



Accelerating the Concept-to-Cash Cycle Using an Advanced Order Fulfillment Platform

Reducing time-to-market for
new product introduction with a
flexible ordering and fulfillment
infrastructure

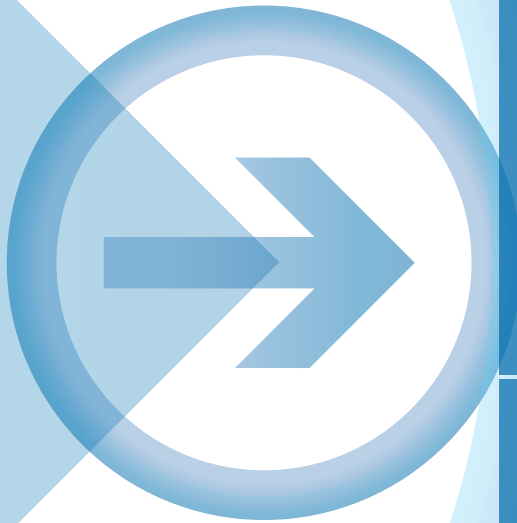


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One of the major challenges for telecom operators when introducing triple-play and multiplay offerings is to harmonize and streamline cross-functional product/service catalogues and the associated order capture, order management, and fulfillment processes. In the triple- and multi-play arena, product and service bundles are introduced, retired, and modified at a very fast pace.

Some services are only offered for a short time period, e.g. to cover a major sports event. In these scenarios, it is imperative that the offerings and their respective order capture and fulfillment processes are managed in a timely fashion. Traditional operations would typically require 3-6 months to bring these new products and services to market, due to major IT development work to be undertaken. With TIBCO's integrated platform, organizations can achieve a time-to-market of less than two weeks.

Communication service providers that can benefit from this reduced time to market capability include:

- Mobile operators with a clear value add product strategy
- Convergent operators
- Virtual operators
- Combinations of the above

1. Three Steps to Accelerating the Concept-to-Cash Cycle

Accelerating the concept-to-cash cycle requires telecom operators to focus on three key areas:

- Enable product management to model new commercial offerings.
- Simulate, test, and approval of the process.
- Deploy the new bundle into production, ready for orders and fulfillment.

“Our main goal is to meet our customers’ needs. By integrating our support systems entirely within the TIBCO environment, we can not only deal with customers extremely quickly, but also ensure that everything we deliver is tailored to their needs.” -

**Jan Peter Speijer,
Project Manager,
KPN**

BENEFITS OF ACCELERATING CONCEPT TO CASH

- Reduce cycle time for introducing new products and services from 3-6 months to 1-2 weeks.
- Improve interactions between customers and service provider with “first time right.”
- Improve operational efficiency by bridging gaps between product management and IT infrastructure support.
- Increase quality of service levels for end customers through better service assurance.

Achieving a faster concept-to-cash cycle requires telecom operators to take a holistic view of the product and services lifecycle and to leverage platforms that enable the process using a wholly business-driven product design and order fulfillment platform. The landscape for delivering multi-play services is typically based on tying existing single-play offerings together. These bundled offerings could be the result of mergers and acquisitions, partnerships between operators, a service provider becoming a virtual operator for one or multiple offerings, or partnerships with various third-party services and content providers. The key to delivering and supporting new products and services in an accelerated fashion is to elevate product and services catalogues, customer data, order capture, order fulfillment, and third-party content/service provider on-boarding functions to platforms in their own right. These platforms do not replace existing functionality but rather leverage and repurpose it by using an end-to-end approach to centralizing management and orchestration of the key underlying processes.

ENABLING PRODUCT MANAGEMENT TO MODEL NEW COMMERCIAL OFFERINGS

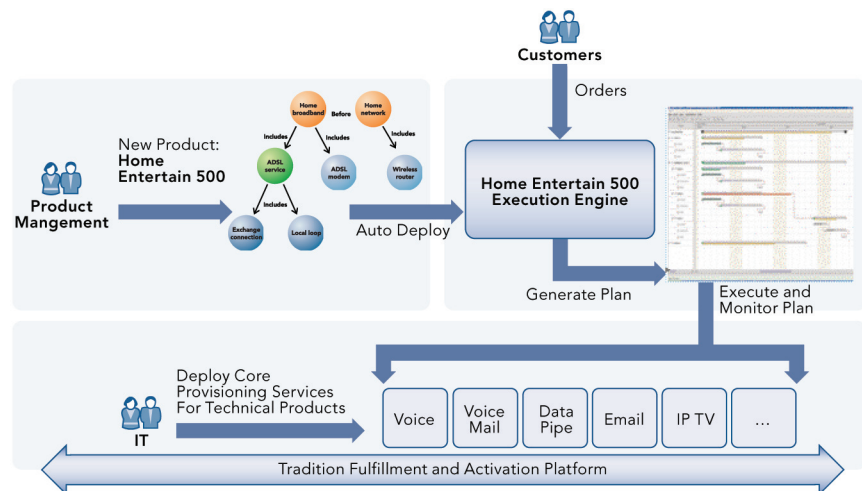
Historically, the product management function has been able to design new commercial offerings faster than they can be deployed, as the associated order management, order fulfillment, and service activation steps have taken three to six months to be deployed. The challenge for operators has traditionally been the responsiveness of IT to provide the infrastructure for rapid design and deployment. This pattern is now changing thanks to the availability of a business-driven product design and order fulfillment platform, which relies on the orchestration of some key business processes that bring together data from the product catalogue, dependency rules using a rules engine, and optimization of the order fulfillment plan to ensure a smooth delivery of products and services to the customer.

Leveraging a unified platform in which product and services catalogues can be synchronized, dependency rules can be extracted by the fulfillment platform, and process templates can be used for constructing individual fulfillment processes for customer orders is key to the concept-to-cash cycle. Applying a data- and rules-driven approach to order fulfillment means that the data and rules associated with the data define and drive the business processes as opposed to the other way around.

TIBCO provides a pre-integrated but modular platform of technologies to achieve this end-to-end vision. The unified platform is comprised of master data management (MDM) software, a business process and rules engine, a standards-based, carrier-grade service-oriented architecture (SOA) platform, and business-to-business technology. These offerings have been deployed many times within TIBCO's customer base. By combining these offerings in an integrated solution, tremendous efficiencies and time-to-market improvements can be achieved.

Product management defines a new product and service bundle such as "Home Entertain 500" and compiles the new bundle into a ready for fulfillment item in the product catalogue, drawing on a combination of master data, dependency, and coexistence rules as illustrated in Figure 1.

Figure 1. Product management perspective



SIMULATE, TEST, AND APPROVE THE PROCESS

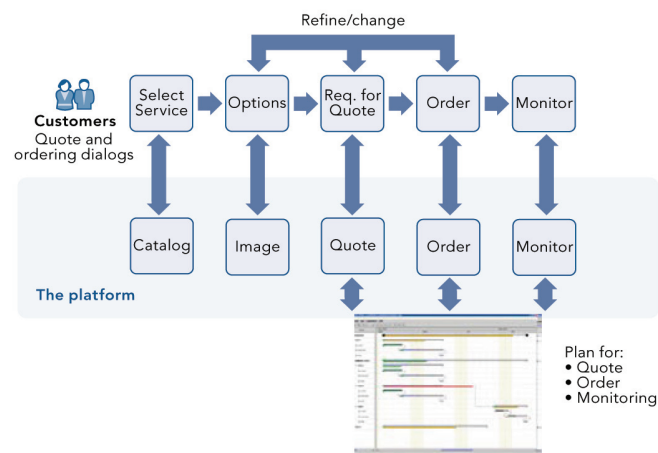
Once product management has defined the product and services bundles, there are a couple of steps to complete before deployment of the new bundles on the operations support systems (OSS) and business support systems (BSS) infrastructure. The first step is for technical product management to set up the technical products and dependency rules within the catalogue. The second step is to simulate and test the new bundles and seek the required approvals within the organization. Simulation and test processes help ensure that operators achieve customer satisfaction levels the first time around, in keeping with the “first time right” imperative.

In order for telecom operators to move quickly through these key simulation, test, and approval steps, a flexible and componentized product configuration and simulation and test platform is necessary.

The order capture process is tested through to confirmation; this process is driven by intelligence about the configuration of individual products and services, taking into account all cross-constraints and resource and workforce reservations for feasibility and quote. The dialogue with the customer is personalized based on the customer profile and current offerings. The customer order can then be executed in the fulfillment platform.

On this platform – which has full access to product and services catalogues, current customer status, rate plans, installed devices and equipment, and real-time access to resource availability – it is possible for customers to configure and order new products and services directly through a self-service portal and to receive direct feedback on possible delivery and installation dates as illustrated in Figure 2.

Figure 2. Self-service portal



DEPLOY THE NEW BUNDLE INTO PRODUCTION

Once the supporting platform is in place to support the end-to-end fulfillment process, it should be possible for a new bundle to be immediately fulfilled without any further configuration or intervention from IT. The underlying platform is key to enabling the last step in the concept-to-cash cycle.

When seeking to rapidly deploy new bundles of products and services, it is key to use a componentized approach that can draw together services that support the deployment of new products and value-added services and orchestrate them drawing on a rules engine, which determines which services can coexist together. The order orchestration layer can be directly linked to the order catalog; any new commercial offering based on existing core services (such as voice, voicemail, MMS, SMS, etc.) is then instantly available to the various channels.

To ensure that fulfillment of the customer order is 'right first time', a goal-based order management approach is recommended. The goal-based approach abstracts the process from the underlying technology, focuses on the customer's specific expectations and ultimately provides more flexibility to the business. A unique capability to directly link goals to deployment has been developed by TIBCO. It draws on reusable components, orders plans, and ties them into an executable plan. The execution plan is derived from the goals expressed in the order.

The flexible deployment model includes creation on demand of an execution plan based on the products, rules, and relationships defined in the catalogue and in the order. The product catalogue specifies which underlying process or service component needs to be executed and what its parameters are. An order for a new product from an existing customer triggers the validation of the customer's current assets and services against the new product, possibly further validation of constraints or options (e.g. distance from exchange to premises), and composes the target execution plan.

The execution plan reserves external resources such as field engineers and inventory and takes into account their availability in terms of stock and time/schedule. The GANTT chart-like project plan ensures that each task maps onto a service or process component that is implemented within the technical fulfillment platform, and feedback is provided to users with status information on service availability. Continuous jeopardy management is applied to this plan so that even if a task slips in the beginning, the critical path through the plan is calculated

and potential service level agreement (SLA) violations are highlighted. A sample execution plan is illustrated in Figure 4.

The deployment model depends on the existence of a supporting enterprise infrastructure, which includes a provisioning/order interface using an SOA platform, a process model that maps the technical services into the fulfillment framework, a product catalogue, which reflects dependencies and constraints and the goal-based order management capability.

Figure 3. Fulfillment platform

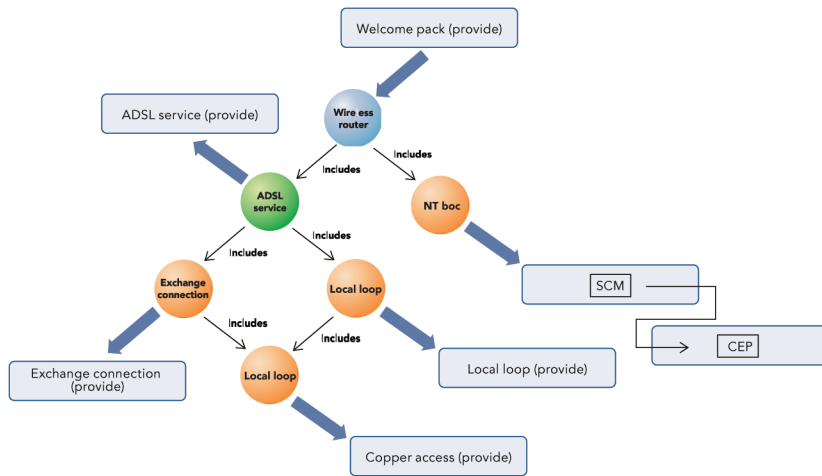
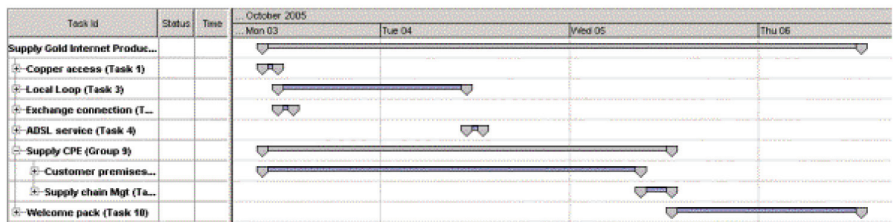


Figure 4. Execution plan for new products and services



2. Conclusion

The enablement of a business-driven product design and order fulfillment platform is made possible by adopting a model-driven approach. A model-driven approach will ensure centralized management and orchestration of the key supporting processes in the concept-to-cash cycle. By providing an integrated but modular platform of technologies to achieve this end-to-end vision, TIBCO is helping telecom operators reduce the concept-to-cash cycle to a minimum and improve customer satisfaction by getting it right first time.

HOW TIBCO ACCELERATES THE CONCEPT-TO- CASH CYCLE

To enable product management to model new commercial offerings,

TIBCO provides a data and rules-driven approach in a unified platform that includes an SOA architecture and a business process and rules engine to ensure that new product definition is truly business driven.

To simulate, test, and approve the process, and to ensure that key product configuration data is taken into account, TIBCO's master data management software, business process and rules engines are drawn upon in order to effectively simulate and test new products before deployment. This step is key in accomplishing the goal of getting it 'right first time' for the customer and ensuring customer retention.

To deploy the new bundle into production, TIBCO's flexible and componentized deployment platform and goal-based process management capabilities ensure that new products and services can be deployed rapidly and immediate feedback is provided on the provider's ability to deliver and meet customers' expectations.



3. About TIBCO

TIBCO Software Inc. (NASDAQ: TIBX) is a provider of infrastructure software for companies to use on-premise or as part of cloud computing environments. Whether it's optimizing claims, processing trades, cross-selling products based on real-time customer behavior, or averting a crisis before it happens, TIBCO provides companies the two-second advantage™ – the ability to capture the right information at the right time and act on it preemptively for a competitive advantage. More than 4,000 customers worldwide rely on TIBCO to manage information, decisions, processes and applications in real time. Learn more at www.tibco.com



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