SMA
STRATEGY MEETS ACTION

Insurers
Driving Agility and Cost Optimization
With BPM-Enabled SOA

An SMA Whitepaper
Author: Deb Smallwood, Founder
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Executive Summary

Insurance is one of the leading industries to adopt business process management (BPM)-enabled service-oriented architecture (SOA). The industry has witnessed great momentum, progress, and successes in the adoption of BPM-enabled SOA in the past year. Although the "hype" has subsided somewhat, the early adoption successes are very real, and fast-following insurers are beginning to examine their forward-thinking peers, benchmark programs, and launch their own BPM-enabled SOA solutions. Insurers that approach business processes holistically and invest in lean models find it easier to leverage the technology investments effectively and are better positioned to survive the current economic storm. In addition, insurers are finding that BPM is an attractive solution for many IT initiatives, including legacy modernization.

Insurance is one of the leading industries to adopt BPM-enabled SOA. It has witnessed great momentum, progress, and successes in the past year.

Across the global insurance marketplace, insurers are polarized in today's economic crisis; they find themselves either struggling to survive or thriving and growing as they seize the market opportunities. Consistently, our research reflects that those that are thriving and growing have become smarter and more demanding in creating agile and cost-effective business processes and technology environments. No longer is it acceptable to wait six months or more and spend seven figures to implement a new product or adhere to a new regulatory change within the constraints of the technology environment. In today's changing world, the expectation is smarter, faster, and cheaper, yet with the same level of quality.

Although the insurance industry is typically not known for being the first adopter of any new technology, insurers have led the way with BPM-enabled SOA. Insurers are now clearly beyond early adoption and are mainstreamers implementing proven and mature technology across the enterprise. Given the current global economic crisis, implementing BPM-enabled SOA solutions will not only help insurers survive but also will enable them to come out stronger on the other side, with more agile and optimized business processes and technology environment. The time is now for most insurers to embrace this technology and begin to gain the positive results, as many in this industry are doing.

Based on SMA research, this paper provides a view of the current state of BPM-enabled SOA adoption in insurance. The successes are highlighted in three brief case studies. These studies reflect four areas of market traction and success: legacy modernization, underwriting automation, claims processing, and customer information services. The paper also includes an easy checklist for your company to determine if BPM-enabled SOA is right for your firm and outlines an action plan to help your company get started.

Insurers Achieving Great Successes

Over the past year, the insurance industry has achieved great success in the adoption of BPM-enabled SOA, driving cost optimization and agility. SMA research indicates that the top 25 insurers in both P&C and L&A are now implementing (or already have implemented) varying levels of BPM-enabled SOA. In the case studies examined in this paper, top insurers, as well as many midtier insurers, are leveraging SOA frameworks and implementing BPM with great success and progress. In fact, BPM is a mainstream technology across the industry.

SMA primary research indicates that, for the insurance industry, investment in BPM-enabled SOA would yield the best returns in legacy modernization and initiatives like agent connectivity, underwriting automation, claims processing, and single-customer information service.

Many of the first implementers of BPM focused first on a top priority, such as modernizing their systems. This is an attractive place to start because the technology enables them to leverage effective core capabilities of the legacy systems and begin to unbundle the high maintenance costs and less agile areas as well. Typically, the data integration challenges are streamlined with Web services. After gaining momentum with early ROI, many have migrated to developing reusable services or components that were loosely coupled with the evolution of full BPM processing. Eventually, the real power of BPM-enabled SOA is full dynamic and event-driven processing, creating the ultimate business and technology environment that is agile and responsive to any change or event in real time. See Figure 1 for an illustration of this approach.

Figure 1: Legacy Modernization Approach
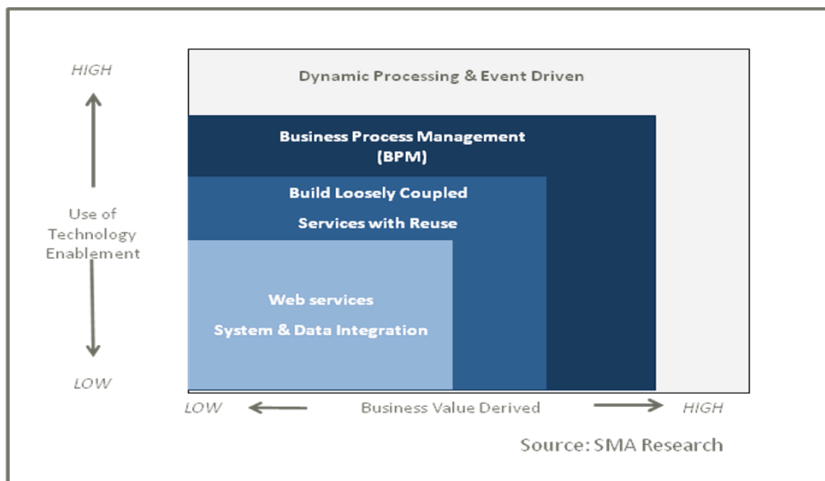
Mini Case Studies

Legacy Modernization: Underwriting and Policy Admin

Particularly in today's marketplace, applying technology to the underwriting business process and integrating it with a full legacy modernization of the policy administration system has been a hot trend. Initially, the business requirements were focused simply on the administration system. The new requirements include advanced risk selection and more sophisticated rating, with advanced rules and workflow. Expanding processing flows now require the capability of straight-through processing and real-time exception-based flows that are integrated with underwriting workstations, agent portals, self-service capability, and back-end, fully integrated policy admin systems. Not only are processing and workflows more advanced, they also need to be cost effective and agile. At a minimum, legacy modernization is required with possible replacement. But SMA research finds that replacing the entire legacy system is not always the best solution. Overall, it is clear that BPM does provide an attractive and proven solution to this broad set of requirements.

A North American Midtier P&C Carrier. This insurer, like many others in the industry, had an eroding book of business, largely because it did not provide automation to its agencies, and it had rising combined ratios because it lacked precision pricing. Furthermore, it had an outdated policy administration system that was costly to maintain, lacked agility for business changes, and would not effectively integrate with the business need for real-time predictive analytics.

Through an SOA framework that aligned data integration standards using Web services for all interfaces, development of reusable services, implementation of a business process manager, rating engine, and enterprise service bus (ESB), the insurer identified, modeled, and developed a solution. In this case, quantifiable business value was recognized within the first three months of full production.

- **Agility.** First, by implementing real-time quotes via automated underwriting rules selection and workflow to the front end of their data collection process, the insurance agencies were provided with a robust rating engine that expedited their underwriting processes. Use of this engine yielded improvements in the quality of the quotes submitted by the agents through automated rules and pricing precision. Furthermore, straight-through processing for the quoting process connected the agents to the insured in real time. Upon implementation, this BPM-enabled SOA solution increased the submission of quotes to the insured by 65%.

- **Cost Optimization.** Efficiency gains did not stop with the implementation of underwriting rules and workflow automation. Straight-through processing for the quoting transaction quickly rose from 0% to 70%, with a clear line of sight to the overall goal of 80%. This rate, coincidentally, is heading toward alignment to the industry best practice! Furthermore, a reduction in direct and indirect expenses was realized in the underwriting process with this automation, and the rating tiers increased from 3 to 25, thus allowing for improved pricing precision and competitive pricing.

- **Legacy Modernization.** Finally, and perhaps most strategically significant, its legacy system was unbundled and replaced with highly scalable tools and solutions that included a BPM tool, rating engine, and services components. It is upon this framework that the carrier can make future enhancements to further exponential gains in process agility and cost containment with only incremental cost.

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Claims Processing

Today, claims end-to-end processing has a basic requirement to provide the flexibility to achieve the right balance of high-touch personalized customer service with a high-technology automated service at the right time for the right customer or claimant. Both the business processes and the technology environment require dynamic flexibility to scale claims operations and accelerate payment processing after an event like a flood or hurricane. The technical foundation of claims processing must be nimble to integrate with the new flurry of data and analytics tools becoming available for straight-through processing and real-time payments. Similar to the challenges of the policy legacy system, legacy modernization for claims management systems is a priority. Replacing claims management systems does not necessarily reap the same benefits as leveraging advanced processing and technology. Today's agents and customers expect insurers to provide capabilities like first notice of loss, validation, investigation, case management, and payments with the same level of real-time capability in underwriting. Of course, the level of automation depends on the line of business, type of claim, and severity, but it should not limit the potential for some automation for any book of business. BPM in claims provides a flexible and adaptable solution for the dynamic processing of business needs.

A European Midtier P&C Carrier. To improve its overall responsiveness, a personal and commercial lines claims processing entity needed to drive efficiency and improve customer service by applying automation-enabled straight-through processing for high claims volume. It leveraged BPM-enabled SOA framework coupled with the legacy modernization. By also developing reusable claims services and implementing business rules management (BRM), business process manager, and ESB with full orchestration, the insurer achieved substantial ROI within the first six months of full production. Its primary challenges were to eliminate paper and automate via a straight-through processing implementation.

The automation of personal lines (FNOL) was the first implementation with a combination of BPM and BRM, along with scanning, imaging, and automated workflow. The results were astonishing: 60% of the claims were processed in real time and within three or four seconds — a significant improvement from the several days of processing time. Building off this framework, the carrier made commercial lines next in the queue. Once a manual paper-based workflow, claims case management became semi-automated and paperless, yielding a 20% reduction in loss expenses.

Customer Information Service

Top of mind for many insurers is the vision of a shared single-customer view that becomes the common truth of customer information. Most insurers are plagued with multiple data stores that contain the same information. In addition, this data is passed among many applications, creating a cobweb of application interfaces. Not only does this scenario impact the quality, completeness, and accuracy of the data, depending on the sources, but it also requires much overhead in both maintenance costs and constraints on the ability to respond to business changes and needs. BPM-enabled SOA allows for the creation and sharing of a common customer information service that is used as the pathway to obtaining consistent, accurate, and complete customer data to be shared across the enterprise. In addition, this shared service provides true cost optimization and agility for any new business requirement and business need.

A large global life insurer built new reusable service components, which yielded a savings of ~$40M per year — a 50% reduction in cost!

A Large Global Life Insurer. This insurer wanted to create a technology platform that leveraged reusable services as the start of its journey of BPM-enabled SOA. The program commenced with a customer information service system that leveraged an SOA framework. The insurer built a new reusable services component for customer data, which yielded a savings of about $40 million per year — a 50% reduction in cost — and also built over 500 reusable components. The business value from the investment in reusable services was realized within

the first six months of production through development cost reduction. Additionally, this solution reduced the complexity of its existing IT environment by enabling the company to sun-set obsolete applications, reduce application interfaces, and consolidate data-reporting mechanisms. BPM-enabled SOA provided a significant cost optimization opportunity for this carrier. This same opportunity exists at many insurance companies because, typically, the technology environments are highly complex with comprehensive core application requirements, embedded e-business rules, and insurance-related content. The sheer volume of data stores along with the business processes interwoven throughout their application framework presents the opportunity to slash both operational and maintenance expenses and to maximize true agility. Creating a reusable customer information service is a great place to start.

Is BPM-Enabled SOA Right for Your Company?

Given the successes of the early adopters of BPM enabled by SOA, "fast followers" are emerging quickly. Based on our research, some key characteristics begin to outline the criteria for embracing this technology. The following criteria are right for BPM-enabled SOA:

- Policies written in more than one line of business and more than one state

- Combination of multiple core systems that are in-house and/or package software applications

- Multi-tiered IT environments with complex data integration requirements between applications

- High maintenance costs that are associated with lack of agility and time to market

- Requirement to address the legacy situation in policy administration, claims management, or billing applications

- New initiatives in underwriting or claims

Legacy systems continue to be the main reason for such high maintenance costs. It is precisely for this reason that BPM-enabled SOA is relevant to this population of insurers and can help solve the legacy modernization challenge.

If your company aligns to at least three of these six criteria, SMA believes that it is prime for BPM-enabled SOA. Our research shows that companies that continue to implement technology solutions in a non-BPM-enabled SOA framework will quickly fall behind. Many of those that implemented legacy replacements or other technologies in a non-BPM-enabled SOA framework are now facing rewrites or replacements once again. It is clear that they will fall even further behind as they constantly replace functionality and technology.

And last, many insurers allocate 60–75% of IT spend on maintenance — "keeping the lights on" —limiting their funding for strategy and competitive IT investments. This practice creates a backlog of system enhancements and new project development, creating a great impact on the business ability to gain traction with new technology solutions. And legacy systems continue to be the main reason for such high maintenance costs. For precisely these reasons, BPM-enabled SOA is relevant to this population of insurers and can help solve the challenge of legacy modernization as well.

How to Get Started

Moving to BPM-enabled SOA is no longer an option; it is a necessity. Insurers are embracing and executing it, and the reality of agile and cost-optimized technology solutions is a given. Although starting may appear to be a daunting task, it is actually quite simple. Just follow this step-by-step approach:

1. Be clear on your business needs and priorities with appropriate business sponsorships.

2. Explore and understand "possibilities" with your trusted advisor, internal business and IT executives, and/or external trusted solution provider and/or system integrator partner.

3. Find the right project at the right time that will use the right blend of BPM-enabled SOA technologies. Do not attempt anything major or mission critical for the first project.

4. Start small; begin with Web services for improved data integration or begin to develop reusable services.

5. Establish an overall governance process to help guide the evolution and reinforce participation from both business and IT.

6. Look to see how BPM can be the solution for any new development project, including legacy modernization, as the option rather than replacement.

7. Build each implementation off the previous project by leveraging the technologies, the services, or best practices.

8. Track success, learn from each project, and create momentum in your company.

Call to Action

Because of current market conditions, every insurer is under great pressure to both drive cost optimizations in its core business processes and become more agile and responsive as the market shifts. Laying the foundation by incrementally improving business processes and technology environment together creates an imperative for most insurance companies. It has been proven by the successes of BPM-enabled SOA that insurers can achieve both agility and cost optimization in business processes as well as in the underlying technology environment.

The time is *now* for insurance companies to begin implementing BPM-enabled SOA solutions. This technology is proven and mature, and the many companies that have embraced it are successfully moving forward, gaining traction in both agility and cost optimization each day.

About SMA: Strategy Meets Action

Exclusively servicing the insurance industry, SMA is a new breed of strategic advisory firm offering a unique blend of research, advisory, and consulting services to insurance companies and to solution providers. By leveraging best practices from both the management consulting and research advisory disciplines, SMA's advisory service offerings are actionable business-driven and research-based where strategy meets action.

Additional information on SMA can be found at www.strategymeetsaction.com.