key to addressing an end user's preferences on a dynamic basis. The catalog should enable the federation of underlying catalogs, whether located within the catalog manager itself, in other OSS/BSS CSP systems, or within supplier-provided catalogs. An example is a wireless offering that includes the melding of relatively dynamic

services, such as handsets, ringtones, MP3s, and applications that are held in CSP and supplier catalogs. The packaging of the services must be dynamic and reflect the demands and preferences of each potential subscriber.

A fully-featured service catalog can support offer rankings based upon the client profile and a guided Q&A approach. As a highly configurable management solution, a fully-featured catalog manager handles promotions, up-sell/cross-sell functionality and lifecycle management through a fully-integrated Web 2.0 enabled platform. By enabling the CSP to permit the end-user to pick-and-choose the services and features desired, the service catalog can then present a customized bundle back to the client as a unique offer specifically tailored to their needs. This must be done while applying a complex set of business rules to ensure that the selected configuration is workable.

For CSPs, rolling out bundled service offerings across a national network presents a highly collaborative ordering process laden with multiple order failure points. These type of manual "quote-to-order provision" implementations require multiple interaction points, as well as decisions distributed and managed by provisioning centers across a national network. Due to the highly collaborative order process requirements needed, Web 2.0 technologies are ideal for automating and streamlining complex telecom orders. Benefits from utilizing a 2.0 infrastructure and techniques include:

- Shortened service rollout time (typically realized in months)
- Elimination of multiple and duplicated systems
- Elimination of human input errors
- Reduction of personnel handling of order process

In order to create an environment that supports this functionality in a Web 2.0 environment, CSPs need to ensure that the following points are integrated into any dynamic fulfillment solution optimized for Web 2.0:

- Customized solutions that leverage 2.0 capabilities to attract and retain customers. CSPs must be able to offer, particularly to their commercial clients, customized services that are differentiated not only by price, but also with managed network services, hosting, connection to non-standardized equipment, and support beyond the traditional demarcation point. These tailored solutions demand tailored fulfillment strategies.
- Flexible and adaptive fulfillment strategies that incorporate the complexity of the services and their interaction with client hardware and software. The catalog and fulfillment solution must be capable of interpreting a dynamic set of business rules (often exposed by third party applications), and to decompose the order into services and orchestrate their fulfillment.
- An interactive, project management approach to service orchestration and delivery. The explosion of multi-site orders involving the expansion of CSP connectivity to new sites, inter-carrier and cross-border facilities, and site and service inter-dependencies, demands on-the-fly adjustments to workflow and schedules. Due to the complexity and variations of these

situations, an adaptive and interactive fulfillment solution managed by a project manager is required in order to ensure seamless order handling and management.

Conclusion

Web 2.0 is not all about next generation web applications. For CSPs, it is also about integrating new ways of interaction with their client base, creating a dynamic service delivery framework and enabling real-time billing and charging solutions that leverage and monetize the new service delivery platform. By utilizing an optimized catalog manager enabled for Web 2.0, CSPs can create a customized self-service environment that provides automated order fulfillment and orchestration to enable the creation of a larger marketplace with new services and ability to generate additional revenues.

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