Insurance

Enterprise product catalogs
From myth to urgent reality

By providing a single source of product information, product catalogs give insurers clearer visibility into the quality, profitability and risks of their portfolios.

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Executive summary

Across the insurance industry, carriers are facing increased competition, ongoing market turbulence and lingering financial headwinds. Internally, they are modernizing outdated technology infrastructures and integrating siloed data repositories as they seek transformation of key customer- and market-facing operations.

In navigating this challenging landscape, leading carriers are pursuing multiple routes to performance.
improvement and increased profitability. These paths include operational excellence and higher process efficiency, as well as product and service innovation. At the same time, the analytics revolution in insurance means it’s possible to rethink performance management practices via new insights into market demands and consumer preferences and through increasingly sophisticated perceptions of risk.

Robust and standardized product architectures are proving to be a powerful key to unlocking value in all of these areas. Specifically, forward-looking carriers are operationalizing detailed product architectures – composed of product structures, rules and data entities – by establishing enterprise product catalogs. These catalogs are capable of transforming how insurers rate, quote, book, issue and service policies. By providing a single source of product information, product catalogs give insurers clearer visibility into the quality, profitability and risks of their portfolios. Additionally, catalogs make it easier and more efficient to develop and price products, sell and update them based on market opportunity or regulatory requirements, and accurately pay claims against them. Plus, they greatly increase the quality and integrity of data used to manage the business.

This paper will highlight the business case for product catalogs, define their relationship to product architectures and outline a series of steps that insurers can take to develop and deploy them.
Product architectures and product catalogs in context

A product architecture defines all the structures, rules and data entities inherent in specific insurance products. It aligns with data and business rules about industry and distribution segmentation, underwriting appetites and workflow. The product architecture is animated within product development processes through versioning and “copy-modify” parameters; that is, the product architecture is the backbone of the process that assembles and configures standardized and validated design artifacts into products, which are housed in the product catalog, the product system of record. Those products are then converted via run-time technology environments into specific instances of policies that are then housed in the policy administration system, which serves as the system of record for individual policies.

However, the product catalog is not just important to the policy administration system to validate the product for quoting and issuance. The role of a product catalog is to serve as a central repository for all of a carrier’s products (which are each based on a predefined architecture) within a carrier’s portfolio and to serve as the central point for all of the processing systems that need regular access to complete, timely and detailed product information. Those systems cross the entire spectrum of processes and operations within a typical insurance enterprise, from customer-facing sales and service channels to critical back-office functions.

The list of core systems and processes relying on product catalogs includes:

- Agent portals
- CRM (opportunity management)
- Underwriting (workstation, rules engine)
- Policy administration
- Billing
- Claims
- Booking system of record (ODS)
- Reinsurance
- General ledger (GL)
- Financial reporting
- Business intelligence and analytics
The expanded role played by product catalogs underscores the clear and compelling value offered by common product models built on high-quality, high-integrity data. They can be used in realms that seem far removed from traditional definitions of product-related activities. For example, they can inform reinsurance processes (via the attachment of policies and contracts) and general-ledger accounting and financial reporting. In this sense, product catalogs can serve as the source of the all-important “single version of the truth” about a carrier’s products. Further, they can facilitate improvements in master data management (MDM) practices and overall data governance. These are critical roles, and they meet a long-standing need at many insurers.

When product architectures and product catalogs exist within integrated product development processes, insurers have a strong platform for product innovation; that is, they gain the ability to rapidly identify market opportunities and efficiently launch high-quality and profitable products to meet the needs of discrete market segments.

But the impacts reach beyond product development. An agent or broker might query the product catalog via the carrier portal to see about offerings for a specific type of business, such as a florist. The agent can check to see if a relevant product has been filed in the state where the florist operates, and whether this specific risk is eligible and worth quoting. Further, the agent can check for cross-sell and upsell opportunities where other products or coverages may be available for this risk. In these scenarios, the agent gains confidence that there is a viable and suitable product offering for a specific type of customer.

An underwriter will ping the catalog system for associated rules, while claims managers would use catalog data to make sure they are dealing with policies built on valid product definitions. This is valuable in that it promotes consistency in the coding of claims for certain types of loss. Over the long term, policies can be updated in one place, with those changes inherited through product configuration logic to all impacted policies, while also cascading through other systems.
Why: the business case for product catalogs

The growing interest in product catalogs is an acknowledgment that policy administration systems are ill suited to “own” product definitions across the enterprise. Rapidly increasing customer expectations and the need for more agile, nimble product development capabilities to meet those expectations are also business drivers. It has become clear that ready access to complete, consistent and multidimensional product data is required if core processes are to function with peak efficiency and effectiveness.

To some extent, the business case for product catalogs mirrors the broader value proposition for product development and management. The specific benefits include:

- Higher profit returns in new product offerings through greater precision in risk selection, rating, pricing, and coverage terms and conditions
- Faster market entry to optimize growth opportunities through reusable product components and alignment of the design and execution processes and systems
- Increased account retention through improved customer and broker perceptions of product quality and delivery effectiveness
- Clearer insight into and stronger ability to anticipate customers’ emerging needs and issues via effective feedback mechanisms
- Stronger “pull” dynamics and brand leverage in the market with differentiated coverages, services and product packaging

The speed-to-market advantage is particularly compelling. Insurers whose product architectures and catalogs are based on the reusable and extendable components, robust version management, disciplined use of inheritance and copy, and other leading practices are likely to see rapid improvement in product development and launch timelines. Likewise, product definitions are not confined to the policy administration system, so centralizing product changes can yield significant time and cost savings over traditional IT work, spanning front- and back-end systems to support both new and modified products.

The value proposition for analytics and reporting is also strong. Clear product definitions, based on high-quality and complete data sets, are the backbone of effective analytics in insurance. Higher-quality data leads directly to more effective predictive modeling, higher levels of integrity in external reporting and long-term portfolio optimization. For instance, analysts can test changes against their current book of business through impact modeling before they deploy products into run-time environments. Given the significant investments insurers are making in analytics, the improved data quality enabled by product catalogs should not be overlooked.

The underlying element in the business case is the way in which product catalogs link and align the “design” and “run” environments of the business, which historically have not been effectively integrated or synchronized. Insurers who can match quality data from product design and pricing to underwriting and policy administration - as well as to sales and service and to claims, finance and accounting - in a continuous, integrated

and synchronized loop gain huge potential advantage. First and foremost, they can be sure they’re structuring and pricing products appropriately for the actual risks covered by a policy. Secondly, they gain confidence that they are paying claims accurately. Thirdly, they can use analytics to uncover high-value opportunities to boost the quality of their portfolios. All of these provide a clear line of sight to higher profitability and increasingly precise risk selection. These capabilities represent the potentially transformative value of product catalogs.
Product architectures and catalogs must be designed with run-time execution in mind.

Common reference product architecture and data model
How: building product catalogs one step at a time

Given the high-potential impact of the product catalog on insurance operations, a full assessment of current product data assets and practices is necessary for crafting a prioritized road map for developing both product architectures and product catalogs.

The goal is to create absolute consistency and integrity in the product data that is consumed by other systems and used to make critical decisions across the business.

New technology - in the form of product configuration systems - is an essential element in establishing product catalogs based on common models. In the recent past, these applications were viewed as ahead of their time because viable vendor solutions and third-party support were distinctly lacking for carriers interested in rethinking their approach to product definition and development capabilities. Today, that is no longer the case, as several viable solutions have come on the market, in the US and Europe.

There is growing consensus that product configurators will become standard assets in insurers’ IT portfolios in the relatively near term. In this sense, the product configuration market is following the path of underwriting workstations, which were nonexistent 20 years ago and viewed as nice-to-have 10 years ago. Now, underwriting workstations perform critical analytical tasks and few, if any, insurers would attempt to operate without them.

As organizations evaluate their options for implementing new technology, they should begin with a clear understanding of their particular data needs and the complexity of their current IT ecosystems and product portfolios. Specifically, they may wish to assess their product structures and rules taxonomy across underwriting, product, policy and billing functions as a starting point.

With that insight, the next step will involve a proof of concept to determine the necessary architectural components for centralizing product definitions, with an emphasis on designing and testing run-time integration capabilities with policy administration, agent-facing and underwriting systems, among others.

The cultural and organizational implications are also worth mentioning. It’s important to note that product development, claims and underwriting units typically have different leaders, which can lead to challenges in achieving alignment across functions. Thus, executives looking to lead the development and implementation of product catalogs must prepare to look beyond process and technology concerns and address potentially sensitive organizational factors as well.

The bottom line: innovation and transformation within reach

Product catalogs can serve as enablers of broad-based transformation within many types of insurers. Rather than siloed or functionally oriented improvement initiatives (within claims, for instance), product catalogs can help bridge the gaps across many end-to-end processes. The vision is to create truly integrated product definitions across the enterprise - definitions that enable operational consistency from assessing risk and developing new products; to rating, quoting and booking policies; to managing service, claims, finance and reporting functions. The enterprise product catalog is a necessary strategic investment not only for insurers seeking high-performance product management but those insurers aspiring to higher levels of operational efficiency and strategic analytics as well.

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