

# Speeding Insurance Product Development: Removing Constraints through an Adaptive Systems Approach

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# Speeding Insurance Product Development: Removing Constraints through an Adaptive Systems Approach

*by Roger Soppe, Kate Fowler and Helen Pitts*

**Adaptive, rules-based policy administration systems provide the opportunity for insurers to rapidly respond to changing market and regulatory dynamics, accelerate the product configuration process, and quickly bring to market new or enhanced products to meet evolving consumer demand.**

## EXECUTIVE OVERVIEW

2009 was a challenging year for life and annuities insurers who experienced significant erosion of their investment returns. Declines in business volume, assets under management, and market capitalization also negatively impacted the bottom line for many insurers.

A key lesson insurers learned during the past year is that they have to prepare to embrace unanticipated change. Keeping pace with shifting market conditions may mean rejecting, or at least changing, the status quo. In fact, agility and the ability to adapt to change need to become the key characteristics of the business performance plan.

As 2010 kicks off, insurers are reexamining the way they do business—and taking a hard look at better aligning business processes to get the most value out of IT investments. They are focused on system investments that enable them to not merely sustain, but drive profitable growth. This means systems must fuel the company's ability to rapidly enter new markets, exit unprofitable ones, introduce uniquely differentiated products, and support diverse sale channels—all while improving operational efficiency and controlling costs.

Yet, the ability to accelerate speed to market stalls when companies are held back by the constraints of their current policy administration systems. Inflexible legacy systems can lengthen product development cycle time, increase overhead and cost new business opportunities. Legacy systems also lock insurers into outdated business practices, putting them further behind their more agile competitors.

To meet their goals for growth and profitability—and to adapt to change—insurers require an adaptive policy administration system with rules-based product configuration tools that enables agile business practices. They need a flexible, modern system that delivers speed, reliability and consistency, particularly throughout the product development process.

**“Insurers are actively engaged in enhancing their agility through investment in modern applications, flexible infrastructures, and improved development methodologies. Insurers measure their agility primarily with regard to improvements in speed to market for new products.”**

**—Novarica,  
“Innovation and Agility in Insurance IT,”  
January 2009**

## **CONSTRAINTS ON INSURANCE PRODUCT DEVELOPMENT**

When trying to introduce new product and capture market share, insurance companies face a number of constraints, spanning people, processes, and systems. One of the biggest constraints falls into the “systems” category: inflexible policy administration systems, which have been built and modified over many years.

The technologies and tools built for the insurance industry 20 to 30 years ago were massive systems. They required a lot of planning, took a long time to implement and were truly built to last—in a steady environment where significant change was not expected. They were in some ways like dams, designed to harness a tremendous amount of potential power and resources. Huge, multi-year undertakings, dams are expensive to build and require significant planning and resources. And once they are built, they are difficult to move.

Similarly, legacy insurance systems are immense, immovable systems that are difficult to alter and maneuver. These systems that performed as designed and worked so well 10 or 20 years ago, are now unable to meet the demands of an industry that must adjust to the sudden, unexpected changes that define the new insurance reality. The systems in turn have spawned a host of inefficient processes, designed to work within the constraints of inflexible technologies. And they have introduced constraints on the “people” front: older workers who understand the legacy systems are retiring, and younger employees do not have expertise in COBOL or other code languages that dominated the IT world in years past.

To overcome these constraints, insurers should consider adaptive policy administration systems. An adaptive system is designed to be flexible, agile, and maneuverable, so that the system itself is no longer a constraint to new product development.

Adaptive policy administration systems help insurers eliminate constraints within the product development cycle in three primary ways:

1. Removing reliance on IT
2. Streamlining quality assurance
3. Managing rule migrations and standards

Once these constraints have been removed, insurers are free to implement more flexible processes and address the people challenges involved in new product development. By removing these constraints, an adaptive policy administration system enables insurers to increase their speed to market, reduce total cost of ownership and achieve competitive advantage.

### **Removing Reliance on IT**

The product development process using legacy policy administration systems typically requires heavy reliance on IT. For example, an insurer may wish to add a health rider to an existing annuity product. In the case of a hard-coded legacy system, a select group of IT programmers would have to customize the system to

modify the product based on requirements provided by the business unit. This not only lengthens the overall product development time cycle, but hampers an insurer's ability to be nimble in today's competitive marketplace.

In contrast, with an adaptive policy administration system, the change would be configured using business rules, without changing or recompiling the source code. Rules-based, configurable systems enable collaboration across a hybrid group of IT and business users, such as actuaries, customer service representatives, claims, compliance, and others involved in the product development process. Business users are no longer reliant solely on IT to make system changes; nor is IT dependent solely on the business to provide product development requirements.

With an adaptive, rules-based system, business analysts, actuaries and other users involved in the product configuration process can create or change products with complex and extremely specific features, without concern for system limitations. This level of flexibility lets users drill down and manipulate products and features at the most intricate levels. Rules can be shared between lines of business where appropriate, enabling insurance companies to enforce common product and regulatory calculations and processes globally. Such mastery of data provides unparalleled opportunity to capture emerging markets with unique, niche products.

Insurers face another looming challenge as the aging IT workers who have long supported their legacy policy administration systems retire. Their replacements have been trained on new programming languages and methodologies. While highly skilled, these new workers may be ill equipped to support aging systems. An adaptive, rules-based policy administrative system removes reliance on this dwindling pool of older IT workers by (1) empowering business users to modify products using business rules, and (2) providing a system built on modern code languages (such as Java) that younger IT workers are familiar with.

### **Streamlining Quality Assurance**

Inflexible legacy policy administration systems can limit the ability of users to perform thorough unit testing and debugging. Quality assurance (QA) often has to rely on IT to process test case results and unit testing prior to migration over to the quality assurance environment. Unit testing also is often restricted to single event processing or even a single calculation.

Additionally, QA testing is most likely performed using a waterfall approach where all cases are bundled together on a single processing date. This limits the amount of testing that may be done in a single batch, making it less likely that testers will be able to understand or predict the results that one event may have upon another.

An adaptive policy administration system lets insurers break through this constraint by enabling transaction-level testing and debugging. In every stage of the process, including development and quality assurance, each policy can be independently processed forward. The system allows each event or transaction to be examined as it occurs, providing a more complete view of how each event will impact the next.

**Mastery of data provides unparalleled opportunity to capture emerging markets with unique, niche products.**

**"To remain competitive, life insurers must effectively offer new products, such as hybrid annuity and long-term care products, improve their abilities to cross-sell various products based on customer need; improve Web-based self-serve capabilities for customers and distribution; and revamp operational compliance and risk management process. Policy administration systems over 10 years old, whether vendor-built or insurer-built obstruct these efforts."**

**—Gartner Inc. "MarketScope for North American Life Insurance Policy Administration Vendors," June 2009**

**“Whether it means introducing entirely new products, changing rates, modifying coverages or adding riders and minimums, insurers need to be able to bring to market products as fast as their peers in order to avoid losing market share.”**

**—Novarica,  
“The Business Case for Modernizing Core Systems,” May 2008**

**“Oracle Insurance provides us with a robust, end-to-end solution that will help us improve offerings to our customers. It will also give us increased agility to respond to changing market demands and swiftly capitalize on opportunities for strategic growth in our business process outsourcing.”**

**—Rob McGinnis,  
Chief Executive Officer,  
Marsh U.S. Consumer**

This reduces the resources and time required to uncover complex errors such as mismatched valuations.

An adaptive system should give users visibility into every transaction that has been processed: scheduled events, allocations and valuation, accounting detail, data entry, end results of calculations processed, disbursements, etc. Not only does this streamline quality assurance, but this level of traceability improves compliance and reduces the workload associated with audits.

### **Managing Rule Migrations and Standards**

The final primary constraint encountered during product development is inadequate control of rule migrations and data standards. When using traditional legacy systems, any changes required to create or modify products are typically hard-coded. This makes it difficult to quickly trace changes within the system, especially when there is a need to view comparisons between versions. Hard coding also creates complexity when there is a need to see how rules relate or to view data dependencies within the rules.

An adaptive system includes built-in tools and processes to remove these constraints. For example, a release management tool can be used to view a complete history of changes that have been made to any given rule. Tracking multiple product versions is not only important for history and documentation, but also a necessary part of compliance. To further assist in the configuration process, an adaptive system includes an integrated data dictionary, where users can easily view hierarchies, elements and various dependencies. The data dictionary promotes greater reuse of existing rules, elements and even whole products, making product development a more efficient process overall.

### **MARKET SUCCESS OF ADAPTIVE SYSTEMS**

Recognizing the need for adaptive systems, Oracle is engineering its Oracle Insurance Policy Administration system to include the attributes insurers require to support an agile policy administration lifecycle. A business-rules based architecture, for example, enables rapid new product introduction by providing fast reconfiguration through product templates and cloning, and a rules palette that guides users through the product development process. Transaction-level testing through business rules supports the related QA process, improving accuracy and providing an audit trail for compliance. Other tools integrated into the rules palette—including a debugger, release management and data dictionary—all help speed the product development process, with features such as drag-and-drop functionality and process step documentation that promotes greater reuse within the product development cycle.

The adaptive nature of Oracle Insurance Policy Administration has made it possible for Oracle Insurance customers to do more with less. One customer reported developing six products in parallel with 12 people—an undertaking which previously would have required up to 40 people using the insurer’s legacy system.

**“Since its inception Oracle Insurance Policy Administration has offered the market not only modern technology but also new ways of thinking about old problems.”**

**—Celent, “ABCD Vendor Report: North American Policy Administration Systems, Life, Health, Annuities,” January 2010**

Another insurer based in the Northeastern United States leveraged the business rules of Oracle Insurance Policy Administration to develop a highly complex new annuity product and bring it to market in less than nine months. The response in the market was phenomenal, with the product accounting for one-quarter of the company’s total sales during the first year of roll-out. The insurer reported that it would not have been able to develop this product using its previous legacy system, which simply did not have the capability to handle the complexity of the many features and options of the annuity: “We’ve been able to really leverage the architecture of the new system so we can do things like put regulatory changes in very quickly, and configure new products and bring them to market in record time.”

This insurer has since migrated other products to Oracle Insurance Policy Administration and retired its legacy system, significantly decreasing its overall product development cycle. Previously, new products took up to twelve months to roll out on the legacy system. The insurer’s most recent product launch using Oracle Insurance Policy Administration took only four months.

## **CONCLUSION**

The question for today’s insurance carriers and providers is this: how adaptable are your IT systems, and what impact can adaptive systems have on your business? Having adaptive systems can help you identify and remove constraints that impede your ability to prepare for and respond to an ever-changing market. By leveraging an adaptive policy administration system, such as Oracle Insurance Policy Administration, insurance companies are removing the constraints that stand between them and rapid, agile new product development. By removing reliance on IT, streamlining quality assurance, and managing rule migrations and standards, they are successfully entering new markets and gaining an advantage over their competitors.

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## **About Oracle Insurance**

Oracle’s vision for the insurance industry is simple: offer a complete, modern and innovative set of components and solutions—from technology and business infrastructure to core processing—that enables our customers to transform their insurance enterprise.

For more information about Oracle Insurance, please contact us today at [insurance\\_ww@oracle.com](mailto:insurance_ww@oracle.com) or 1.800.735.6620, or visit [oracle.com/insurance](http://oracle.com/insurance).



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