

amdocs

WHITE PAPER

THE EVOLUTION OF SERVICE DELIVERY

IT'S NOT JUST ABOUT TECHNOLOGY ANYMORE

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EXECUTIVE SUMMARY

Quickly defining, launching and delivering new services is critical to service providers' ability to compete. But as convergence advances and new, aggressive and nimble competitors enter the market, expectations of the pace, volume and lifestyle impact of innovation are higher than ever. Customers are no longer content with simple, one-size-fits-all services. Today, they want a range of applications and features that further their lifestyle—a customer experience that's dynamic, constantly evolving and unique to them. The ability to provide it requires service delivery proficiency—and services—well beyond service providers' traditional scope.

Today, service delivery requires providers to create and manage a large and effective ecosystem of partners that includes application developers, advertisers, publishers, and content providers. The need to effectively on-board, manage and monetize the relationships with this diverse and growing set of partners, paired with an ever-expanding range of new services, is forcing service providers to rethink the notion of service delivery. It's not just about technology anymore.

This white paper discusses this shift and exposes the ways in which most technology-driven approaches to service delivery are insufficient to create competitive differentiation. What is required is an open, integrated and holistic service delivery framework that marries “core” service delivery components with key customer experience systems (i.e., critical business- and operational-support systems that enable the customer experience) and the ability to create a collaborative partner environment that fosters innovation. The result is the agile delivery of innovative, lifestyle-enabling services in the context of a differentiating and intentional customer experience.

THE PERCEPTION OF SERVICE DELIVERY HAS CHANGED

Until recently, if you asked a service provider executive what keeps him up at night, he likely would have said it's how his company is going to bring the next "killer" service to the market faster than the competition. And you wouldn't be surprised to hear this. The race to "turn up" new switches, cell sites and services on the network has been the cause of many sleepless nights since the deregulation of the communications market. And having the right infrastructure in place to do so has always been critical. But more recently, the hypercompetitive communications and media marketplace, compounded by the increasing expectations of the end-consumer, are forcing service providers to rethink the traditional notion that service delivery is just about managing their services (and a handful of partner services) at the network level.

In today's market, service providers face a whole host of new competitors, all trying to disintermediate them in the value chain and take control of the customer relationship. For example, devices like the Apple iPhone, content platforms such as Nokia's Ovi, and Web 2.0 environments such as Facebook and MySpace have already succeeded in redefining the customer experience. Yet at the same time, they threaten to marginalize the role of the service provider in the digital lifestyle value chain. Realizing that many of these new competitors and their innovator ecosystems can innovate faster and more efficiently than they can, service providers must consider new ways of bringing to market an exponential number of innovative services within their walled gardens (their branded portals that control their users' access to Web content and services), while also capturing their share of growing off-portal activity.

As the number of competitors increases, so do the options for customers. And it's not surprising that customers have become more and more selective regarding with whom they spend their money. They don't just want cheap, "vanilla" services anymore. They want highly personalized experiences in which services are delivered to them in the full context of their individual usage habits, social connections and preferences.

But how can a service provider bring to market the innovative services to address the myriad expectations of its millions of customers?

Service providers are realizing that they can't do this on their own, or even with the help of a few strategic partners. Only a rich ecosystem of partners can enable the degree of innovation required to meet customer expectations. Consider the "long tail" of digital media. Service providers couldn't possibly create, launch and manage the range of esoteric, often highly personal applications, content and commerce options unfolding in cyberspace. But they must broker those transactions: provide a platform for content providers and developers to bring their services and digital goods to market, and provide a simple, personal, valuable customer experience that encompasses them.

As a result, the perception of what constitutes effective service delivery has changed. Although having the right technical infrastructure, or "plumbing," in place is still critical to quickly defining and delivering a new service, building competitive advantage requires service providers to augment this technology approach with capabilities that enable consistent, integrated and innovative experiences for both customers and partners.

“It's no longer just about the network, operators must now be generous in addressing customer needs while being mindful of cost and time-to-market factors that make for an improved customer experience.

The communications industry has traditionally been technology-driven, but increasingly, the focus on customers is essential for addressing changing market demands.”

KARL WHITELOCK, STRATECAST, OSS BSS ASIA PACIFIC EXECUTIVE MINDXCHANGE SUMMIT, MARCH 2008

WHY MOST SERVICE DELIVERY PLATFORMS AREN'T ENOUGH

Although no industry standard exists, what is thought of as a “common” service delivery platform, or SDP, can be described as a service-oriented architecture (SOA) in which various customized service delivery applications (e.g., service creation and orchestration) are integrated and sold as an end-to-end solution.

Service providers have typically looked to SDPs to address an urgent need to bring to market a new line of business (e.g., IPTV, multimedia messaging service) or as a horizontal infrastructure to overcome existing network silos to increase efficiency and speed time to market for convergent services and bundled offers. What these SDPs have lacked, however, is a holistic view of the customer experience. They focus completely on the technology aspects of service delivery, not on how the customer actually experiences the service.

THE CUSTOMER EXPERIENCE

Although integrated at the fringe, SDPs typically lack cohesion with the business- and operational-support systems (BSS/OSS) that have a major impact on the customer experience, such as digital content management, offer management and partner management, etc. These customer experience systems are often thought of as secondary, rather than an integral part of service delivery.

Let’s take a scenario where a customer is currently located in an airport. The service provider can combine this real-time contextual information (location) with information about the customer’s favorite sports and his preference to accept short advertisements in return for free content, and offer him a short sports clip. Since the service provider knows the customer is not at home and not likely to have access to a full-size TV set or PC screen, the offer negotiation with the customer as well as the actual content (the ad and the video clip) are delivered to the mobile device, using the content transcoding functionality of the service delivery domain. The service delivery components involved in this short scenario include service creation, partner management, content management, advertisement and offer management—each played a critical role. For example, without the content management and content transcoding functionality, the service provider may fail to negotiate the offering or to deliver the content as per customer preferences and context, hence impacting the customer experience.

Typical SDPs are powered by processes that were intended to support interaction with the network and IT infrastructure, not with the customer. They tend to ignore business processes that impact the customer experience—those spanning from the initial point of interaction through to the network. Without the necessary customer context (e.g., device, location etc.), the value of an SDP is limited to the technical mechanics of service creation, execution and orchestration. If we look at the scenario above, if the customer had said he is not willing to be exposed to ads in return for content and the service provider had sent an offer to view a video, it would have been unwelcome and, if repeated, could eventually invite churn.

But, if a service provider is able to integrate service delivery with real-time customer information and the underlying business processes, it can efficiently deliver highly targeted services that meet customers’ exact needs, preferences and context. Achieving this kind of intentional customer experience requires the service provider to have a full lifecycle

view of the customer, the service and the partner. This involves many customer experience related processes, which cross various BSS/OSS and the typical SDP functions. So even if an SDP can bring new services to market quickly, if it is technology-focused and disconnected from experience-focused business processes, as the examples above show, it most likely will fail to provide the competitive differentiation service providers seek.

THE PARTNER EXPERIENCE

Many SDPs have also ignored the partner experience. Like customers, partners (e.g., Web 2.0 developers, advertisers, etc.) can choose from a multitude of service providers with whom to do business. Attracting and retaining high-value partners is critical to competitive differentiation and bringing to market quickly the innovative services customers want. For example, third-parties seeking service provider partners would find value in the ability to access and use core service provider system assets (e.g., customer experience systems such as charging) to support their offerings. However, most SDPs do not expose these capabilities or support the business processes necessary to attract and support a rich partner ecosystem. Furthermore, many SDPs do not provide the ability for service providers to monetize such ecosystems. For example, service providers typically are not equipped to create a marketplace of service building-blocks, where each partner can contribute a component that can be combined with another partner’s component and with the service provider’s unique assets

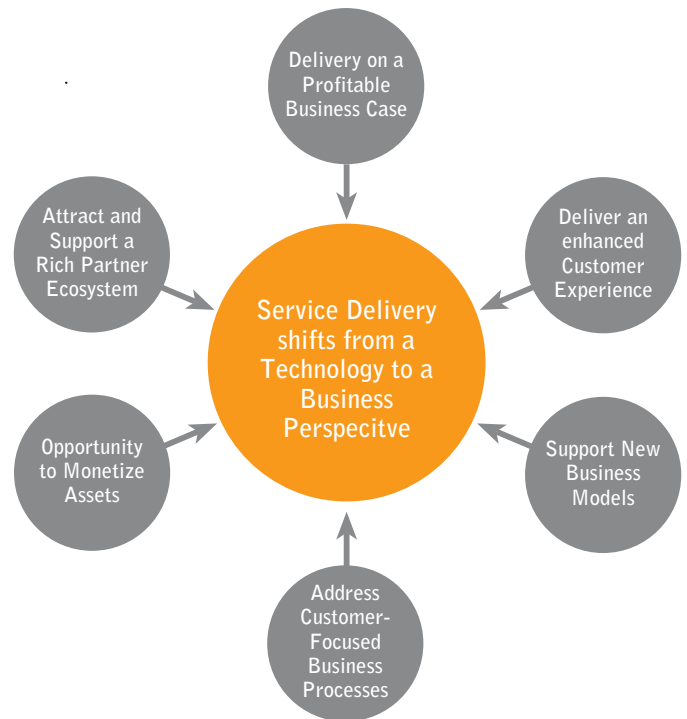


FIGURE 1: Drivers Shifting Service Delivery Focus from a Technology to a Business Perspective

(such as systems, usage and preference data, or even the customer relationship) to create an innovative new service. Some partners may be willing to pay the service provider for taking part in this model, so such proliferation of innovation will not only enrich the customer experience, but may also enable a new revenue stream: the “Telco 2.0” model. Most SDPs provide limited support for the Telco 2.0 model as well as for partners in general. They don’t enable the necessary partner business processes nor are they well integrated with the key BSS/OSS capabilities to successfully support partner ecosystems. Moreover, they lack the flexibility to support various partner business models, such as advertising.

Last but not least, a lot of SDPs do not deliver projected ROI. Their deployments are pure infrastructure projects focused on providing the “plumbing” to support service creation and delivery. Very few support a wealth of new services out of the box that could be immediately monetized. This significantly reduces ROI for extremely complex and costly projects.

In short, a new service delivery approach is needed. One that recognizes the shift in focus to address the business perspective—not just technical concerns, as illustrated in Figure 1.

A NEW APPROACH TO SOLVING SERVICE DELIVERY CHALLENGES

In order to truly stand out from a growing crowd of competitors, service creation and delivery must begin with a focus on the customer and partner experiences. Doing so requires developing an open, integrated service delivery framework. This approach includes not only the core components of an SDP, such as service creation, orchestration and execution, but other critical customer experience systems and the underlying business processes that will enable service providers to attract a rich partner ecosystem, enable service innovation and enhance the user experience.

There are many interpretations of the service delivery framework (or SDF) in the market today, but all share an important common denominator: the blurring of lines between what was thought of as the “core SDP” and other customer experience systems. Figure 2 depicts Amdocs’ view of a service delivery framework and its key components. Amdocs’ vision of the open service delivery framework includes customer experience systems together with the “core SDP,” to enable service providers to deliver both the customer and partner experiences, and deliver on their business objectives.

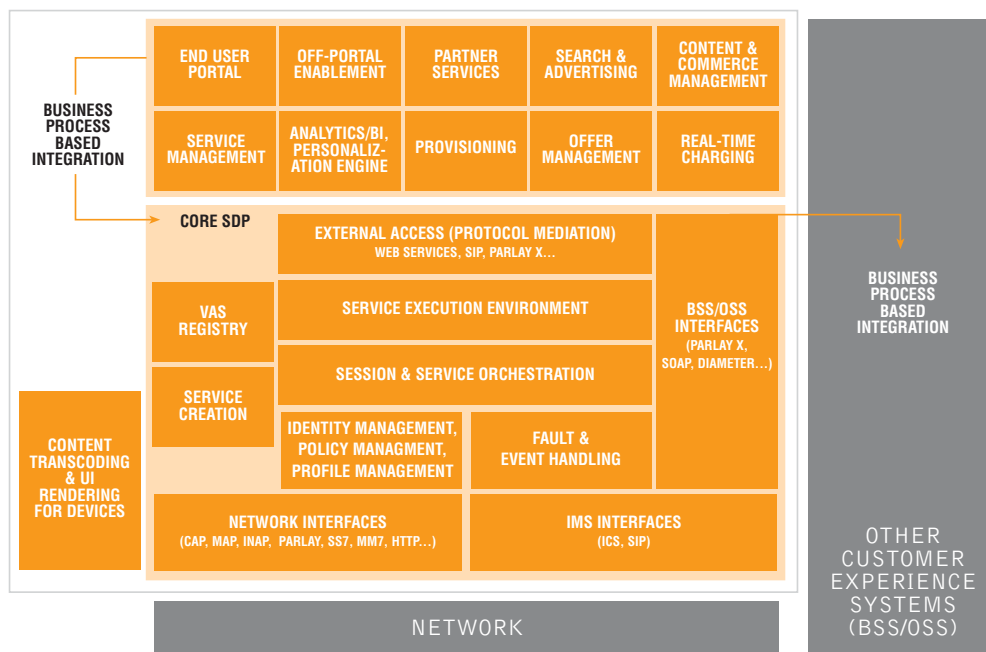


FIGURE 2: Amdocs’ view of the open service delivery framework

Take, for example, offer management. Service providers today must manage an increasing number of services and applications across networks, partners and lines of business. In order to quickly and cost-effectively combine and optimize these services into personalized offers, providers must centralize the customer and product data repositories that feed offer management. Thus, applications like the enterprise product catalog are key enablers within the scope of a service delivery framework.

Another example: In order to bring to their customers new content-based services, service providers must consider digital content and commerce management (both on- and off-portal) within the scope of service delivery. And providers must work with an increasing number of partners to deliver innovations like service mash-ups and Web 2.0 applications while monetizing them by managing the end-to-end commercial aspects (including customer and partner relationship monetization). This requires specific partner services and processes to create and manage a collaborative partner ecosystem that enhances service creation and delivery.

But in order to deliver the intentional customer experience, providers cannot consider applications and systems alone. They must ensure that experience-critical business processes are fully integrated within a service delivery framework and are aligned with the customer experience. For example, a service provider wants to launch a bundled mobile and broadband offer, but has multiple, differing business processes (e.g., provisioning) for these two lines of business. Without proper alignment, customers' experience of the new service will likely be disjointed and inconsistent; their first impression, a disappointment.

The need for a more holistic and integrated view of service delivery, has been acknowledged by leading industry bodies, such as the TeleManagement (TM) Forum, which has proposed a model of the SDF. Accordingly, the TM Forum's SDF brings together, in a logical and holistic view, both core service delivery and customer experience functions, including service design, creation and composition, deployment, service provisioning and activation, service execution, charging, billing and revenue management, service retirement, monitoring and trouble resolution, etc.

Adopting this kind of holistic view of service delivery is critical to delivering a customer experience that will be personal and immediately valuable. However, evolving complex existing back-office systems is no easy task. Most service providers will need to take an evolutionary approach to transforming their service delivery architectures. That means that ideally, they must be able to deploy open, modular solutions that meet specific business needs and business cases today, with the option to grow or change their service delivery infrastructure over time as market dynamics necessitate and as resources allow.

GOALS OF THE TELEMANAGEMENT FORUM'S SDF:

- > Provide near zero touch business processes for delivering next generation services
- > Support business practices associated with multi-provider cooperation
- > Enable a new generation service marketplace of managed & monetized composite services providing a new ecosystem for service business model evolution that supports e.g. on-boarding of 3rd party services, inter-partner settlement and management
- > Allow consistent end-to-end management of services exposed by and across different service provider domains and technologies, such as communication or web 2.0 community services
- > Support agility and faster time to market by leveraging existing assets (e.g. network resources or OSS/BSS exposed as services) and by supporting the modular creation of new assets (e.g. by combining services)
- > Take advantage of the collective intelligence/creativity present within multiple providers' domains

AMDOCS' APPROACH TO SERVICE DELIVERY

Amdocs is among the few vendors to support a holistic view of the service delivery domain. As shown in Figure 2, it is our view that BSS/OSS systems and business processes should be seamlessly integrated with core service delivery capabilities. This integration allows providers to manage service creation and delivery as part of the complete customer and partner experience.

The broad functionality in the Amdocs CES 7.5 Portfolio bridges the gaps common in most SDP approaches between network and IT systems, core SDP functions, and other customer experience systems. Taking this approach, service providers can manage the complete customer lifecycle—from any point of interaction through to the network. The following Amdocs CES 7.5 products and solutions allow service providers to meet all of their service delivery requirements today and into the future:

- > **Amdocs Service Delivery and Control Solution** – This solution provides core service creation and execution capabilities, along with multimedia media support and dozens of out-of-the-box value-added services to accelerate time to market and immediately drive revenues. These include fun ring back tones, tele-voting, and other revenue-generating services for both mass market and business customers. It connects Amdocs real-time charging and other BSS functions to all types of networks and provides a complete and consistent service experience.
- > **Amdocs Qpass Retail Suite** – Delivers a rich, personal shopping experience across all storefronts for all types of digital content and value-added services.
- > **Amdocs Qpass Off-Portal Suite** – Enables profitable growth for service providers and their partners by enabling off-portal or direct-to-consumer digital commerce models.
- > **Amdocs Partner Settlement Manager** – Manages the complete partner lifecycle from partnership agreements to settlement.
- > **Amdocs Multi-Channel Self-Service** – Enables service providers to provide customers with self-managed billing, payment, customer profile and account information, and problem-handling through multiple self-service touchpoints, including the Web, IVR and television.
- > **Amdocs Search and Digital Advertising Solution** – Leverages subscriber data and network infrastructure to provide targeted and personalized advertising both on- and off-portal.
- > **Amdocs Enterprise Product Catalog** – Centralizes product information to empower more agile product strategies and achieve fast, low-cost time to market. Aligns market offers and customer needs to realize greater customer value, and removes technology and process barriers to product innovation.

- > **Amdocs Service Management** – Operationalizes new products, enabling service providers to federate and use existing OSS, delivering a single common view and configuration approach across new and existing systems, and speeding time to deploy new services.

- > **Amdocs Service Fulfillment** – Supports the provisioning and fulfillment of network- and subscriber-based services, including, design and assign and activation, as required.

In addition, Amdocs has a roadmap to provide additional solutions in the service delivery domain. These include:

- > **A business and technology partner collaboration environment** that provides developers and partners easy access to service provider and third-party services.

- > **An online experience solution** that uses fine-grained customer preferences to guide service provider-consumer on-portal interactions—whether for physical or digital goods, or communication services—via Web, handheld device or TV.

All Amdocs offerings are designed with a focus on the customer experience and are driven by best-practice business processes. In addition, their modular, SOA-based design and compliance with industry standards provide our customers with the flexibility to easily evolve their service delivery strategies with minimal risk. And we complement our product capabilities with our unique consulting expertise, to ensure our customers build and implement a service delivery strategy that enables them to focus on both the customer and partner experience, and achieve competitive differentiation.

To learn more about how Amdocs can help you evolve your service delivery strategy, please speak to your Amdocs account representative today or visit www.amdocs.com.

CONCLUSION

Service providers must manage their service delivery strategies more holistically, as part of the overall customer experience. To do so requires adopting an integrated service delivery framework that includes not only the common components of an SDP, such as service creation, orchestration and execution, but also the critical applications that provide the context of the end-user experience and that support the complete customer, service and partner lifecycles. As a result, service providers must place increased emphasis on business-focused solutions in the areas of digital commerce, partner and service management within their service delivery strategies. In addition to these business-focused capabilities, providers must also be able to support the underlying business processes that enable the service lifecycle, including integration with numerous partners and third-party application developers, and the end-to-end customer and partner experience.

This notion of a more holistic service delivery framework approach to managing service delivery in the broader context of the customer and partner experience is rapidly gaining momentum. Amdocs is uniquely positioned to enable service providers to minimize the risk of evolving their service delivery strategies. Only Amdocs provides the relevant business process expertise and solutions spanning network, BSS/OSS and service delivery. Only Amdocs has the breadth of standards-based, modular yet integrated applications required to enable service providers to not only facilitate service innovation and rapid time to market, but to also deliver the intended customer experience and create a rich ecosystem of partners that will enable rapid service innovation.

ABOUT AMDOCS

Amdocs is the market leader in customer experience systems innovation, enabling world-leading service providers to deliver an integrated, innovative and *intentional customer experience™*—at every point of service. Amdocs provides solutions that deliver customer experience excellence, combining the software, service and expertise to help its customers execute their strategies and achieve service, operational and financial excellence. A global company with revenue of \$2.84 billion in fiscal 2007, Amdocs has more than 17,000 employees and serves customers in more than 50 countries around the world.

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