

## Monetizing Digital Services Takes More Than a Catalog

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We've been talking about product catalogs for a decade and, during that time, many service providers have implemented a centralized catalog stack and lead-to-quote-to-order functionality that is improving agility and time-to-market for new services. Using a catalog-centric solution, service providers design, define, configure, price and deliver new products to customers faster and more reliably than ever. Products are quickly customized, priced and sold via multiple outlets and on-line channels. Availability and eligibility are rapidly validated against operational resources and orders can be customized for each customer across any variety of channels.



In today's digital services environment, an automated multi-channel quote-to-order-to-install solution based on a centralized catalog and data architecture is table stakes. However, for operators competing with over-the-top providers, monetizing that multi-channel environment is becoming exceedingly difficult. Adding more partners and more products is adding cost for digital service providers (DSPs).

Even with sophisticated order-to-cash catalog solutions, existing manual processes used to bring partners into the catalog and push product to customers are becoming unwieldy and expensive. Likewise, customers are bombarded with so many product choices and bundles that they get tired of looking and give up.

*In short, it takes more than a catalog.*



## Services at scale

DSPs are anxious to start generating revenue by bundling partner elements into product and service bundles. But, in order to do that, they will need real-time, agile, digital IT solutions that enable effective product design and sales processes that support digital business models. In order to serve multiple customer channels and integrate disparate partner ecosystems, DSPs need to adopt a strategy and structure that enables a hybrid, distributed operating model. Otherwise the processes and systems remain the same, and they were never intended for this.

As DSPs scale operations to support thousands of small partners rather than a few dozen large

partners, the painstaking manual processes currently in-place stop working. Partner products and components including infrastructure, data, applications and content are all being provided as-a-service from the cloud. But getting partner resources from the cloud to the catalog to the customer requires more than catalog integration. Order management, CRM, billing, fulfillment and assurance systems all have to be part of service composition.

To deliver a unique service instantiation to every customer, OSS/BSS must scale to dynamically manage thousands of partners and automatically accommodate each unique customer instance. Adding thousands of product variations means more data captured, correlated, analyzed and transferred. Increasing the number of transactions, sources and destinations of data requires dynamic processes and intelligent automation. As the IT and network infrastructure grows, and evolves (Information Centric Operations, SDN and NFV), and the number of products being offered by DSPs increase, existing OSS/BSS solutions must either scale or be supplemented with intelligent, autonomous IT systems.

## Putting the pieces together

A DSP cannot hope to own all the applications and content its customers might want to access and they shouldn't. Customer demands change constantly and the only way to keep up is to automate the steps, open the interfaces and use the cloud to evaluate, accept, decline, on-board, off-board, evaluate and pay partners. A partner platform that operates in the cloud (or even as a service) can automatically and rapidly evaluate, certify, on-board, off-board and manage settlements for thousands of unique partners and their products.

DSPs that want to monetize partner offerings need to act as brokers to cloud products and services from providers of all types and sizes. Acting as the conduit between the cloud and customers takes advantage of the existing deep relationship that DSPs have with their customers while further reinforcing their brand as a full-service provider.

Existing OSS/BSS solutions are unable to rapidly analyze the customer journey. Augmenting existing solutions with systems that learn enable DSPs to implement recommendation engines, sentiment analysis, customer analytics and social media analytics. No two customers are the same, but there are patterns and persistent actions that can be understood and used to recommend products that customers actually want, not just the ones they've already bought.

Too many times, analytics present customers with more of the same – the same video, a hotel in the city visited last week, a good deal on something that was bought yesterday – and don't learn that a purchase has been made and it is time to move on.

To genuinely serve customers, DSPs have to be able to keep up with their actions and transactions. What do they search for? What do they decide on? What do they actually pay for? As the volume and variety of service elements increases exponentially, customers are faced with too many choices. It is widely reported that there are more than 2 million apps in Google Play store and more than 2 billion in the Apple App Store. Merely making those storefronts available isn't going to generate revenue.

## Mastering the Digital Supply Chain

To help customers navigate through the miasma, CRM tools have to evolve beyond recommendation engines that are based on static product rules. By tracking what customers are doing and regularly evaluating social and media transactions, DSPs can dynamically model new services, bundles and offers that are then pushed out to customers or made more broadly available as short term promotions. For example, 3,000 of your customers tried a new game based on an on-line advertising campaign. Using those same channels, a DSP can offer those customers a discounted subscription to the game that is automatically bundled and billed with their mobile service. No extra logins or configurations, just click "OK".

Orchestrating all of the sources, products, customers, infrastructure and revenue across multiple

channels and providers requires a rigid process and open everything. While the DSP will not own every link of the chain, they will be held responsible if something fails. Visibility into the digital customer journey helps to understand what is working, what isn't and where the customer experience is being adversely affected.

Whether the focus is content or enterprise IT services, DSPs are the enablers and the digital supply chain makes that possible. Acting as the conduit between partners and customers, DSPs are obligated to monitor every transaction and every element that makes up the end-to-end delivery of that service.

*But data is no good if you can't use it.*

## Put the Data to Work

Many DSPs would like to pay closer attention to what their customers are actually doing; but, without a way to automate interactions and an operational analytics capability that automatically learns and adapts to use cases over time, data continues to accumulate with little or no return. The information is simply too diverse and disorganized to use, and many analytics solutions don't help.

Restricting focus to the traditional means of event collection, processing and distribution to billing and assurance systems is a waste of data. Deriving value from the tremendous volume of data available to DSPs requires rapid intelligent analysis and automated distribution to critical business processes and systems. Comprehensive management of all the events related to a customer – not just billing transactions – is critical to fully understanding customer behavior and improving customer interactions.

Processing all of these disparate events can have a much bigger impact when fast, as well as past, data is aggregated, integrated and analyzed. Using analytics and artificial intelligence to perform complex event processing, enables DSPs to rapidly respond to changing or emerging demand, isolate problems with partner products and quickly adjust to changing conditions.

Autonomous and human-enriched learning, sentiment and contextual analysis of customer transactions combined with customer behavior analysis, empowers customer service agents by automating first response, using predictive and prescriptive recommendations to improve first call response and reducing handling time. Productivity is improved and training costs are reduced, all while delivering a more personalized customer experience.

## Start Now

Existing CRM, order management, billing, assurance and fulfillment systems and data will remain part of DSP operations for the foreseeable future and new functionality must be aligned so that ongoing operations are not put at risk. Dynamic orchestration of CRM, order management, fulfillment, billing and assurance has to be consistently implemented, integrated and automated horizontally across services and sales channels and vertically from the customer to the core of the network. Anything less is expensive, time consuming and error prone.

Supplementing existing IT solutions for CRM, order management, fulfillment and billing with predictive analytics and intelligent tools reduces the risk associated with wholesale system replacement. Adding an environment where next generation business intelligence and analytics peacefully coexists with existing OSS/BSS solutions and data reduces churn, increases conversion rates, improves customer satisfaction and reduces costs.

As customers demand immediate access to an infinite number of applications using a wide variety of devices and access methods, the need for real-time and sophisticated business intelligence and analytics has grown. Business intelligence applied to CRM is more than the collection and processing of xDR's. The ability to manage the breadth of customer events and data, apply sophisticated analytics and deliver actionable results in near real time helps DSPs recover lost revenue, understand the impact of customer behaviors on revenue generation, and identify

opportunities to increase sales and satisfaction.