Insurance – Product Design and Development

Helping Insurers More Quickly Develop, Configure and Release New Products to Market

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Executive Summary

For today’s insurance carriers, optimal product design and development has become a key business imperative for profitable growth and for delivering new products to market. With the right tools, carriers can make strides to improve both areas.

The current economic crisis is driving insurers to work harder than ever before to remain competitive and profitable. According to Gartner Inc., “product development is becoming a key priority for the global insurance industry. Insurers that invest in new solutions and change the underlying process to automate and streamline their product-development processes will find themselves with greater sales volumes and more satisfied customers because of proper product fit.”

Greater accuracy — characterized by risk dynamics associated with selection — across underwriting and pricing processes is essential. The consequences for insurers that neglect product innovation are dire: they will fail to get targeted products out to producers and customers quickly and efficiently and will lose business, as well as market share. Ultimately, they may not survive current market conditions.

Technology plays a critical role in meeting these needs by allowing underwriters, actuaries and marketing staff to electronically collaborate across disbursed locations. This enables improved product development cycles, which helps increase product quality, matching to customer needs, and accurate pricing to a narrower segment that’s harder to identify and supply.

The majority of top insurance carriers are cultivating skills and leveraging partners focused on accelerating product development in order to compete with industry peers. They also are launching entire new marketing brands as a means of competition. Small, nimble carriers traditionally are able to respond more quickly to emerging market segments, getting the early jump on opportunities. Larger carriers are held back by their inability to centralize information and modify master product catalogs. They need those abilities

1Kimberly Harris-Ferrante, “Product Development Gains Priority in Insurance Sector,” Gartner (September 2004)
to quickly respond to competitive pressures and implement new marketing strategies and products.

Carriers with stressed balance sheets are causing the industry to experience unprecedented mergers and acquisitions, bringing about industry consolidation. The decision of who remains after a merger or acquisition often may be determined by which department head has the higher-performing team. This uncertainty is keeping marketing and underwriting executives on their toes. Time to market has become more than just a competitive advantage; in today's economy, it's about corporate survival. Other market dynamics, such as aging producer organizations, also are causing industry consolidation. This is producing new, larger Managing General Agencies, which reduces competition and forces smaller independents out of the market.

High-performance product design and development (PD&D) technology, coupled with business process automation, can help insurers improve financial ratios and the non-financial aspects of their businesses, positioning their organizations for future success. It can help them improve three key areas:

- Increase sales by significantly reducing PD&D cycle time up to 65 percent, specifically across product research, validation, design, development, maintenance and deployment
- Increase customer value by dramatically improving product quality perception
- Increase personnel productivity and improve organizational alignment for both captive and independent producer networks

An optimized PD&D process must help insurers create niche products quickly based on even the most narrowly defined market segments. Carriers in North America and Western Europe quickly are adopting PD&D to identify these niche, underserved small- and midsize-market segments that are highly profitable. Optimized PD&D also can improve an organization’s capability to quickly respond to small markets where many carriers lack control over multi-national or conglomerate product catalogs that focus on geographic profitability, or provide a heightened awareness of producer product and channel performance. By creating narrower risk selections, PD&D can provide improved accuracy in product pricing by increasing the ability to accurately match risk to price. Another key benefit is an improved ability to generate reports and filings, leading to greater regulatory compliance.

Insurers have many requirements for their PD&D solutions as they strive to meet ever-increasing regulatory compliance obligations, industry pricing pressures and challenging customer recruitment and retention. Many product configurators only answer part of the requirements. Product configurators traditionally focus in three areas: product design, product testing, and product management. While this is a good start for insurers engaged in PD&D processes, insurers will require much more collaboration and interoperability as they expand their thinking about product development across the broader community. To meet their numerous obligations, insurers need to look for new PD&D vendor solutions that will better integrate people, existing legacy applications and best-of-breed providers to support these new requirements.

Microsoft Corp.’s technologies and services form key components of the Insurance Value Chain (IVC), a comprehensive approach to help insurers successfully meet today’s challenges. Solutions from Microsoft’s partner community ease IT complexity and connect all facets of the insurance process, including agent and broker services, product development and design, customer performance and insight, underwriting and claims servicing. These solutions help insurers become more agile while reducing overall technology costs.

At Microsoft, we believe our low-cost, best-of-breed technology platforms have allowed our global Insurance Value Chain partners to build solutions that can help insurers reduce product life-cycle management (PLM) cost, and cut average development time in half — from 180 days to 90 days for the standard cycle, or below 30 days for aggressive carriers. Microsoft’s IVC partner PD&D
solutions help insurers gain more agility in policy administration, underwriting and marketing by enabling them to extract more functionality from their existing systems. Microsoft and IVC partner solutions allow insurers to unlock legacy data for new product development endeavors.

Today, very few software solution providers are capable of delivering on promises in this nascent PD&D landscape that covers a wide range of capabilities specifically targeting commercial and personal property and casualty (general insurance) carriers. One asset and partnership that can meet these demands is Accenture's Insurance Configuration Components (ICC). ICC is a solution developed by Accenture business architects in close collaboration with technologists from Microsoft and Avanade (a company created by Accenture and Microsoft). ICC was released initially on Nov. 21, 2007. The first release was packed with features, such as centralized master product catalog and component definitions that allow business users to configure product templates and offerings. ICC now incorporates IVC best-of-breed interoperability with leading partners such as Blaze Advisor from Fair Isaac Corp. for insurance underwriting rules and Insbridge for rating. ICC’s product developer workbench allows product changes to be pre-modeled with these IVC partners and tested for impact on premiums. Microsoft provides the platform and interoperability software, such as Microsoft .NET and BizTalk Server, supporting a full service-oriented architecture.

Accenture’s ICC PD&D solution suite includes a powerful combination of technology tools and non-technology asset accelerators that provide standardized product catalog blueprint components, business tasks and workflow frameworks, and process models and flows, to help insurers fuel intelligent, differentiated and targeted growth. The Accenture solution can help insurers test pricing scenarios and broader coverage products before launch to the marketplace. The solution supports targeted campaigns to customer-specific niche segments by gathering insight around customer risk exposures and buying behaviors.

The ICC solution can enable insurers to build new products quickly that are tailored to specific industry or customer needs in a way that allows them to minimize the importance of price and build higher-profit-margin business capable of surviving market cycles. The solution is intended to help insurers build an offering that combines products, services and expertise, and help them deliver it to a dynamic marketplace on a sustainable basis.

Accenture’s early-adopter charter client, Safeco Insurance Co., now a part of Liberty Mutual Group, selected the solution as a key component in its strategy to modernize its product and policy systems, allowing for greater product innovation. The goal of the new system was to help centralize and enhance the delivery of product development capabilities across commercial and personal P&C lines of business and geographies. ICC delivers advanced software application design that offers a full range of product configuration capabilities for medium-sized and large property and casualty insurers. The ICC solution is the newest addition to Accenture’s suite of P&C technology solutions, which also includes claims components, underwriting components and policy administration software. Accenture helped Safeco, now a part of Liberty Mutual Group, adapt and implement the Phase I solution. They now are working on Phase II.

Embracing PD&D strategies can lead to differentiation. Insurers that do not improve their product design and development processes will miss opportunities for profitable portfolio growth. But even more critical, if they are not able to optimize the PD&D process by adequately assessing customer needs, creating new products to serve customers’ needs, and quickly delivering those products to sales channels, they won’t be able to compete in the various market cycles of what has become a very competitive marketplace.

This white paper delves deeper into the product design and development challenges insurers currently face and describes forward-thinking strategies that insurers must identify to address today’s challenges. It explores in more detail the
technologies companies have implemented that have enabled them to become more agile and technologically integrated, responsive and efficient. The benefits these companies have seen, and will continue to see, include the ability to price well, target niche markets, get products out to the market more quickly, efficiently and cost-effectively, and remain competitive through varying hard and soft market cycles globally.

**Business Challenges in Product Design & Development Markets**

Across various economies and geographic regions, “hard and soft” insurance market cycle conditions cause competitive challenges and shifts in strategic business imperatives for insurers and producers, especially in general insurance lines of business. Premium pricing strength erodes during soft market conditions, pushing carriers to seek more profitable niche growth through finer risk segmentation and tailored product and service offerings. To respond quickly to these dynamic market conditions, carriers must have the ability to either price-down in soft markets or price-up during hard cycles at the right risk levels. Most carriers’ legacy platforms respond to pricing and underwriting change controls in 90–180 days on average — often missing starting and ending cycle rhythms. Policy renewals are particularly vulnerable during these cycles. Risk reevaluation and pricing periods typically are susceptible to competitive predators. Renewal pricing often is left either to inefficient manual processes as guesswork or to mass re-pricing applied across the board without insight into risk-ratio tolerances or customer loyalty.

**Inability to Identify and Capitalize on New Product Opportunities with Risk Selection and Pricing Accuracy**

Insurance carriers typically move across all or a subset of seven key business process management steps when responding to market cycle challenges. The steps, in sequence, are research, design, development, analysis, filing, maintenance and deployment. Not all product updates require carriers to move through the entire sequence of steps. For the situations that do use all seven steps, such as new product portfolio and branding, the bulk of the workload and duration lies within the “design, develop and analyze” steps, depending on the degree of product complexity for launch or modification. However, in North America, filing, along with regulatory and compliance, takes the most time because of the time required to work with all 50 states’ insurance commissioners. Whether products have to go through all seven steps or only a few of the steps, ultimately, carriers want several product development work streams and launches done simultaneously and issued to production on a specific date.

Another issue brokers deal with is the need for instant risk evaluation, rating, pricing and product modification to close business quickly. This type of design capability is invaluable when a broker is negotiating underwriting details for a multimillion-dollar deal with a major customer, such as a global hotel chain in Europe or more than 1,000 commercial delivery vehicles across China. Real-time responsiveness and collaboration with a broker during these timely negotiation situations are priceless in winning against the competition.

**Rigid, Existing Policy Administration Systems**

Insurers struggle with the imperative to grow business with limited resources and budgets. Many insurers are hampered by inflexible legacy systems that stymie their efforts to grow, through 20- to 30-year-old technology platforms that hold critical data assets captive. It is not uncommon for an aged policy administration system to possess old, impossible-to-maintain, hard-coded information that holds carriers back. This often is known as the “spaghetti code” of policy systems. The legacy systems are difficult to maintain, change and teach to new IT staff. Carriers are looking for ways to use new, best-of-breed technology to make their systems more agile so they can support improved processes, including shortened PD&D configuration cycles. Gartner’s Kimberly Harris-Ferrante says, “Some insurers want to extend the life of their legacy systems and leverage past investments
by modifying policy solutions. Using this approach, established systems are modified to comply with standards or to support new initiatives. Policy system modification projects might include using new technologies, such as Web services and XML, to expose trapped legacy data to other systems and applications. Moreover, continues Harris-Ferrante, “although custom development has been preferred in the past, the trend has reversed during the past three to four years. Instead, insurers today have shifted to purchasing packages or maintaining their systems.”

Difficulty Integrating New Product Development and Configuration Capabilities on Top of Existing Systems

Constantly changing insurance market cycles have made it essential for carriers to grow new business wisely, while preserving profitable results. It’s become clear that insurers need to look at their internal operations and systems for opportunities to integrate best-of-breed IVC components into emerging supply chain configurations. This enables carriers to shift resources to new or updated, value-added, mission-critical deliverables that introduce products and services to market faster while hitting profitable niche targets.

Insurance Carrier Strategies for Better Product Design & Development Servicing

Insurers that embrace PD&D strategies can drive successful business models that lead to a culture of change, rising to meet any product-related service challenge. The ability to quickly identify and capitalize on new product development servicing controls can reduce inaccuracy on risk selection and pricing. The ability to manage several PD&D workload streams at various stages simultaneously exposes deep insights and business intelligence about your business for those areas that are running smoothly and those that lack productivity. Organizations seeking PD&D agility across business, operations and systems will achieve high results consistently by delivering on difficult assignments that correlate product development, people, collaboration and regular compliance approvals.

As PD&D servicing becomes normative over time as a naturally integrated set of refined processes, insurers will be able to develop and maintain consistent delivery through agility, as well as a streamlined work force. Carriers can consider redeploying critical resources to new business imperatives that allow for analytics, workflow processes for ongoing operational efficiency, and/or experimentation with new products and services with speed and accuracy testing. Some carriers invite employees to engage in brainstorming for new ideas while others use cash incentives for ideas that lead to successful product launches. Carriers possessing these new skills and disciplines will be ready to meet unanticipated opportunities and threats. Innovators will be able to respond to unexpected shifts in business strategy, as well as quickly identify product lines to discontinue.

While culture, knowledge and processes are vital elements, Microsoft believes that cost-effective platforms in combination with IVC technology partners are the most critical aspects to achieve and sustain consistent high-performance PD&D. Accenture reinforces this concept with its point of view on the five business imperatives critical for high-performing insurers:

**Industrialized rules management**: Insurer systems must include externalized, business-configurable rules that separate product configuration from business process management. Rules combined with product blueprint components and format accelerators consistently identify all processes and data utilized in the underwriting and product development operations that directly govern collaboration processes from a centralized rules management repository.

**Data mastery for customer/account, producer, product, and policy data**: PD&D software vendors and systems integrators must possess a firm understanding of standardized data model mastery for all transactions across enterprise
service bus messages. In addition, data mastery is achieved through standardized XML messaging and employing ACORD formats and partners that utilize standards. Standardized messages provide easy analytical and operational business information that leverages common data dictionaries for improved data integrity and reusability in data capture and rules-driven processing.

**Agile product management:** A good measure of top-down dedication to market agility is the level of financial commitment by senior executives to transform the product development process. It’s important for insurers to have the ability to quickly develop, test and deploy new products from pre-existing components. It’s also essential that they standardize efficient processing across business channels and products.

**Disciplined and predictive underwriting across market cycles:** The quality of an insurer’s underwriting function can make or break its bottom line. Insurers must be able to finely segment risk to optimize targeted growth, while ensuring superior selection, pricing and terms. PD&D is a complete set of tools for developing, simulating, optimizing and implementing rule changes faster than the competition, giving insurers the ability to respond quickly to changes in market dynamics.

**Straight-through processing:** It is critical to have an integrated approach to data capture, quoting, underwriting, pricing and issuance that provides variable business processes according to risk complexity and servicing. PD&D can help carriers go to market quickly with product development that is faster than conventional methods. Instead of coding rules in programming languages, new applications are developed using a rules language that closely approximates how business people think about their business, reducing the opportunity for errors or misunderstanding. Business users can change rules at any time, without disrupting operations and without IT assistance.

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**The Microsoft Vision for Product Design & Development**

Microsoft’s vision for insurance product design and development is to help insurers leverage existing software assets and evaluate new technology innovation platforms. Microsoft technology can help facilitate the PD&D process in two ways: by helping carriers get agility out of existing policy administration systems, and by enabling insurers to easily integrate new product development and configuration capabilities on top of existing systems. Microsoft products and technologies also can help insurers shorten product configuration cycles. Microsoft can help insurers migrate information from legacy tools to up-to-date systems or surround existing systems with a common desktop, cohesive interface and central information repository for greater agility and improved access. Microsoft technologies and IVC partners can help insurers quickly and easily configure rules for underwriting, pricing, workflow and assessment dialog questions. With these technologies, insurers can implement solutions that will allow them to continue to benefit from their previous technology investments.

Microsoft accomplishes this vision in several ways. For example:

- By helping IVC partner architecture codification, providing partners with the ability to test interoperability and compatibility at Microsoft Technology Centers for both execution and result answer set validation
- By helping carriers consolidate into a master product production catalog that provides a single consistent source of product information, which enables product derivative generation as modifiable product copies
- By implementing solutions that externalize business rules and data that sit on top of and easily integrate with existing legacy systems, which allows insurers to continue to benefit from previous technology investments

The Microsoft Insurance Value Chain (IVC) is a comprehensive approach to meeting these challenges.
successfully. Microsoft and its partners develop global and industry standards-based solutions that ease IT complexity and connect all facets of the insurance process. These solutions can help insurers become more agile while reducing overall technology costs. They also can enable a People-Ready Business: one that builds customer connections and strengthens profitable customer relationships.

Carriers that are early PD&D adopters have pinpointed a set of technology-related characteristics that are critical to improving their processes. These cost-saving strategies can help insurers deliver on the Insurance Value Chain promise, which helps the overall insurance industry deal with an increasingly dynamic environment both within and outside of the enterprise. What is Microsoft’s Insurance Value Chain? Microsoft’s goal is to enable best-of-breed partners to service the insurance industry better by combining the benefits of Microsoft’s technology platforms with business solutions areas. Key to the power-of-choice message, Microsoft encourages IVC partners to standardize on compatibility and integration between applications to reduce complexity, time and cost of modernization. Legacy modernization extends all the way to mainframe migration — a compelling trend in the insurance industry. The purpose of the IVC is to set the stage for integrated solution accelerators, giving customers the power of choice so enterprise carriers can achieve straight-through processing (STP) in their organizations.

Microsoft platforms provide a comprehensive array of solutions that can help improve product design and development. These solutions range from basic infrastructure components — such as the Microsoft Office system, Microsoft Office SharePoint Server, Microsoft BizTalk Server and Microsoft SQL Server — that individual carriers use to build capability in-house, to an entire product design and development initiative provided by Insurance Value Chain partners such as Accenture.

Microsoft can help insurers reduce product life-cycle management (PLM) through PD&D by more than half of the preferred loop time of 90 days, getting it down to 35 and 40 days for product enhancements, with the potential of just minutes for simple rule and rate changes. Microsoft platforms and IVC partner solutions can help insurers get agility out of their existing
legacy systems. IVC partner solutions can enable insurers to extract more functionality out of their existing systems by unlocking data assets through a service-oriented architecture and Web services. These solutions allow insurers — many of which are encumbered with enormous legacy systems — to easily integrate new product development capabilities on top of existing systems.

Featured Partner Solution – Accenture ICC

A Deep Dive Look into Accenture’s Insurance Configuration Components Reveals Advanced Capabilities

Accenture’s Insurance Configuration Components (ICC) solutions are targeted at Tier 1 and 2 domestic and multinational carriers in North America, Europe, the Middle East and Africa (EMEA), Asia-Pacific, Latin America and Brazil, Russia, India and China (BRIC). ICC is a centralized rules management utility that can support rapid and flexible product innovation across the enterprise. This modular software application offers a wide range of product configuration capabilities for medium-sized and large commercial and personal property and casualty (general insurance) carriers.

Key features include these:

- Support for centralized product definitions that can be configured and maintained by business users
- Interoperability with leading external engines for insurance underwriting, rating and forms
- A product developer’s workbench that allows product changes to be pre-modeled for their impact on premiums
- Microsoft .NET for support of Web services and a full service-oriented architecture

Accenture’s ICC powers a product development solution that can help insurers enhance the product development life cycle from the initial idea to deployment and ongoing maintenance. Through extraction and centralization of the business rules traditionally housed in legacy applications, insurers become better positioned for higher performance in underwriting, product development and policy processing.

Accenture’s Product Development Solution Suite includes a powerful combination of Microsoft .NET-based technology tools and non-technology assets, such as capability blueprints, business case frameworks, process models and process flows to help insurers fuel intelligent, differentiated and targeted growth. The Accenture solution can help insurers achieve success in bringing better-priced and broader-coverage products to the marketplace that are targeted to customer niches, by leveraging better insight around customer exposure and buying behaviors.

The Accenture solution can enable insurers to build products that are tailored much more to the industry or customer niche in a way that allows them to minimize the importance of price and build a book of higher-profit-margin business capable of surviving different market cycles. It’s all about building offerings that combine products, services and expertise and delivering them to the marketplace on a repeatable basis, in a manner that continues to remain profitable across the underwriting cycle.

Since the Accenture solution is based on Microsoft technologies, insurers can replace their aging hard-coded, complex and expensive legacy applications with a modern, Microsoft .NET-based componentized architecture, which will give them not only greater speed and greater flexibility, but also lower total cost of ownership across IT resources.

Seattle-based Safeco, now a part of Liberty Mutual Group, is the charter client of the Accenture Insurance Configuration Components Solution. When the company wanted to implement a new product development system for its commercial and personal insurance businesses, the firm chose Accenture’s ICC solution to help it centralize and
enhance its product development capabilities across all geographies. The Product Development Suite is a key component in the company’s strategy to modernize its product and policy systems and allow for greater innovation in the product development process.

“Efficient product configuration is one of the most challenging operational objectives for P&C carriers today,” says Gail McGiffin, senior executive in Accenture’s insurance practice. “Our new component-based solution frees leading insurers like Safeco (now a part of Liberty Mutual Group) of the traditional limits of legacy policy systems, enabling them to rapidly develop and deploy their product offerings, efficiently centralize their product management operations across product and regulatory lines, and integrate their product systems with other best-of-breed technology and information tools.”

Accenture’s Product Development Solution Suite addresses the activities and processes of product life-cycle development from idea and market research to real-time performance insight on how the offering is doing in the marketplace, and product and services development, deployment, product launch and product refinement.

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**The Accenture Solution Leverages Offerings From Strategic Partners**

The Accenture ICC solution provides an integration framework for leveraging best-of-breed external engines for underwriting rules, rating and forms. Some of Microsoft’s strategic IVC partners are providing the technology for the implementation at Safeco, now a part of Liberty Mutual Group, such as these:

**Fair Isaac:** Fair Isaac Blaze Advisor provides the business rules management component for the Accenture ICC solution implemented at Safeco, now a part of Liberty Mutual Group. Blaze Advisor is an agile business rules management system, a complete tool for developing, simulating, optimizing and implementing rule changes promptly, enabling companies to respond quickly to market changes.

**Accenture:** The Accenture ICC solution leverages leading rating components such as the Insbridge system at Safeco, now a part of Liberty Mutual Group. Insbridge is a Web-based rating system for all lines of business. It enables business users to create, deploy and manage complex rates and rating rules with a supremely accurate rating engine in an easy-to-use environment. Insbridge’s flexibility enables ease of deployment for both commercial and personal rating plans.

**Accenture and Avanade Connected Architectures®:** The ICC architecture framework foundation is based on Microsoft and leverages Accenture’s AICS architecture, which provides pre-built and easily configurable services that can be used out of the box to integrate common functionality such as logging, caching, cryptography, validation and data access, as well as policies to encapsulate common architecture code from the main application. These services encompass the .NET 3.0 Framework core components to ensure consistency and accuracy in development, regardless of your staff members’ skill and experience level. AICS.NET glues the foundation and models together by providing configurable implementations of common design patterns such as data extensibility and code/decode with an easy-to-use administration console. Service Factory and Web Factory provide a model-driven surface that accelerates development. The model represents applications as shapes on a diagram and auto-generates code, which accelerates development by producing seamlessly updated model changes and uniform code that is easy to maintain and understand, even among multiple parties on a large development team. The Microsoft-based Accenture AICS architecture is continually evolving and is expected to further leverage the Avanade ACA.NET frameworks as it advances its capabilities with future ICC releases.
Featured Partner Solution – Duck Creek

Configuration, Speed to Market, and Self Sufficiency are Key Factors in Selecting Duck Creek

Duck Creek Technologies Inc. is a leading provider of software and services to the insurance industry, providing leading rating capabilities for personal, commercial and specialty lines. Duck Creek Technologies offers next-generation rating solutions that support the life-cycle rating process across Internet-based rating, quotes, proposals and agency self-service. Duck Creek enables customers to develop insurance products and to sell and service those products in their chosen markets with unprecedented speed to market, flexibility, reach and quality.

Duck Creek provides North American insurers with framework accelerators for commercial and personal lines of business. At the center of product design and development, Duck Creek’s EXAMPLE application drives a series of activity and workflow capabilities across platform, author, server, express and forms. These SOA application modules are end-user friendly, and power users easily can design, develop and deploy rating services. EXAMPLE Author is the creation tool within PD&D that enables staff to collaborate, create, update and manage rating and other complex product services quickly — all without writing a single line of programming code.

Using advanced technology, Duck Creek can define many lines of business within EXAMPLE Author, capturing product rating definitions in intelligent XML documents called EXAMPLE ManuScript. The flexibility of EXAMPLE ManuScript enables staff to define various lines of business from the ground up. For example, you can do the following:

- Define all the data elements in a visual editor environment
- Define rating processes interactively
- Create and populate rate tables that actually look like those in your manual
- Define user screens for rating, quoting and even online product manuals

Data standards are very important at Duck Creek, which complies with ISO and NCCI-based commercial lines. EXAMPLE Author, in conjunction with EXAMPLE Templates, provides a jump-start to development for commercial line products.

EXAMPLE Author simplifies testing and deployment of new products quickly by validating rate changes for accuracy against data from a regression database. When the product launch is ready to “go live,” one click deploys EXAMPLE ManuScript, and services are made available instantly to carriers and producers.

Microsoft Technology Utilized in Product Design & Development

Microsoft-based solutions are real-world solutions that help companies achieve the strategic goals that are critical to their success in today’s competitive marketplace. The solutions, and their benefits, include these:

**Microsoft.NET**

**Cutting-Edge Application Development Platform:** The Microsoft .NET Framework is Microsoft’s comprehensive and consistent programming model for building applications that have visually stunning user experiences, seamless and security-enhanced communication, and the ability to model a range of business processes. Microsoft .NET Framework, a component of the Microsoft Windows operating system, enables developers to create platform-independent applications and solutions. Not only does this reduce development time and costs, but also makes it possible to connect information and people throughout the enterprise regardless of the operating system, applications or devices they use.

**Web Services,** the .NET Framework communication mechanism, uses a data format based on the
Open XML standard as a universal language of data exchange over the Internet. When two isolated systems (such as an underwriting system and policy database) are working well on their own, it is rarely cost-effective to redesign one or both of them to work together. Web Services provides a smart and easy solution for interoperability and flexibility between these data silos.

Microsoft’s .NET Framework is the Windows developer platform that connects information, people, systems and devices. .NET provides component building blocks that connect to Microsoft’s Enterprise Service Bus (ESB) offering through BizTalk Server, as well as Avanade’s ACA.Net and Accenture’s AICS architecture, which makes an end-to-end service-oriented infrastructure for easy data and application integration. Benefits of the .NET Framework for insurance product design and development include these:

• **Security-enhanced, MultiLanguage Development Platform.** Developers and IT professionals can count on .NET as a powerful and robust software development technology that provides the security advancements, management tools and updates needed to build, test and deploy highly reliable and security-enhanced software.

• **Rapid, Model-Driven Development Paradigm.** Visual Studio offers developers adapter solutions that enable rapid application development and result in dramatic increases in productivity.

• **Superior Reach across Devices and Platforms.** The .NET Framework enables developers to build solutions for a wide array of devices from personal computers and servers to mobile phones and embedded devices. Microsoft Silverlight, a runtime that contains a subset of the .NET Framework, helps developers expand their reach by providing a cross-browser, cross-platform and cross-device plug-in for delivering the next generation of .NET-based media experiences, advertising and rich interactive applications (RIAs).

Windows Presentation Foundation (WPF) provides a unified framework for building applications and high-fidelity experiences in Windows Vista that blend application user interface, documents and media content, while exploiting the full power of the computer. A single WPF programming model can be used in Visual Studio to write code once and deploy it as a stand-alone, installed application or in a browser. Features include Client Profile, which enables faster redistribution with a smaller download; 2-D and 3-D graphics and hardware accelerated effects; common file format (XAML), which allows designers and developers to collaborate; scalability to different form factors; and controls, data binding and extensibility, which enable developers to quickly build high-fidelity applications, such as Accenture’s AICS architecture and ACA.Net Framework.

Windows Communication Foundation (WCF) provides a unified framework for rapidly building service-oriented applications. It makes it easy to build and consume security-enhanced, reliable and transacted Web services. WCF’s single programming model unifies the capabilities in ASP.NET Web Services (ASMX), Web Services Enhancements (WSE), Remoting, COM+ and Microsoft Message Queuing (MSMQ) so developers only need to learn one programming model. In addition, WCF services offer more design flexibility by supporting architecture such as Representational State Transfer (REST), JavaScript Object Notation (JSON) and Plain Old XML (POX) encoding.

BizTalk

**BizTalk Adapters** provide out-of-the-box host systems integration that offers efficient legacy integration development tools for PD&D. Native runtime protocol engines allow insurers to connect BizTalk Server to existing legacy policy administration systems that are typically on IBM mainframe zSeries or midrange iSeries or pSeries computers. Microsoft believes that preserving investments in existing systems extends the life of those data assets, thereby offering carriers the ability to temporarily access critical data as plans unfold for wholesale replacement. Microsoft ships adapters that support interoperability at several layers.

**BizTalk Adapter** for host applications is based on technology in transaction integrator, allowing
enterprises’ PD&D environments to connect to IBM mainframe zSeries (CICS and IMS) or midrange iSeries (e.g., AS/400) server programs. The adapter offers host COBOL and RPG source code import wizards to generate XSD schemas for use in BizTalk Server projects.

**BizTalk Adapter** for IBM DB2 connects BizTalk Server 2006 to critical data stored in IBM mainframe DB2 for z/OS, IBM midrange DB2/400, and IBM DB2 Universal Database for open platforms (AIX, Linux, Solaris, and Windows). The DB2 adapter supports distributed transactions across traditional SNA and open TCP/IP network connections. Insurers easily can create solutions that securely and efficiently integrate DB2 databases without the need for custom programming.

**Microsoft BizTalk Adapter for Host Files** connects BizTalk Server 2006 to critical data stored in IBM mainframe zSeries VSAM datasets and IBM midrange iSeries AS/400 physical files. The host file adapter offers built-in data conversions from host data types to XSD data types, including a broad set of EBCDIC and UNICODE string conversions for older legacy file formats surviving in many carriers today. The adapter offers an intuitive designer with which to define metadata maps of the host records.

**BizTalk Adapter for WebSphere MQ** enables BizTalk Server to communicate directly to MQSeries Queue Managers deployed on non-Windows operating systems without needing to deploy and manage WebSphere MQ Server for Windows.

**Microsoft Office SharePoint Server**

**Increase Collaboration using Microsoft Office SharePoint Server**, part of the 2007 Microsoft Office system, which facilitates collaboration, provides content management features, implements business processes and supplies access to information. Searches for people, documents and data can be conducted effectively, large amounts of business data can be accessed and analyzed, and users can participate in forms-driven PD&D business processes.

**Microsoft Office SharePoint Server** provides a centralized workspace for product design teams to manage documents, participate in discussions and coordinate schedules through shared calendars in Microsoft Office Outlook. SharePoint sites can be created quickly for specific new product brands’ related content publishing, content management, records management or business intelligence needs. Office SharePoint Server uses tools already familiar to most information workers. In addition, IT professionals can customize or extend the Windows SharePoint Services foundation to create new Web-based tools and services specific to the PD&D organization, department or broader insurance industry. These new tools and Web services can be combined with line-of-business applications (e.g., underwriting, policy and rating), capitalizing on existing IT investments.

**SQL Server**

**SQL Server 2008** enables the consumption of data within custom applications developed using Microsoft .NET and Visual Studio and within service-oriented architectures (SOA) and business processes through Microsoft BizTalk Server. Information workers can access data directly in the tools they use every day, such as the 2007 Microsoft Office system. SQL Server 2008 delivers a trusted, productive and intelligent data platform.

**Effective Data Management**

**SQL Server 2008** helps organizations manage any data, any place, at any time. It enables the storage of data from structured, semistructured and unstructured documents, such as images and music, directly within the database. It delivers a rich set of integrated services for querying, searching, synchronizing, reporting and analyzing. Data can be stored and accessed in large servers within the datacenter all the way down to desktops and mobile devices, enabling control over the data no matter where it is stored.
Customer Evidence

Scores of insurance companies use Microsoft-based technologies in their product design and development initiatives. These solutions have enabled the insurers to do the following:

• Identify and capitalize on new product opportunities with greater accuracy in risk selection and pricing
• Achieve agility from existing systems
• Easily integrate new product development and configuration capabilities

The following examples detail the experiences of insurers that have implemented Microsoft-based technologies to help their firms achieve greater speed to market.

The Progressive Group
Service area: Policy management application development

At the heart of company operations for Progressive, one of the largest insurers of private automobiles in the United States, is its internally developed application for managing policies. As the company began to replace its mainframe-based application, first deployed in 1979 and frequently updated over the years, it needed enterprise-grade technology that would scale and provide the flexibility to easily deploy new solutions.

Progressive is in the process of creating its new policy management application using the Microsoft SQL Server 2005 Enterprise Edition database, with development being done using Microsoft Visual Studio 2005 and Microsoft .NET Framework 2.0. The company’s 45,000 agents will be able to retrieve policy data through Web-based access supported by Microsoft technology.

Among the anticipated benefits are enterprise-grade reliability, scalability, easy integration and faster time to market.

http://www.microsoftio.com/content/apo/proof/progressive.pdf

Safeco, now a part of Liberty Mutual Group
Service area: Product development system
Technology: Microsoft .NET 3.0

Safeco, now a part of Liberty Mutual Group, selected Accenture to help implement a new product development system for its commercial and personal insurance businesses. The
company will implement Accenture’s Insurance Configuration Components Solution, an advanced modular software application that provides support for centralized product definitions, interoperability with external engines and pre-modeled product changes. Accenture’s AICS architecture built on Microsoft .NET 3.0 is used for Web services and a service-oriented architecture. The purpose of the new system is to help centralize and enhance product development capabilities across all geographies. Safeco, now a part of Liberty Mutual Group, anticipates that the solution will provide the ability to quickly configure and analyze new product logic for improved speed to market and reduced implementation costs associated with introducing new products to the marketplace.

http://newsroom.accenture.com/article_display.cfm?article_id=4678

**Vital Forsikring ASA**

**Service area:** Pension application  
**Technology:** Microsoft BizTalk Server

Norwegian life and pension insurance provider Vital Forsikring ASA wanted to boost the number of subscribers to its products. However, after several mergers, Vital had a myriad of mainframe systems running different applications. The insurer opted to build a new pension application based on a service-oriented architecture.

By using Microsoft BizTalk Server 2006, Vital was able to combine different transactions available through its disparate systems and present them to employees and customers as Web services in a single Web portal. Vital has improved customer service by ensuring that all transactions are completed successfully and by providing around-the-clock access to its pension products. The insurer also can bring new products to market faster and expects to cut development costs for its next project by $2.4 million (U.S.).


**West Coast Life Insurance Company**

**Service area:** System integration  
**Technology:** Microsoft .NET Framework, Visual Studio 2005, SQL Server 2005

West Coast Life analysts and executives realized that too much time was being spent manually searching for information in a variety of formats, such as paper documents, spreadsheets, databases and other repositories. To be more efficient and effective, the company needed an integration solution.

Using Microsoft Visual Studio 2005 and Microsoft SQL Server 2005, developers created a smart client application that brings together an inclusive view of products, reinsurance treaties and rate tables. The in-house developers relied heavily on time-saving features in Visual Studio and Microsoft .NET Framework 2.0 to speed the development and implementation. Today, West Coast Life can make decisions more rapidly and provide even better service for customers and a solid bottom line for the company.

**Conclusion**

Microsoft’s approach to product design and development can help insurance carriers more quickly identify and capitalize on new product opportunities with greater accuracy on risk selection and pricing; get agility out of existing policy administration systems; and easily integrate new product development and configuration capabilities on top of existing systems.

The solutions help insurers more easily tie product configuration in with leading rules and rating engines, and more thoroughly test configurations in an agile, rapid QA environment before sending them to production and to market. Companies gain agility from existing policy administration systems by surrounding systems with a common desktop, cohesive interface and central information repository.

The solutions also allow for the easy integration of new product development and configuration capabilities on top of existing systems for fast and easy configuration of rules for underwriting, pricing, workflow and assessment questions. Microsoft technologies enable insurers to implement solutions that easily integrate with legacy systems, allowing them to continue to reap benefits from their previous technology investments.

Accenture Insurance Configuration Components solution is at the heart of Accenture’s Product Development Solution Suite. The suite includes a combination of Microsoft .NET technology tools and non-technology assets. The Accenture Product Development Solution Suite can help insurers become successful by enabling them to create and swiftly deliver better-priced and broader-coverage products to the marketplace that are targeted to customer niches, by leveraging better insight around customer exposure and buying behaviors.

The Accenture solution will enable insurers to build products much more tailored to the industry or customer niche in a way that allows them to minimize the importance of price and build a book of higher-profit-margin business capable of surviving different market cycles. It’s all about building offerings that combine products, services and expertise and delivering them to the marketplace on a sustainable basis, in a manner that continues to remain profitable across the underwriting cycle.

With Microsoft-based technologies, insurers are able to replace their aging and expansive legacy applications with modern Microsoft .NET-based componentized architecture, which not only will give insurers greater speed and flexibility, but also will lower the total cost of ownership across their IT resources.

While there is no magic bullet that will provide insurers with a definitive competitive edge in today’s market, a product design and development strategy can allow firms to more quickly identify and capitalize on new product opportunities with greater accuracy on risk selection and pricing. Such a strategy can enable insurers to gain a higher proportion of targeted business with compelling insurance offerings, which will insulate them from some of the market volatility since their products are differentiated and tailored to customers’ needs.

**Appendix: Partners and Partner-Led Solutions**

Microsoft works with a wide array of Insurance Value Chain partners to create product design and development solutions based on Microsoft products and technologies. Product design and development partners include these:

**Accenture** ([http://www.accenture.com](http://www.accenture.com))

Financial services companies compete in a global business environment in which speed and differentiation must be achieved while constantly driving down costs. Accenture’s business and financial services consulting helps insurers enhance their performance to succeed in this highly competitive industry by enabling
them to achieve operational excellence and differentiation, setting them on the road to high performance.

**Avanade (http://www.avanade.com)**
A joint venture between Accenture and Microsoft, Avanade is the premier global technology integrator for Microsoft enterprise solutions. The company’s technology infrastructure and .NET application development solutions provide a rich legacy of superior customer service, exceptional rigor in project delivery, and a thorough understanding of how today’s technologies meet tomorrow’s innovations to yield business value. Avanade experts can help companies capitalize on existing infrastructure investments, design and deploy Web services applications, and create solutions that are efficient, scalable and reliable.

**Duck Creek (http://www.duckcreektech.com)**
Duck Creek Technologies develops and markets software that enables insurance carriers to rapidly define, develop, deploy and manage their insurance products and services — for any line of business. Duck Creek’s products are built on the EXAMPLE Platform, a collection of Web services that can complement an existing legacy system or be used to create a full-functioning system or application.

**Fair Isaac Corporation (http://www.fairisaac.com)**
The Fair Isaac enterprise decision management (EDM) approach for insurance brings analytics, business rules management and information strategy together to improve business performance across the insurance value chain. This approach provides clients with decision-making engines for core processes, including underwriting, claims management, policy administration, marketing, distribution and customer service. EDM helps clients automate and improve operational decision-making within business processes and improve customer interactions in real time.

For a complete list of IVC partners and their contact information, visit http://www.microsoft.com/industry/financialservices/insurance/partners/default.mspx.

For more information, contact a member of the Worldwide Insurance Team at Insurance@Microsoft.com.

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**About Microsoft in Financial Services**

Microsoft’s Financial Services Group provides software that helps financial firms transform the customer, employee and operations experience so they can maximize opportunities for increased market share and profitability. Microsoft software helps empower people and IT staff within financial firms — and across key focus areas such as advisor platforms, channel renewal, insurance value chain, enterprise risk management and compliance, and payments. Through a combination of Microsoft- and partner-provided solutions, customers enable their employees to turn data into insight, transform ideas into action and turn change into opportunity.

More information about Microsoft’s Financial Services Group can be found at http://www.microsoft.com/financialservices.

**About Microsoft**

Founded in 1975, Microsoft (Nasdaq “MSFT”) is the worldwide leader in software, services and solutions that help people and businesses realize their full potential.