

Driving Platform Play with Centralized Product Catalog

Abstract

Telecom operators are seeking to transition from their conventional business models to ones centered on 'platforms'. Communications service providers (CSPs) worldwide have started diversifying into provisioning of adjacent and bundled offerings, as their core revenue streams of connectivity services have got commoditized. An essential aspect of this attempt to position themselves as platform players is dynamic service orchestration, wherein telcos leverage their and their partners' capabilities to drive a number of digital initiatives including 'smart' enterprises, 'smart' cities, and 'smart' homes.

The business case for undertaking such a transition is pretty persuasive. In a digital economy where information is the key to creating value, being a platform player in a connected ecosystem could help telcos monetize effectively, by providing a broad portfolio of offerings that creates a digital lifestyle. Given this imperative to reimagine their value proposition, telcos have begun transforming their IT landscape by harnessing various disruptive technologies including automation, Big Data, artificial intelligence and cloud computing.

Fragmented Product Catalog: An Impediment

Rapidly evolving customer expectations—in terms of personalization, self-service, consistent omni-channel experience, and so on—mean CSPs need to be more agile and responsive, and provision innovative, value-for-money offerings.

Aiming for a platform play is, of course, the way forward for telecom operators. Realizing this aim, though, is proving to be far from easy for many carriers. A major impediment on this front is the significant fragmentation of telcos' product catalog. The average product lifetime today keeps getting shorter, and the number of product variations continues to increase rapidly. Moreover, product offers and definitions now comprise a broad array of elements such as price, distribution channel, offer validity period, and target group, rendering the task of catalog management challenging.

CSPs are presently confronted with the following three major pain points, as far as a product catalog is concerned:

Multiple product information systems

CSPs have, over the years, built many systems through different vendors to provision catalogs. For instance, channel and order management applications have historically underpinned the offer and fulfillment catalogs, respectively, while billing systems have taken care of the pricing catalog.

Another point to take note of here is that telecom operators now rely on diverse data models for various products defined and maintained in multiple systems. The legacy business support system (BSS) that handles fixed line services may not deliver the same degree of flexibility in accommodating new features, as the new setup that provisions mobile services. This incompatibility between the dated and new applications, wherein they do not 'speak the same language', makes product catalog management an arduous task. For example, customer service agents dealing with product data would find it difficult to secure the requisite information, when querying IT regarding the overview of product status. This fragmentation and inconsistency of product catalogs leads to lower productivity, higher operating costs, suboptimal service delivery, and slower product development.

Product definition and enhancement complexity

Parallel systems containing scattered product data, stored across a number of data-bases, also create complications for product managers, when it comes to designing and implementing new offerings. Since different systems have distinct data models, CSPs cannot deploy any single data structure for their entire product portfolio. As a result, product managers cannot reuse existing configurations during product definition, and have to make them from scratch, which is a time-consuming process. Effort duplication, through the usage of multiple applications, is also reflected in disabled product inheritance.

The second challenge associated with catalog fragmentation is the complex task of maintaining product data and reconciling the same across systems and offerings – this entails a lot of work.

Thirdly, getting consistent product performance data is almost impossible in a cluttered data environment, with enterprise users struggling to get an overview of the products defined in different systems.

Suboptimal customer experience

Complex product definition and management has far-reaching implications, beyond a CSP's product management department. Most importantly, it can adversely impact the customer experience. As a case in point, inconsistent product data could result in poor order management, including rendering of incorrect pricing information to the customer.

Product catalog fragmentation could also hit service fulfillment. Say, a customer has requested for the activation of a certain value-added service (VAS). But, as the service to resource mapping was incorrect, the customer's request was wrongly provisioned. The consequent dissatisfaction may not only increase customer churn, but also customer service costs.

How a Centralized Product Catalog can Enable Platform Play

How can CSPs address these pain points and successfully migrate from the traditional business model to a platform-based play? Consolidating and centralizing disparate product catalogs can be a significant enabler in this regard. Specifically,

integrating product data silos across the value chain will deliver five notable benefits for telecom carriers:

Bundling of core and partner services

As CSPs roll out differentiated ancillary services to stay relevant in the connected marketplace, they need to smoothly integrate core and partner offerings for effective orchestration of the platform. Centralizing the product catalog can facilitate this bundling, and also pave the way for dynamic provisioning of the same to customers. Moreover, catalog consolidation could foster automated fulfillment of various partner services and settlements, thereby ushering in a seamless partner ecosystem.

Enhancing channel experiences

In the omni-channel era where the consumer experiences the brand across various touch points, CSPs realize the importance of delivering superior, customized, and consistent experiences over different channels. Eliminating catalog fragmentation can lead to the creation of a single source of product information for all channels, thus ensuring consistency in product information, and boosting customer experiences as a result. Catalog centralization here primarily has two dimensions. One, it should use Open application programming interfaces (APIs) for systems that can absorb standard APIs dynamically. Second, a centralized catalog should facilitate synchronization of product data across different systems. Once these aspects are taken care of, telcos would significantly enhance their ability to acquire and retain customers, by delivering compelling experiences across the customer lifecycle.

Delivering mass personalization

Providing customized services to each individual subscriber, based on their unique preferences and requirements, remains a work in progress for many CSPs. For this initiative to yield the desired results—at scale—telcos are pursuing mass personalization, wherein customers get the freedom to create a new product for themselves, aided by recommendations from their CSPs. This is where a well-designed catalog uses flexible modeling to orchestrate large-scale personalization, without triggering portfolio complexity and a surge in operating costs.

Reducing time to market

A streamlined catalog can allow CSPs to design, develop, and unveil new products in an agile manner by shortening the 'ideate to launch' journey. First, relevant

stakeholders—including product managers, service designers, IT executives, network managers, finance, and partners—can quickly brainstorm around the new product idea, refine and review it, before accepting or rejecting it for prototyping. The centralized catalog then fosters product configuration of the shortlisted idea in a single application by aggregating relevant data from products, prices, tariff plans, rules, and policies.

CSPs should consider deploying APIs and one-touch federation in the centralized catalog in order to minimize dependency on IT, thereby shortening the product rollout lifecycle.

Ensuring zero touch fulfillment

CSPs today face growing demands from their customers to deliver on-demand services, anytime, anywhere. For telcos to cater to this want of instant gratification, institutionalizing zero touch fulfillment is imperative, more so as their subscribers access services from their platform partners. Integrating divergent product catalogs, spread across different systems and functions, would enable telecom carriers to do so, harmonizing various configurations.

Conclusion

As CSPs attempt to position themselves as true blue platform players, rather than providers of commoditized services, they must simplify IT systems and make them agile. Consolidating and centralizing the product catalog will help them significantly enhance customer experience and accelerate innovation, besides boosting operational efficiency and plugging revenue leakages. The digital economy will continue to reward innovative companies that harness data-driven insights to deliver compelling value to the consumer. The telecom industry will be no different. It is therefore in the interest of CSPs to start reimagining the way they collect, store, analyze, and leverage product catalog data.

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