

amdocs

# CUSTOMER EXPERIENCE-DRIVEN SERVICE FULFILLMENT

INTRODUCING THE AMDOCS ORDER-TO-ACTIVATION SOLUTION

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# 1. EXECUTIVE SUMMARY

The telecommunications game has changed dramatically in the past three years for all providers of communications and entertainment services, regardless of the access technologies – the stakes are higher, the players bigger and the battle for the customer more intense than ever.

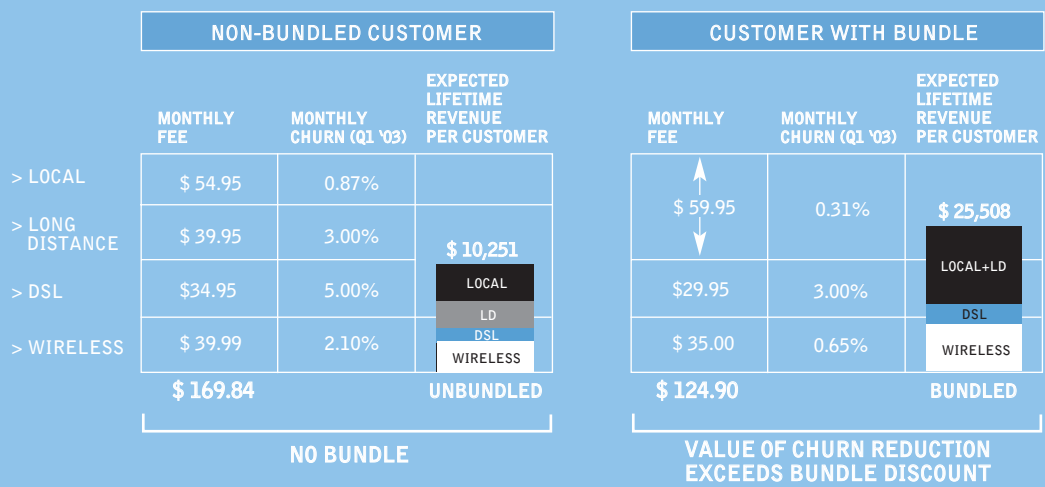
One of the most significant strategies in this game is the bundling or packaging of services. Packaging services together holds the promise of reducing the overall price to the customer, increasing convenience and enhancing the value through the innovative blending of services. This is true for packages of voice and data or content services in a 3G mobile world, voice-video-broadband-wireless bundles, as well as enterprise solutions that blend IT and complex communications offerings to solve networking or operational business challenges. For the service provider, packaging can reduce customer attrition dramatically and increase the average expected lifetime revenue from a customer. According to Smith Barney, Merrill Lynch, and Booz Allen (Figure 1), a bundle of local, long distance, DSL and wireless services, while reducing the total average revenue, more than doubled the expected lifetime revenue per customer from \$10,251 to \$25,508 by lowering the attrition rate (monthly churn) of customers using the bundle.

Service providers all over the world are racing to add value-added services to their traditional services mix and to offer packages to attract, keep and grow their customers, but all is not well in the delivery of these services. While the package holds great promise, profitability of these new services and packages has lagged. In addition, the customers that purchase these attractive bundles have often suffered poor experiences in getting these services delivered and billed properly. Individually, there have been major challenges in fulfilling many of these new services, such as DSL. Service time-to-market and customer responsiveness have been low, and order-error and fall-out rates high. Together, in packages, these problems and costs are multiplied and the customer impact intensified. Moreover, the overall drive to lower costs is drawing attention to the highly-inefficient delivery of services across increasingly integrated service

providers. All of this is happening at the same time that service providers are dealing with that other great challenge of continually lowering their costs.

In this competitive environment, these new services and bundles must be brought to market with ever-increasing efficiency; service providers need to improve margins on highly-competitive services, achieve better time to market and accurately fulfill service requests to promote customer satisfaction and gain long-term loyalty. Moreover, the customer expectation is that integrated corporate solutions and consumer packages that are marketed and sold as a coherent unified offering should be delivered as such. There is little or no tolerance for the shortcomings of a service provider's operations.

However, service fulfillment today is characterized by manual activities, lack of system integration or process standardization, inherent inefficiencies, multiple systems and databases, bottlenecks and dated procedures. Fulfillment systems including ordering systems, provisioning and activation systems, inventory systems and other fulfillment-related systems have been customized to support specific products and lines of business and lack flexibility in bringing new services to market. Development times are lengthy and costly as systems and business processes are rigid and inflexible. Custom-built systems and the use of many small, niche suppliers have resulted in silo-type architectures with minimal integration capabilities. Bundled offerings are marketed and sold as such, but delivered separately through the traditional, independent processes, unintentionally creating damaging and costly customer experiences. This approach has caused the continuing vicious circle of increasingly more complex integration scenarios, where any new OSS must interface with a range of other OSSs, (many of which have proprietary, unpublished APIs). As service and product requirements rise, the cost and complexity of development upgrades and integration will continue to increase, creating a service fulfillment "crisis" for many service providers.



**FIGURE 1**  
COMPARISON OF EXPECTED LIFETIME REVENUE OF UNBUNDLED VERSUS BUNDLED SERVICES

SOURCE:  
SMITH BARNEY,  
MERRILL LYNCH,  
BOOZ ALLEN ANALYSIS

“Carriers felt that provisioning & activation and inventory management were the functional areas least supporting their product/marketing strategy.”

– GARTNER, 2005<sup>1</sup>

Increasingly, solutions must be brought forward which ensure the customer experience is integral to the fulfillment process. They also need to ensure an integrated transition from the front-end customer order capture, to the accurate and timely activation and delivery of the service, or increasingly, the bundle of services to the end customer. The challenge is moving from parallel streams of inefficient service fulfillment processes to a unified and optimized customer fulfillment process that spans order-to-activation and creates an intentional customer experience across services and channels, all at the right cost. This is a significant challenge which impacts people, processes and technology.

Amdocs Order-to-Activation Solution takes an integrated customer management (ICM) approach to resolving the fulfillment crisis for next generation services, packages and bundles. Amdocs’ approach is to enable customer experience-driven service fulfillment. This refers to the intended customer experience in procuring the service – what you want your customers to see and feel, and the cost which is needed to deliver the service in order for it to be profitable. This is the driver of your fulfillment strategy, business processes and systems. In doing so, Amdocs helps service providers to achieve a truly end-to-end service fulfillment solution, transcending traditional boundaries of OSS and BSS and linking the network to the customer. As a result, the business user gains more control and agility in defining and modifying business processes for delivering services to customers, and IT gains more control over and visibility into back-office systems and processes such as inventory, provisioning and activation.

<sup>1</sup> Taken from: “Market Focus: Carrier Demand for Operations Support Systems, Europe, 2004-2005” by Verne Anton, Gartner, March 2005

Amdocs Order-to-Activation Solution for wireline, cable, wireless and convergent service providers streamlines and automates key fulfillment processes. This provides high visibility of the entire lifecycle in order to deliver services in an accurate, reliable and cost effective manner, resulting in an intentional, high value customer experience.

Offering not only expertise and full accountability for the solution, (including business strategy, design, implementation and transition) but also a leading portfolio of integrated, modular products and partners spanning order capture to network activation, Amdocs is uniquely positioned to deliver an integrated, lower-risk, cost-efficient answer to your highest priority needs.

This whitepaper outlines Amdocs’ perspective on the current fulfillment challenges facing service providers and provides a new approach to the problem through customer experience driven service fulfillment. Amdocs Order-to-Activation Solution is also presented.

## CASE STUDY

### EIRCOM, IRELAND

“Amdocs has helped us improve our operational efficiency and customer service, while reducing our operational costs... We can now get a data services order out in three to four minutes. This used to take a minimum of 20 minutes... Now we can train a CSR in three or four days; in the past, it could take months... There’s an end-to-end, overall control that allows us to make sure no orders are lost. Amdocs provides us with a rich, modular system that we can build on going forward...”

GERRY QUINN, IT DIRECTOR, EIRCOM

## 2. SERVICE FULFILLMENT AND THE INTENTIONAL CUSTOMER EXPERIENCE

An intentional customer experience is one in which all customer interactions and process flows across all branded services and interaction channels are planned. Business is carried out in such a way that enhances the value of the customer relationship, while optimizing efficiency. The experience and interactions are relevant, convenient, accurate and timely. The customer experience is the primary design driver of business processes and systems. Not surprisingly, most customer experiences today are ad hoc. They are the random outcome of the way a service provider does business and typically are the result of the industry's traditional network-centric view and silo business approach. The intentional customer experience is as much about efficiency as it is about customer satisfaction. Both are essential in this increasingly competitive market.

The order-to-activation cycle, or service fulfillment, is one of the most critical process areas for any service provider. It has a significant impact on the creation or destruction of customer value and can make or break the service provider's profitability. So, what is an intentional customer experience in the service fulfillment domain? By way of a simple example, let's meet Herbert Martin and follow his experience.

*Herbert Martin is a 41 year-old electrical engineer from Buffalo, New York. Herbert has seen the television commercials for ZComm's new QuadPac bundle of local, long distance, wireless, IPTV, and DSL services for an attractive flat rate per month on one convenient bill. Herbert calls ZComm's toll-free number and reaches Jeff, a customer service representative at ZComm's Montreal-based centralized contact center. Jeff immediately identifies Herbert as both a high-value wireless customer and the VP of Operations and IT for the Buffalo Sabers Ice Hockey Club. Jeff has access to Herbert's recent interactions and profile. Jeff is guided through a script that helps provide Herbert with information on the bundle and, based on Herbert's profile, Jeff is able to recommend the best QuadPac Plan and equipment. Jeff is able to provide Herbert with a convenient appointment time just a few days out for his installation. Herbert is given a tracking number and offered the option to track his order via the MyZComm web portal. The next day, Herbert checks the status of his order and sees that all services are ready pending the installation of his equipment. Herbert also sees an online advertisement about the new Blackberry device online and decides to modify his order and upgrade his bundle, easily handling this change by himself online. Two days later, as scheduled, a technician visits Herbert's home. During the visit, the technician discovers that Herbert frequently works from home. The technician, with full access to Herbert's profile, offers a WIFI upgrade. Herbert accepts and the technician proceeds to install his equipment and devices, and educates Herbert on his services and equipment. Several days later, Herbert decides to upgrade from the 1MB to the 2MB DSL service, making this change instantly on the web portal. At the end of the month, Herbert receives his monthly bill which accurately reflects the changes in his plan and his expected charges and discounts.*

This rather unremarkable example of a customer experience lies in sharp contrast to many experiences that consumers are having with bundled offerings. For example, a leading North American service provider offered a highly-attractive service bundle that included fixed voice, wireless, satellite TV and high-speed Internet with a common monthly bill. An independent sampling of this service found that for one customer who wished to switch from their current services to this bundle it took a total of three weeks to complete, during which the customer had over 21 interactions with the service provider including four technician visits, more than six hours on the phone with customer service agents and seven different welcome letters!

The problem was that the service provider operated a long line of business silos in which the organization structures, business processes and front and back office systems were all network-centric and operated in isolation to one another. As a result, each line of business interacted separately with the customer to deliver its service without insight or regard to the other services in the bundle nor the customer's behaviors or preferences.

This fragmented approach meant that the service provider had no insight into their customers and any customer experience was merely a by-product of the service provider's operating activity. Needless to say, any perceived value of the bundle was negated by a customer experience that was inefficient, impersonal and extremely frustrating. Moreover, the profitability of these services is clearly lower than in our example – duplication and errors translate into an extremely high cost of fulfillment. However, customer experience-driven service fulfillment not only reduces time to market but also cuts costs as well. This is because it reduces the amount of manual activities, which are costly, prone to error and do not scale.

### 3. THE SERVICE FULFILLMENT CRISIS

Figure 2 depicts the intentional customer experience in terms of the degree of enterprise agility – the ability to quickly and flexibly respond to the market – and of alignment – the degree of coordination and synchronization of people, process and technologies with company strategy. Our Herbert Martin example falls into the upper-right quadrant, while our latter real-life example demonstrates an “uncoordinated customer experience” – the service provider quickly offered an attractive bundle to the market which met it with wide acceptance. However, the service provider was unable to deliver, causing customer dissatisfaction, attrition and sub-optimal margins. For business success, the intentional customer experience – high agility and alignment – is critical.

Many service providers cite fulfillment as the process domain which is most in need of improvement of their support system infrastructure. Amdocs’ experience working with leading service providers globally highlights some of the telling statistics of this critical process area:

- > 10% - 30% of orders accepted without qualification
- > An average of 10 and as many as three dozen ordering systems across the enterprise
- > Typically hundreds of additional systems involved in fulfillment processes
- > 10%+ rejection rate for complex service orders due to incomplete or inaccurate information
- > 30%+ of the services not billed correctly or on time due to fulfillment issues
- > Typically 30-50% discrepancy between data stored in inventory systems and actual network assets

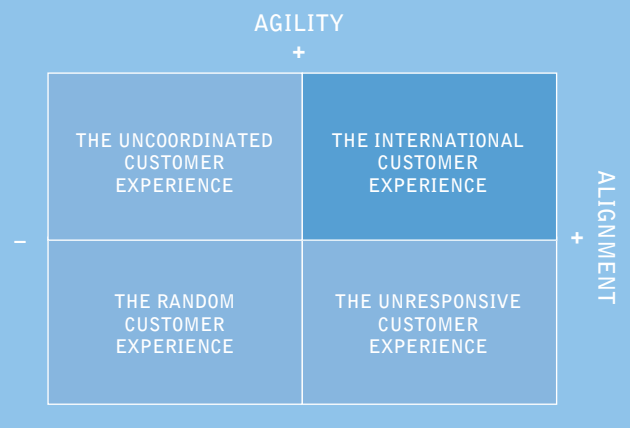
“Many factors are hampering the growth of broadband...perhaps the biggest problem is high deployment costs. Provisioning costs are so high that it may take a couple years for a carrier to recover its DSL installation expenses.”

– TRI, 2001<sup>2</sup>

<sup>2</sup> Taken from “Telecom OSS & E-Business Integration”, 2001 Technology Research Institute

**FIGURE 2**  
 TYPES OF CUSTOMER EXPERIENCES  
 CREATED BY DEGREE ENTERPRISE  
 AGILITY AND ALIGNMENT

SOURCE: AMDOCS BUSINESS RESEARCH



Today, the delivery of an intentional customer experience at the right cost is blocked by existing infrastructure and business processes. Service providers must radically transform the way they do business in order to achieve an integrated customer management (ICM) approach to service fulfillment, as well as to slash operating costs in order to remain price and margin competitive. In order to increase their revenues, service providers need to deliver advanced next-generation services and content over broadband technologies. They need to deliver better and more tailored services, to rapidly expand, as well as handle a large portfolio of services, (some of those being short-lived high turnover data services).

However, these measures, without making the necessary back-office changes, will only further increase their costs and frustrate customers. Delivery and success in this new environment requires much tighter management of the back-office systems and processes: manual activities, lack of system integration, inherent inefficiencies, multiple systems and databases, bottlenecks and archaic procedures are all conspiring to significantly slow down progress towards an ICM approach.

“SPs’ [service providers’] increasing focus on the customer and on efforts to operate more efficiently is the main driver for commercial service fulfillment”

– OSS OBSERVER, 2004<sup>3</sup>

<sup>3</sup> Taken from “Service Fulfillment Market Outlook 2004-2009”, by Larry Goldman

The service fulfillment “crisis” is fuelled by five main issues, converging like a “perfect storm”, and forcing service fulfillment from the back-office to the boardroom. They are:

1. Intense competition for the customer and rising customer expectations
2. The need for greater business agility and significantly faster time-to-market (and revenue) for new services and service changes
3. A lack of alignment caused by a build-up of disjointed, manual, and uncoordinated fulfillment processes and systems
4. A lack of visibility into the service fulfillment process for all stakeholders and inter-dependent systems and processes
5. A lack of proven, reliable, and stable vendors capable of delivering turnkey solutions to the fulfillment crisis

#### INTENSE COMPETITION FOR THE CUSTOMER AND RISING EXPECTATIONS

All industries are striving to create a superior customer experience. As a result, increasingly, customers are coming to expect a seamless, relevant and convenient experience from the first time that they interact with a service provider’s brand. In procuring services from a service provider, the consumer and business customer begins the process of evaluating the value delivered or destroyed over the lifecycle of their various experiences with the brand. One of the first critical processes that new customers encounter is fulfillment – from order-to-activation. Negative customer experiences due to process breakdowns, inaccurate provisioning of services, excessive delays, bottlenecks and errors can be detrimental in shaping a customer’s perception of the service provider and shaping customer loyalty. They can be negative enough to lead to cancelled orders for new services and even to churn. Today, the service fulfillment domain lacks integrity – it is not trusted by the service provider and it destroys the perception of value in the minds of customers.

- > More than 42% of consumers would rather prepare their taxes than deal with an inexperienced or unhelpful service representative
- > Only 30% of consumers believe that their service providers offer the services, entertainment and payment options that best meet their needs
- > More than 64% of consumers believe that the loss of business and increased competition among service providers is the biggest motivator for companies to improve their customer service
- > Consumers identified their biggest complaints:
  - > Almost 18% cited unhelpful customer service representatives
  - > Only 25% of consumers believe that their service providers always understand their needs

#### CONSUMER EXPECTATIONS ON THE RISE

SOURCE:  
AMDOCS 2005  
CONSUMER SURVEY  
(1,100 CONSUMERS SURVEYED)

Corporate customers can be even more demanding – moves, additions, changes and deletions must be handled in a timely and accurate manner as every company watches the bottom line more intensely. As noted, the bundle or packaged solution strategies of service providers have intensified this issue. When bundles or solutions are marketed and sold as integrated offerings, the customer expects an integrated experience. However, too often, business processes and systems remain at odds with the expected experience. Instead, far from the hoped-for intentional customer experience, many service providers create an ad-hoc experience across the bundle of services and across interaction channels, destroying their customer value and driving up their costs. Corporate customers also need increasingly complex services delivered over hybrid networks. This requires greater coordination across the various silos and, increasingly, complex-related processes.

Some of the other issues that create this integrity gap and impact the customer experience in a negative way include the following:

- > A lack of integrity of network data leads to the creation of false expectations, misdiagnosed problems, recurring errors, and customer dissatisfaction
- > A lack of automation and poor scalability means prolonged order cycle times and longer, less predictable waiting periods for customers
- > Provisioning fall-out leads to failures to meet customer commitments
- > Low provisioning success rates leads to customer-service issues
- > Billing errors frustrate customers and drive calls to the contact center (not to mention revenue recognition issues, incorrect payments to suppliers, and high levels of unbilled resources or activities which significantly impact the bottom line).

An example of the impact of this complexity and lack of integrity is in the inventory area. In legacy networks and management systems, inventory was typically managed manually and at a network technology level. Element management evolved to incorporate more automation; however, there was no mechanism in place to have a centralized and aggregate view of all inventories across all technology domains. As an example, a European service provider with less than 2 million subscribers had, in 2003, as many as 50 individual inventory systems! Consequently, it was very difficult to manage orders for complex services across multiple networks and technologies. Data integrity (30-50% discrepancy between data stored in inventory systems and the network) was another severe problem that resulted in a high provisioning fallout rate and lack of ability to perform pre-order validation (i.e. to validate the availability of the service to customer in the order capture stage).

Service providers have evolved to a situation where they have many disparate, services or network-specific ordering and inventory systems, making it difficult for them to create an effective end-to-end fulfillment process. Individual systems were not adaptable to new services, and consequently, it became easier to create a new system to handle the dynamics of a new service. Unfortunately, service providers have implemented and acquired so many systems that it has become extremely difficult and costly. In addition, traditional services typically relied on a single network technology and could therefore be supported using a silo solution. However, newer generation services often require multiple technologies. Silo solutions cannot reach across all of the technology domains that they need to manage. Corporate customers demand seamless and timely delivery of services that today's fulfillment environment simply cannot provide.

#### INCREASING NEED FOR GREATER AGILITY AND FASTER TIME-TO-MARKET

The market is changing at an increasing rate. New competitors, business models and service innovation call for a dramatically new level of responsiveness. Speed and flexibility is becoming a competitive weapon. The introduction of new services has an impact on the systems and it is essential to reduce these, as well as to add standardization and configurability to the process. Increasingly, the time-to-market for new services is now measured in days or weeks, rather than months. Services, especially content services, are increasingly time-sensitive and even occasionally temporary (for example, World Cup national ring tones) and service experimentation is increasingly the norm. All of these factors lead to a need for rapid time-to-market for new services at significantly-lower costs.

Contrary to the need for agility in the business, today's service fulfillment environment suffers from lengthy and costly development times due to systems and business processes that are rigid and inflexible. Custom-built systems and the use of many small, niche suppliers have resulted in silo-type architectures with minimal integration capabilities. The number of systems and databases impacted by the changes involved in adding a new service is high, which slows down time-to-market. As service and product requirements continue to rise, the cost and complexity of development upgrades and integration will continue to increase. Bundled offerings intensify this problem.

#### A LACK OF ALIGNMENT CAUSED BY A BUILD-UP OF DISJOINTED, MANUAL AND UNCOORDINATED FULFILLMENT PROCESSES AND SYSTEMS

Becoming more agile and striving to meet heightened customer expectations are significant challenges, but when you combine these needs with the current situation of fulfillment processes, it is easy to understand how service fulfillment has reached a crisis situation for many service providers. The ever-increasing back-office complexity and a lack of coherent, coordinated or automated processes is exacerbated by the need to support converging and increasingly complex services. These processes are disjointed vertically across service and network domains, and disjointed horizontally – CRM (including e-channels, front-end sales order management and back-end provisioning order management) exists, at best, as “islands of automation”, at many service providers.

“Telcos’ history as monopolies and habit of creating one IT system for each product has led to inefficient manual processes and thousands of internal IT systems that have difficulty talking to each other. This has put OSS/BSS on the critical timeline for all new products, and product development cycles have been measured in years, not days and weeks...”

– LARS GODELL, FORRESTER RESEARCH<sup>4</sup>

As noted earlier, historically, the problems caused by this build-up of disjointed, manual and uncoordinated fulfillment processes meant that introducing a new service was always faster and more cost-effective by introducing another domain-specific service fulfillment silo. This vicious cycle, or “death spiral”, as some service providers refer to it, has led to the following mounting problems:

- > Inefficient use of human assets due to silo systems, duplication of activities and lack of automation
- > Inability to execute pre-order validation due to inaccurate data
- > Poor economies of scale
- > Complexity of service and product introduction, especially where trying to execute fulfillment across service or network domains
- > Sub-optimal agent utilization due to multi-system “swivel chair” customer management
- > Lengthy training and high attrition due to system complexity and lack of empowerment for agents to provide appropriate levels of services.

Again, the bundle and the increasing complexity of business services and solutions means this “mess” has become a crisis. Alignment of the business is critical. The introduction of additional silos, it is now recognized, will only worsen the situation and fails to address the needs of new generation services.

<sup>4</sup> Taken from “Telcos Must Restructure the Way they Innovate”, by Lars Godell, Forrester Research, October 2004

#### LACK OF VISIBILITY INTO THE SERVICE FULFILLMENT PROCESS

This cliché fits the service fulfillment crisis perfectly. Many of the problems in the service fulfillment domain can be traced to one issue – a lack of visibility into the process by stakeholders – such as customers, salespeople and customer service representatives– and interdependent systems.

“The right hand doesn’t know what the left hand is doing.”

– ANONYMOUS

This lack of visibility can be broken down into several areas:

- > Lack of visibility of service provider assets (no tracking of assets) creating stranded network assets or little understanding of capacity or availability, which leads to poor asset utilization and revenue loss
- > Lack of visibility caused by poor integration of ordering and provisioning processes and systems, leading to fulfillment failures and the inability to identify bottlenecks, to proactively deal with problems or to optimize the process

Greater visibility into the fulfillment process will reduce the number and severity of errors, accelerate cycle times, lower costs and greatly enhance the customer experience. Increasingly, this means real-time visibility.

#### LACK OF PROVEN, RELIABLE, AND STABLE VENDORS CAPABLE OF DELIVERING TURN-KEY SOLUTIONS TO THE FULFILLMENT CRISIS

The service fulfillment space has been characterized by a highly-fragmented vendor market. Some excellent niche solutions are available to service providers and many have utilized such vendors to solve point problems with point solutions. However, the tactical approach taken by both service providers and vendors has contributed to the complexity in integration and ongoing management of their systems. Initiatives and industry organizations, such as OSS/J and NGOSS have made great strides to provide a better framework for the OSS domain, and to define interfaces and standards to help alleviate this problem. Traditional systems integrators have also been active in this area but have generally reduced their focus since the telecom downturn and the exodus of many skilled consultants from the field. Unlike CRM, billing and other areas of the BSS/OSS, in general, service providers have been left to themselves to architect and assemble their service fulfillment solutions. They have not enjoyed the benefits of large vendor R&D investment in this area or a focused services organization which is capable of providing turnkey solutions.

“The concept of an intentional customer experience is one that can create significant differentiation in the communications industry. Companies who can help service providers break down silos and align their organizations around an integrated customer management strategy, adapt business and operational systems to become more agile, and place the customer at the center of the business will create exceptional business value for those service providers. There are very few companies with the breadth of products, professional services, industry know-how and partnerships to make this happen.”

– ROB RICH, EXECUTIVE VICE PRESIDENT, YANKEE GROUP<sup>5</sup>

<sup>5</sup> Taken from Amdocs Press Release, February 17, 2005

Some of this key issues caused by this historically fragmented and immature market include:

- > Increased project risk, length of implementation and total cost
- > Complex software upgrades and compatibility issues
- > Higher cost of change – changes, such as new product introductions are more costly due to infrastructure silos and excessive testing requirements
- > Lack of professional services and broader fulfillment expertise result in higher risk of implementations

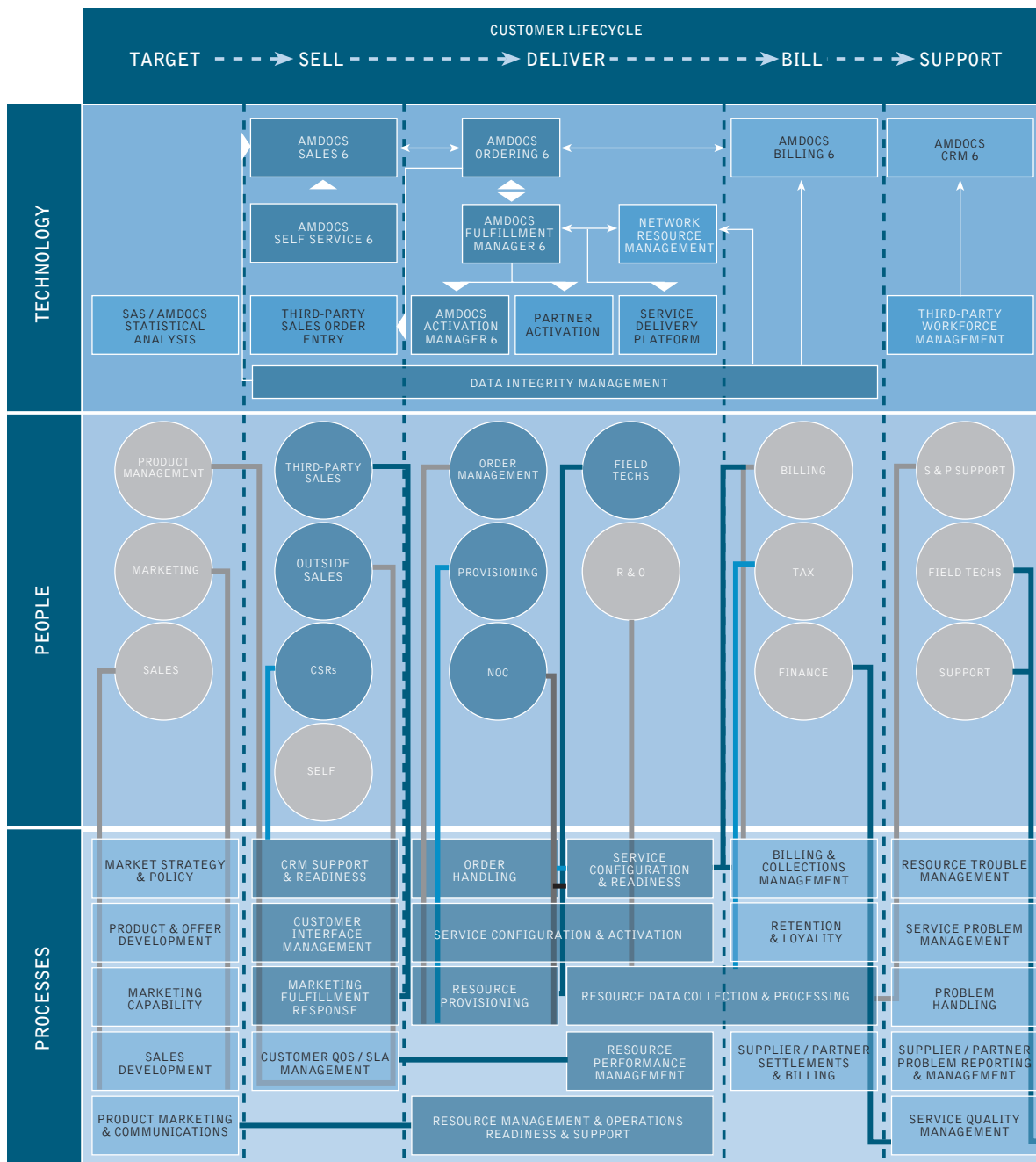
While this industry situation may have not been a problem through the 1990s, the fulfillment crisis outlined here, and the need to create a differentiated customer experience at lower costs for an increasing complex bundle of services surely calls for a better-funded and more focused approach from a trusted vendor in the industry.

# 4. AMDOCS ORDER-TO-ACTIVATION SOLUTION—THE ANSWER TO THE FULFILLMENT CRISIS AND THE INTENTIONAL CUSTOMER EXPERIENCE

The Amdocs Order-to-Activation Solution offers service providers a cost-effective and turnkey solution for resolving the fulfillment crisis. Amdocs experts help them to determine the right evolution path for their service fulfillment environment, and to align their people, processes and technology with the intended customer experience. Amdocs’ solution enables the complete management of service requests of all sorts from order capture through to service activation – a pre-integrated, modular ordering and fulfillment solution that automates and streamlines the entire process. This reduces operational costs and provides greater visibility of the fulfillment process for a high-value and a more responsive, intentional customer experience. Moreover, Amdocs offers service providers complete accountability for the solution implementation. Amdocs provides comprehensive OSS implementation and integration services to deliver the full solution.

Amdocs acts as prime integrator taking on complete program management for the entire defined solution, including the integration and implementation of partner products. The solution is pre-integrated and modular enabling flexible deployment and evolution paths to be created.

This means that service providers can evolve their environment at a pace that makes the most sense for their situation, meeting today’s business needs, generating rapid returns and moving towards a truly integrated customer management approach.



**FIGURE 3**  
A COMPREHENSIVE SOLUTION—PEOPLE, PROCESSES AND TECHNOLOGY

Amdocs Order-to-Activation Solution is made up of key component products from the Amdocs 6 pre-integrated, modular portfolio and services from the Amdocs ICM Blueprint Framework. This includes Amdocs Service Fulfillment Improvement Service, Amdocs Sales 6, Amdocs Self Service 6, Amdocs Ordering 6, Amdocs Activation Manager 6 (Wireless), Amdocs Fulfillment Manager 6 and Amdocs OSS Implementation Service. Amdocs' solution is completed through a comprehensive OSS ecosystem with leading solutions from the domains of inventory, auto-discovery and reconciliation and wireline activation.

Amdocs Order-to-Activation Solution provides:

- > Integrated order-to-activation through fully integrated business process and enabling systems for convergent services wireless, wireline, IP and cable)
- > Fulfillment process integrity and transparency
- > Service creation, adjustment and bundling agility.

#### TRULY INTEGRATED ORDER-TO-ACTIVATION

Amdocs Order-to-Activation Solution offers market-leading, best-in-class, pre-integrated software products, comprehensive consulting, implementation and integration services and predefined processes and templates, Amdocs uniquely delivers a cost-effective fulfillment solution with lower risk. Amdocs Order-to-Activation Solution provides integrated best-in-class software products from ordering to activation. For example, Amdocs ordering products are at the heart of the solution. Recently selected by industry leaders, such as Telus Wireline (Canada), SBC Lightspeed (USA), Telkom South Africa, Svazinvest (Russia) and Elisa (Finland), Amdocs ordering capabilities are best-in-class for convergent services in a large-scale service provider environment. In addition, Amdocs Activation Manager has been implemented at over 40 service providers worldwide.

In addition to market-leading, pre-integrated products, the solution also provides comprehensive and complementary services. The ranks of Amdocs' 10,000 systems professionals have been greatly enriched over the past several years with the industry's best minds in the field of OSS and service fulfillment in particular. These are experts with knowledge and expertise, not only of Amdocs' products, but also of those of other OSS players. This translates into a single source of accountability for strategy, design and implementation of the complete solution. The advantages of this are simplified, lower-risk solution procurement and a cost-effective implementation with reduced integration costs and risks. Amdocs' integration approach also means highly-effective process integration across operational boundaries and the advantage of business process expertise and pre-designed, communication-specific product templates for lower-cost, process-driven OSS integration.

#### FULFILLMENT INTEGRITY AND TRANSPARENCY

Amdocs Order-to-Activation Solution provides a high degree of service fulfillment integrity, with complete visibility from the customer order through to network and subscriber activation. It delivers the service with accuracy and consistency for a lower total cost of order, and provides exceptional, highly-responsive customer service. This is complemented by process-driven fulfillment and provisioning control, which enables a streamlined fulfillment process. Complete process automation is enabled via dynamic and add-hoc process capabilities. Furthermore, any user or system is provided with access to real-time tracking and the possibility of intervention into the fulfillment process. Finally, process integrity is made possible through the tight process integration across core Amdocs order, provisioning and activation products resulting in strong process alignment and long-term integration compatibility. Amdocs' policy of factory-lifetime integration supports the backward compatibility of future product releases. The Amdocs solution enables complete orchestration of the processes and full empowerment of all relevant stakeholders and systems.

#### AGILITY IN SERVICE CREATION, ADJUSTMENT AND BUNDLING

The Amdocs Order-to-Activation Solution shortens the delivery cycle for the creation and modification of services and bundles through agile product and process configuration capabilities, which enable rapid and low-cost dynamic service and bundle introduction. The component products and pre-designed processes bridge departmental silos. The open architecture and services oriented architecture (eTOM, OSS/J, SOA) ready approach means ease of integration to third-party products. Amdocs has engineered its systems, selected its solution partners and designed its services for maximum agility at the lowest costs.

## 5. CONCLUSION

As markets converge and competition intensifies, the new front in the battle for telecommunications supremacy is shifting from the network to the creation of an intentional differentiated customer experience, at the lowest cost, and across a rich variety of services. However, the service fulfillment process has reached a crisis situation in many service providers and is blocking the necessary business transformation.

Service fulfillment today is characterized by manual activities, a lack of system integration or process standardization, inherent inefficiencies, multiple systems and databases, bottlenecks and dated procedures. Fulfillment systems, including ordering systems, provisioning and activation systems, inventory systems and other fulfillment related systems have been customized to support specific products and lines of business and lack flexibility in bringing new services to market. Development times are lengthy and costly as systems and business processes are rigid and inflexible. Custom-built systems and the use of many small, niche suppliers have resulted in silo-type architectures with minimal integration capabilities. Bundled offerings are marketed and sold as such, but delivered separately through the traditional, independent processes, creating unintentionally damaging and costly customer experiences.

This approach has caused the continuing vicious circle of increasingly more complex integration scenarios where any new OSS must interface with a range of other OSSs, many with proprietary, unpublished APIs. As service and product requirements continue to increase, the cost and complexity of development upgrades and integration will continue to rise. Until recently, service providers have had few options in tackling this challenge and have instead settled for additional silo solutions.

Amdocs offers a comprehensive, turnkey solution for order-to-activation process re-engineering and renewal. Amdocs services, products and partners are backed by an unparalleled commitment to the industry. Amdocs has 10,000 systems professionals and annually invests more than \$120 million in focused R&D.

Amdocs is best-equipped to partner with leading service providers to tackle the fulfillment crisis and help create the intentional and profitable customer experience needed in order to build stronger more profitable customer relationships.



## “With Amdocs, we improve the customer experience and save costs”

BT Wholesale, the network services arm of the leading communications service provider in the UK, has benefited from (Amdocs Solution) in improving efficiency and customer service in end-to-end ordering, fulfillment and service assurance for new generation voice and data services for more than 30 million customers.

PHIL DANCE

CIO, BT WHOLESALE, UK

SPEAKS OUT ABOUT AMDOCS WORK WITH BT WHOLESALE

### RELYING ON (AMDOCS)

Currently we use (Amdocs Solution) as our Service Management platform to meet the needs of over 30 million customers in the UK. Based on our success with (Amdocs Solution), we are increasing our usage of the product to 10,000 BT Wholesale personnel. As we grow our broadband business, we're confident (Amdocs Solution) can support it. For corporate users, we're using (Amdocs Solution) to support our extensive set of IP VPN offerings, both here in the UK and in Europe.

### COST SAVINGS & ROI

By using (Amdocs), we are able to reduce our costs and provide more cost-effective service to our customers. (Amdocs) products enable us to streamline our processes and reduce the number of manual handoffs. That makes the process cycle shorter and requires fewer people. We think we will reduce costs by £20 million a year through the implementation of the (Amdocs CRM Process Manager) product from (Amdocs) in the broadband operations domain.

In addition, we've been able to improve our field force productivity by 10% on a workforce of 6,000. Building solutions with (Amdocs) means that we can confidently embark on projects, knowing that we'll get our return on those investments.

### TRANSLATING COMPLEXITY TO SIMPLICITY

We're at a watershed in our industry as we move from the conventional circuit switch networks to the world of IP. The power of (Amdocs) is its ability to handle the complex changes in today's marketplace. (Amdocs Solution) translates network complexity so consumers of telecommunications services perceive a simple service, which is actually made up of many very complex parts. It's really the power of the Amdocs Process Manager that it is a flexible tool that can deal with complexity, and that makes the (Amdocs) product so attractive to us. The flexibility of the Amdocs Process Manager means that we're able to implement changes at very short notice and this gives us a big competitive advantage.

### TIME TO MARKET

We're looking to use (Amdocs Solution) in the full-scale launch of SDSL products. Traditionally, a product of that complexity might take 15 months to two years to build. Now we're looking at a six-month implementation with (Amdocs Solution). This helps us improve our speed to market and reduces product development costs. More importantly, it increases revenue from that product as we get it into the marketplace quicker.

### WORKING TOGETHER

One of the advantages we see of working with Amdocs is not only that Amdocs has world-class products but it also has world-class professionals who help us to implement those products in the right way. We've been delighted by the professionalism we've seen in Amdocs, and we find it very easy to integrate our own software engineering teams with those from Amdocs.

### ON-TIME ORDERING & FULFILLMENT FOR INCREASED CUSTOMER SATISFACTION

(Amdocs Solution) enables us to make ordering and fulfillment processes simpler and more complete, so that we get the right order, in the right place, at the right time for our customers. (Amdocs Solution) ensures that once a customer is committed to an order, we can deliver it to the customer on the required date to the required degree of quality.

(Amdocs Solution) enables us to initiate services with less manual intervention for a lower cost. We complete transactions for our customers much more quickly and efficiently than before, and we are able to keep them fully informed about the progress of their orders. This leads to increased customer satisfaction.

### SUPPORTING SCALABILITY & FLEXIBILITY

The world of the Internet means that our system has to be available to take orders around the clock for an increased volume of complex services. (Amdocs Solution) is able to scale for our needs. As we continue to grow, the (Amdocs) engine will be able to keep pace with us and connect our customers through to our networks for many years to come.

We're moving from a world of telephony to a world in which virtually every item in your home is connected to a communications device somewhere, which will increase the number of messaging events going across our network and the range of services we provide. All of those will need to be ordered, configured and billed. We're confident that, working with Amdocs, we'll be able to meet this challenge.

# APPENDIX B– SOLUTION COMPONENT: PRODUCT AND SERVICE DESCRIPTIONS

## AMDOCS SALES 6

Amdocs Sales is a comprehensive sales-force automation product designed to meet the needs of today’s global sales organizations. Proven in the largest B2B environments, Amdocs Sales gives your sales organization all the information you need to effectively plan and execute sales strategies, and to maximize the value of your customer relationships through increased sales, revenues and customer loyalty.

## AMDOCS SELF SERVICE 6

Amdocs Self Service Foundation (Standard or Premium) is the technical platform that enables the functionality of Amdocs’ Self Service modules. It supports robust user management, advanced security management, a web framework, a GUI framework, a Portlets framework, an integration gateway, WebServices framework, customer hierarchy management, alerts and notifications, and audit and control.

Amdocs Self Service - Order enables complete self-managed ordering through order capture, negotiation, provisioning and service delivery.

Amdocs Self Service - Point of Sale supports self service for dealers, sales and support locations, including account management and equipment orders.

## AMDOCS ORDERING 6

Amdocs Ordering (formerly known as Amdocs Order Management System) automates the entire ordering process through to completion for all services and lines of business. This enables streamlining of the ordering process as well as tracking and a complete view and effective control of the ordering status. Its advanced error handling and data validation mechanism assure order data integrity and minimize errors and lost orders – resulting in greater customer satisfaction. With its dynamic product creation, out-of-the-box knowledge libraries including reusable service templates and business flows, this scalable, proven product enables you to achieve a faster time to market and to revenue for new services and bundles.

## AMDOCS FULFILLMENT MANAGER 6

Amdocs Fulfillment Manager is located at the center of service fulfillment operations with the goal automating and streamlining your network-build and provisioning processes. The product enables you to easily and rapidly define, modify and manage business processes in a dynamic environment, while unburdening you from the costly and complex operation of multiple service fulfillment systems. It also enables the sharing of domain expertise and best practices, maximizes the effectiveness of your operations and engineering staff, ensures consistency of the provisioning and engineering processes as well as facilitates integration with Amdocs and third-party products. This allows you to achieve flow-through provisioning; to accelerate the rollout of new services and increase provisioning success rates, while reducing your costs.

## AMDOCS ACTIVATION MANAGER 6

Amdocs Activation Manager automates the activation of network services and individual subscribers. It supports multi-vendor, multi-class and multi-technology networks as well as a vast range of IT elements. It also enables zero-touch provisioning that can significantly reduce the operational expenditures, service delivery bottlenecks, and provisioning fallout that are typical of manual processes.

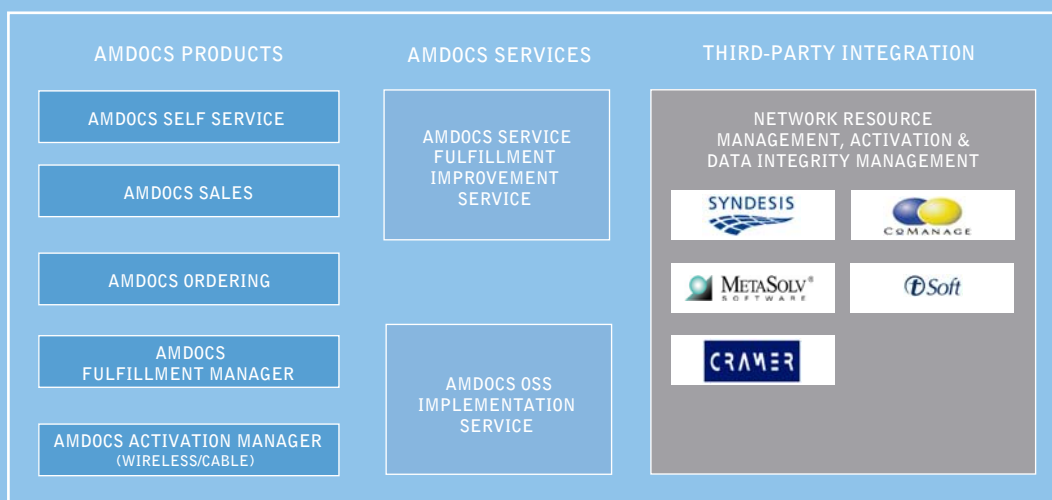


FIGURE 4  
PACKAGED SOLUTION  
TO ADDRESS YOUR  
CHALLENGES

#### AMDOCS SERVICE FULFILLMENT IMPROVEMENT SERVICE

Amdocs Service Fulfillment Improvement Service helps service providers transform their disjointed and inefficient service fulfillment processes by using a customer experience-driven service fulfillment approach. Amdocs experts help service providers to align their OSS strategy with their company strategy, to assess the current state, to determine the optimal approach for the business, and to develop a ROI-driven roadmap. Amdocs' pragmatic approach identifies quick-wins, providing rapid and ongoing incremental gains.

#### AMDOCS OSS IMPLEMENTATION SERVICE

Amdocs OSS Implementation Service provides full accountability for results and is made up of service fulfillment experts to ensure the smooth transition from project deployment to implementation and operations. Using advanced methodologies, extensive best practices and preconfigured tools, the service delivers proven results and minimize any exposure to risk. Following a holistic approach to integration, it ensures that the service provider's people, processes and technology are aligned to the company's specific integrated customer management vision and goals.

#### INTEGRATION WITH THIRD-PARTY SYSTEMS

As necessary, Amdocs will team with best-in-class vendors in the order-to-activation domain to deliver a comprehensive, pre-integrated solution. These include:

> **Inventory:**

> Cramer

> **Auto-discovery and reconciliation:**

> CoManage

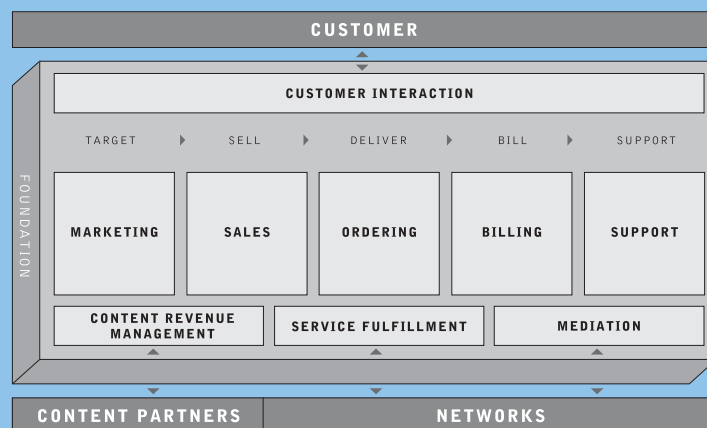
> T-Soft

> **Activation:**

> Syndesis

> Metasolv

## AMDOCS 6 PORTFOLIO



### ABOUT AMDOCS 6

Amdocs 6 is an integrated portfolio of modular products designed to accelerate the implementation of an integrated customer management strategy. Bringing together industry-leading products in billing, CRM, self-service, ordering, service fulfillment, mediation and content revenue management, Amdocs 6 provides comprehensive support across the customer lifecycle: target, sell, deliver, bill and support. By delivering a comprehensive portfolio for business process and IT convergence, Amdocs 6 enables service companies to deliver an intentional customer experience which results in creating stronger, more profitable customer relationships.

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