SMA
STRATEGY MEETS ACTION

Today's Modern Architecture:
Making Strategic and Wise Investments

Featuring as an example:

ISCS's SurePower Innovation®

An SMA Perspective
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This perspective is based on SMA's ongoing research on Core Systems Solutions and Application Architecture. ISCS has purchased distribution rights.

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Introduction

Insurers typically love to flip business challenges into opportunities. Many need to start applying this same philosophy toward technology investments. Nearly 75% of insurers of all sizes say they will increase or at least not cut IT spending in 2010. We project spending will accelerate in 2011 and into 2012 as insurers that did not position themselves for recovery try to catch up with the leaders. This healthy business picture and the positive IT investment projection are tempered with a "back to basics" decision mentality and management approach: Do it right, do it once!

The forward-thinking strategies of the leaders appear influenced by the risks experienced in 2008 and 2009. Where tactics ruled from 2000 to 2007, strategy and long-term vision have regained their rightful position as the highest priorities.

This perspective highlights excerpts from SMA's ongoing research and analysis on core systems solution approaches and IT investment trends in the insurance industry. A brief analysis of the functions and features of the SurePower Innovation® Policy Administration Suite from ISCS illustrates the increasingly important role that an application architecture and common data model play.

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Making Wise Technology Investments

Given the current competitive climate, any misstep in technology investment can be a game-changer; therefore, insurers must consider the link between tactics and strategy as they make technology decisions. Leading insurers are making use of their technology
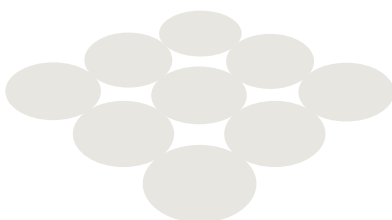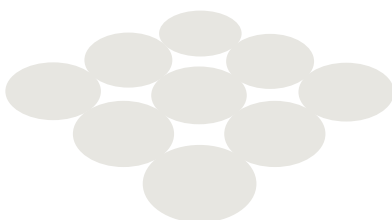
investments to position themselves for coming opportunities. They are examining their technology not only to be a tactical enabler and competitive weapon but also to fit into their overall strategy. It is necessary for insurers to have a plan that moves the organization to a strategic, modern application architecture.

The critical foundation is a full suite of core applications based on a modern architecture for key areas that not only include underwriting, policy administration, billing, and claims systems but also advanced application components such as fully connected portals, enterprise workflow, advanced document management, business intelligence, and analytics. Insurers need to have in place fully integrated core applications that use a modern architecture. They must be open, adaptable, and flexible, providing easy integration with external third-party data and advanced application components. Otherwise, critical investments in core applications or individual advanced application components could be short term and basically become throwaway expenditures.

Business Capability: Linking Capability to Strategy

Step one for insurers is to understand the requirements that correlate to specific capabilities that will enable the business to achieve its goals. Our research continues to identify and investigate the areas of highest priority for insurers: responsiveness and dynamic products.

Responsiveness has taken on a new sense of urgency as insurers face pressing demand to perform in real time and manage change as it happens. Customers expect instant quotes and policy servicing, and they want it their way. Regulators expect compliance now. Stay-

ing profitable depends on being able to adjust rapidly and to quickly manage complex market dynamics. Insurers must have the ability to adapt to fluctuating product requirements, the intelligence to discover new business opportunities, and the flexibility to capitalize on new technologies and solution approaches.

Dynamic products are the latest focal point as offerings take on new shape and as speed to market becomes an essential element. Price, product parameters, and servicing are blending to create new offering dimensions and market expectations. The ease of doing business is an increasingly important factor, influencing both agents and the purchasers of insurance products. Speed and ease go beyond the quoting and sales process to servicing at every touch point. Effective portals are difference makers; personalized product design and servicing intelligence rapidly are becoming the new norm.

Linkage between the business strategy and these required business capabilities is crucial. The enabler for this linkage is the technology. Imagine a business processing environment where workflows cut across the various departments, where external partners and channels are incorporated into the workflows, where processing is integrated across different systems, and where all players are talking to each other and using high-quality common data. Here, business processes and systems are easy to use and easy to change. This integrated world is the foundation for a responsive, dynamic business. At the core of this vision, where business processes connect throughout the organization as all stakeholders share the same information, is a modern architecture that enables integration for all applications, workflows, tools, and services and data.

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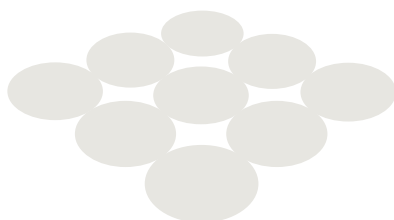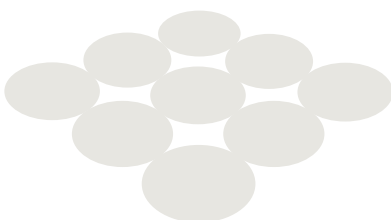
Technology Capability: A Modern Architecture

SMA research indicates that insurers have significant plans to modernize applications, especially their core applications. There are several ways to approach this modernization. SMA believes it doesn't really matter what the specific technology is—whether it is Java or Microsoft .NET—or which database type is used—Oracle, IBM DB2, or another. The technology language or platform is not the tipping point for a company's successful implementation. Although each has its own set of pros and cons, in the end, all technology works when implemented correctly. What *does* matter is the alignment. The technology must align to the insurer's technical architecture standards and guidelines and must deliver the required business capabilities.

To start, every insurer needs an overall conceptual application architecture. This framework shows how all the application pieces fit together and becomes the blueprint for making investments and a guide for setting IT priorities. The modern architecture goes beyond the policy administration and claims systems. It provides an integrated foundation for feature and function across all departments, all products, and all lines. It creates an environment for sharing and reuse across the enterprise.

When the modern architecture (shaped by integrated core systems—the processing heart of the business) is in place, it is easy to integrate advanced application components. Doing so enables an insurer to capitalize on the core applications and various tools, engines, and technologies in the marketplace that offer advantages such as improved service, faster product development and implementation, more effective customer communication… and the list goes on. Figure 1 depicts SMA's Conceptual Architecture.

Figure 1

SMA's Conceptual Architecture

USER INTERFACE

Agent/Broker Portal	Insured Portal	3rd Party Provider Portal	Self Service Portal	Insurer Front Ends	Dashboards & Scorecard	Mobile Technology

CORE APPLICATION

All Lines of Business — All Products — All Feature Functions

Underwriting	Policy Admin	Billing	Claims	Reinsurance	ERP/Finance HR Payroll	Misc

ADVANCED APPLICATION COMPONENTS

Workflow

Common Engines & Tools

Rules Engine	Rating Engine	Cat Models	Geo Coding, Spatial & Other

Customer Communication & Content Tools

Connectivity	Forms Mgmt	Document Mgmt	Scanning & Imaging	Indexing & Archiving	Publishing Tools

Data Services & Tools

Business Intelligence	Statistical Reporting	Compliance Reporting	Quality & Conversions	Predictive Analytics

All insurers should be examining their current application portfolios. They need to evaluate the picture today and determine what it must look like tomorrow to deliver the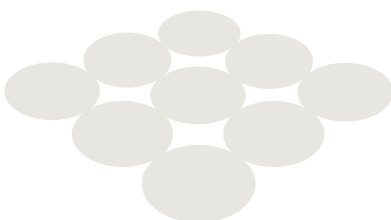 business capabilities needed to implement their strategy. Once they make a realistic evaluation, the next step is to lay out a plan and choose an approach that will move the organization to a modern architecture. For most companies, this means addressing the issue of legacy systems to determine, for example, how the company will implement or change current workflows; whether they want a separate rating engine or one that is inside the policy administration system; whether they need capabilities such as consumer and agent portals; or what is the right combination of externalized engines vs. functions contained within a single application.

One of the biggest decisions facing most insurers is the approach to use for selecting the core system. Few insurers have the skill and experience to custom design and build a system in house. Most are using one of three primary approaches that answer the need for a modern architecture: best of breed, enterprise, or a hybrid of the two. All approaches require choosing the right vendor(s) and using a modern technology platform that is open, componentized and allows plug and play for integrating additional advanced applications and leveraging the current portfolio of IT assets.

Best of Breed Approach

The best-of-breed approach, which entails selecting the best solution for each department or for each core function, has been all the buzz since the early 2000s. For a period of time, best of breed was really the only option for moving toward a modern architecture with modern technologies, since many of the older enterprise solutions often consisted of legacy technology.

Best of Breed was really the only option for moving toward a modern architecture with modern technologies [and] is still a great solution for some insurers.

On the plus side, with this approach, all stakeholders select the solution they want, need, or think they should have. In some cases, a best-of-breed approach opens the door for functional and technology innovation. Most best-of-breed solution providers have great depth in business and technology functionality because of their sole focus. The insurer spreads out their technology risk, can stagger software upgrades based on the upgrade path of that technology. In addition, some insurers believe it is wise not to "put all their eggs in one basket" and be totally dependent on a single vendor.

The negatives for a best-of-breed approach have become apparent for many insurers. When several departments and lines of business are making independent technology selections, the company has no common standards, rendering an enterprise view nearly impossible. Integrating all the pieces becomes costly, time consuming, and extremely complex. The many versions of technology require constant regression testing, resulting in continual quality monitoring of the reconnected components. Managing multiple vendors is a challenge, and accountability is often very difficult to assign. The variety of technology platforms, versions, and approaches leads to higher maintenance costs and the need for highly skilled technical talent.

The pure best-of-breed approach is right for some insurers, particularly those that have the time, money, and talent to successfully implement and manage the required integration and multiple vendor relationships. For others, this approach has created an application environment that is too complex to manage effectively, and has not moved them closer to a modern architecture.

Enterprise Approach

The enterprise solutions approach has made a resurgence in the past couple years and is now a desirable approach. The solutions available
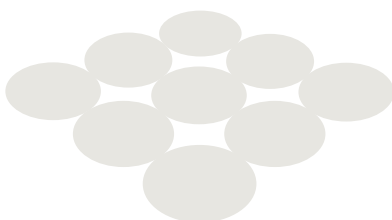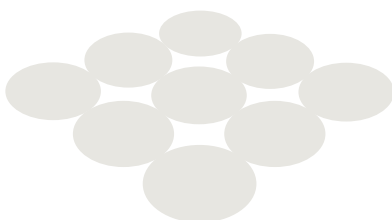
today have changed negative perceptions based on old-technology and legacy systems to positive perceptions based on meeting the required capabilities of both the business and technology.

Today, a new breed of solution providers offers enterprise solutions with open platforms and modern architectures using new, advanced technologies. These providers offer a variety of options, including full feature and function core applications and a range of advanced application components. The enterprise solution components deliver strong business value as they have the depth and functionality to meet the business needs, while leveraging their common platform to make the whole greater than the sum of its parts.

On the plus side, these enterprise solutions provide a full suite of systems that all align to a common modern architecture. Because they are comprehensive and based on a common data model, problems with integration are rare and costs are greatly reduced. It is generally faster and typically cheaper to implement and maintain these new-breed enterprise solutions. Insurers deal with just one highly flexible technology platform. One vendor has full accountability, and the relationship is usually an ongoing partnership.

The negatives for an enterprise solution approach are few but may have significant impact on an organization whose stakeholders and users are accustomed to selecting solutions based solely on the benefit to a specific department or process, instead of looking at enterprise value. The risk of independent customization must be managed, particularly in organizations in which functional departments are in the habit of making autonomous decisions. Insurers that choose an enterprise solution do put all their eggs in one basket. They accept the risk and dependency on one vendor for upgrades and maintenance.
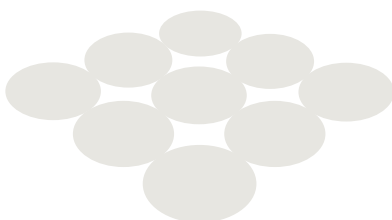
Hybrid Approach

A common approach SMA is observing across the insurance industry is an enterprise-based hybrid, blending an enterprise solution for some or all of the core applications and a best-of-breed approach for some application components, for example, imaging, document management, or rating engines. An enterprise solution provides the architecture and the common data model, and it enables easier integration throughout the organization. This foundation can then be supplemented with best-of-breed application components for an area or areas that are unique or of strategic importance, should the enterprise system not deliver equivalent strategic value in that area for the company as a whole.

The hybrid approach offers many advantages worth investigating. Even insurers that have invested heavily in customized best-of-breed solutions should evaluate it, as should insurers with ongoing legacy issues. It is also an option for those saddled with rigid, old-technology enterprise systems. The hybrid approach, depending on the mix and number of vendors, can offer an alternative that is quick to implement for an insurer needing a modern, integrated architecture that enables the business to be responsive and dynamic.

In a hybrid approach, the first step is to find a suitable vendor of core applications—one of the new breed of enterprise solutions or best-of-breed core function(s) with a modern architecture. This partnership will be important because finding the right core platform is the key to moving to an overall modern architecture. Several vendors offer enterprise solutions, but no one vendor has it all. Insurers will invariably need to add application components, content providers, Web services, or leverage an existing core application. The reality is that all enterprise systems are hybrids to some extent. The strategic question is one of degree— how close does the company choose to

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position itself to the pure-play best-of-breed approach, on one side, or the enterprise approach, on the other.

The important message is to start with the core, a common data model, and an application platform. Some insurers have decided to build the platform themselves; others are buying it. Either way, all insurers need the platform. Unfortunately, SMA research shows that many insurers are just unplugging a legacy system and replacing it with a new core—without aligning all functions and departments to company-wide blueprint that will result in a modern, integrated architecture.

A hybrid approach makes sense for most insurers and is certainly worth considering in these challenging, dynamic times. It is no longer possible for insurers to afford many significant technology investments only to discover their investments do not "add up" to what they really need: market responsiveness and the ability to dynamically add and change products.

ISCS's SurePower Innovation® Suite

Company Overview

One of the new breed of enterprise solution vendors is ISCS. Its solution, SurePower Innovation® combines fully integrated core applications with many of the additional application components, all in a modern architecture. It is an attractive offering for an enterprise solution and could be the best solution for a hybrid approach.

A California-based company, ISCS specializes in providing U.S. property and casualty insurance companies with enterprise-wide automation of their insurance operations. ISCS customers are property and casualty insurance companies ranging from start-up operations

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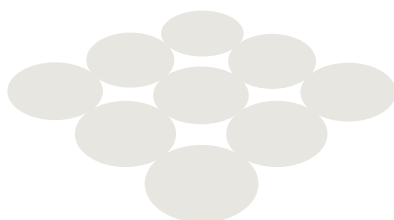
to established companies with $1 billion in direct written premium (DWP).

ISCS's vision is *"to be the primary driver of our customers' success… to enable our customers to lead the industry through the quality of our product, people, and process… to give our customers the advantage they need to grow the business, lower operating expense, and improve customer service."* The company focuses on making certain that every implementation delivers the highest possible product quality, fosters productive teamwork, enables effective communications, and capitalizes on the expertise of the organization.

ISCS's reputation is solid and its clients' experiences are positive. SurePower Innovation stays current with a dependable, scheduled plan for enhancing features and functions. In addition, ISCS continues to invest in ensuring that its offerings stay current with technology upgrades, all to keep pace with the best-of-breed solutions.

Breadth and Flexibility

SurePower Innovation® is being used by insurers that have 50-state programs and a wide variety of personal, commercial, and specialty lines of business. The system is also in use by several managing general agents (MGAs). ISCS touts SurePower Innovation's ability to run all lines of business on the same system. The system can accommodate thousands of internal company and agent users as well as direct sales and insured self-service portal users.

ISCS offers both licensed in-house deployment and ISCS-hosted services. Of special note, ISCS's implementation teams successfully use an agile software development methodology and automated testing tools, designed specifically by ISCS for use with P&C insurers.

SurePower Innovation® is a good example of an enterprise system that provides robust core and advanced processing capabilities.
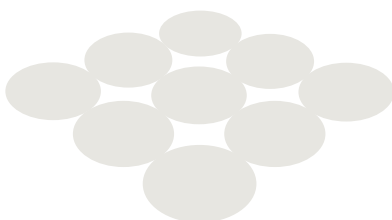
SurePower Innovation is a good example of an enterprise system that provides robust core and advanced processing capabilities. The offering is based on a state-of-the-art, service-oriented architecture (SOA) using a common data model. Other advanced characteristics are use of model-view controller architecture (MVC), model-driven architecture (MDA), and a fully Web-based design throughout all functions. This framework provides the foundation for external data interfaces across the enterprise and can readily form the base of a modern application platform for an insurer. The combination of common data model, pre-integrated modules, and the ease of adding custom-developed features and functions or those from other sources is very powerful. This solution also contains many of the application components required beyond traditional core applications.

Figure 2 maps SurePower Innovation to the SMA Conceptual Architecture, showing the scope of SurePower Innovation's footprint. Of the solutions in the marketplace today, it is one that most closely meets insurers' requirements. It extensively addresses the necessary enterprise capabilities with its full integration across underwriting, policy, billing and claims and has surprising breadth and depth, fulfilling nearly all of SMA's Conceptual Architecture with the few exceptions of CAT models, predictive analytics, ERP/Finance/Payroll/GL, and aspects of spatial capabilities, publishing tools, and compliance services (the system has some capabilities in each of these areas).
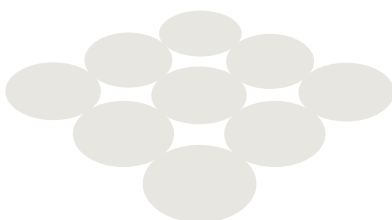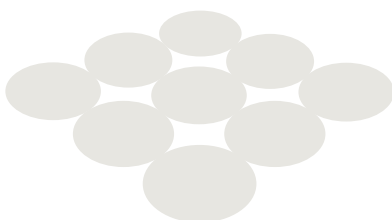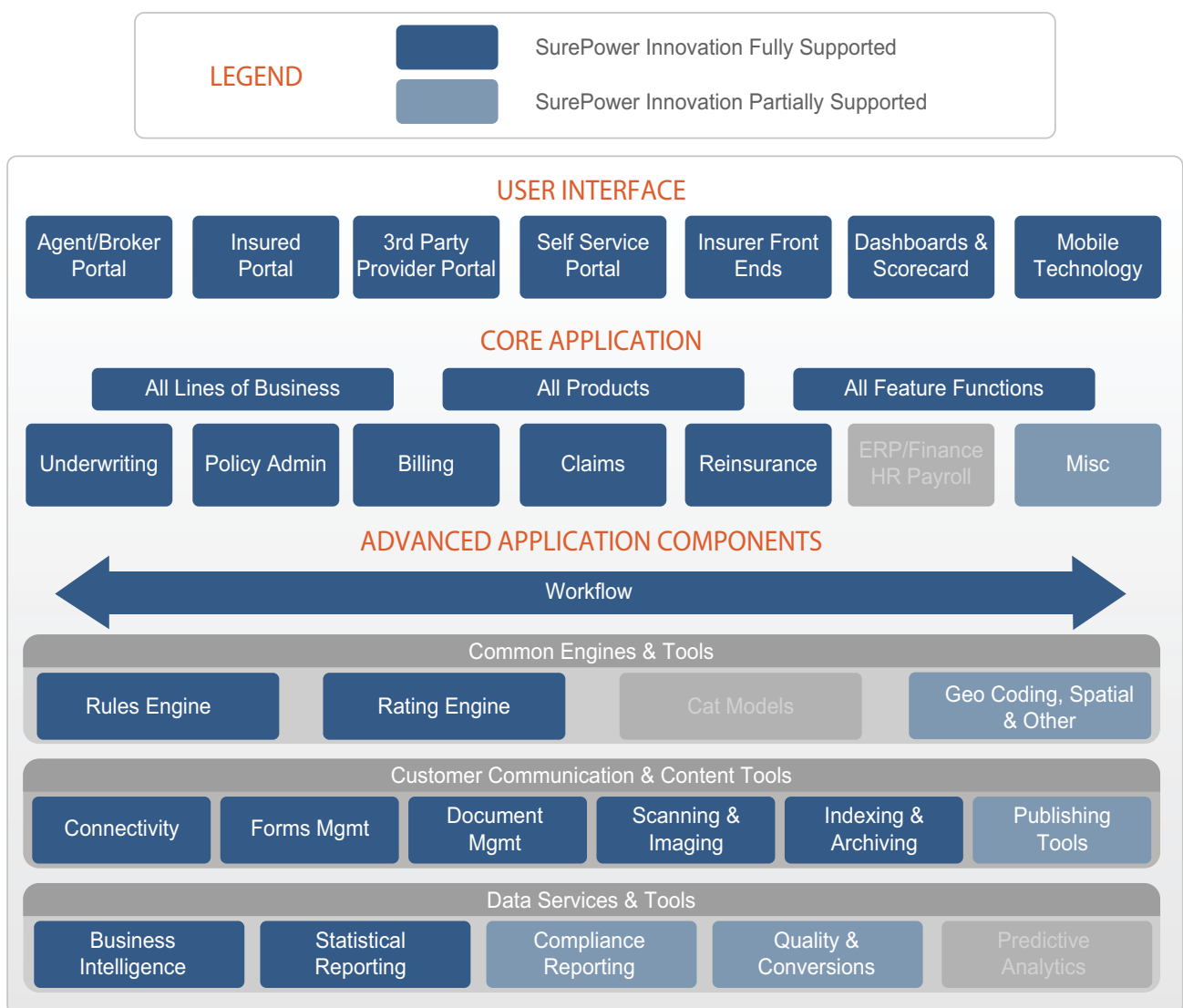
Figure 2

SMA's Conceptual Architecture
with ISCS's SurePower Innovation® Overlay

LEGEND

SurePower Innovation Fully Supported

SurePower Innovation Partially Supported

USER INTERFACE

| Agent/Broker Portal | Insured Portal | 3rd Party Provider Portal | Self Service Portal | Insurer Front Ends | Dashboards & Scorecard | Mobile Technology |

CORE APPLICATION

All Lines of Business | All Products | All Feature Functions

| Underwriting | Policy Admin | Billing | Claims | Reinsurance | ERP/Finance HR Payroll | Misc |

ADVANCED APPLICATION COMPONENTS

Workflow

Common Engines & Tools

| Rules Engine | Rating Engine | Cat Models | Geo Coding, Spatial & Other |

Customer Communication & Content Tools

| Connectivity | Forms Mgmt | Document Mgmt | Scanning & Imaging | Indexing & Archiving | Publishing Tools |

Data Services & Tools

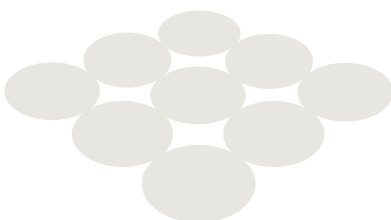| Business Intelligence | Statistical Reporting | Compliance Reporting | Quality & Conversions | Predictive Analytics |

This modern technology platform allows for quick responsiveness to business changes, enhancements, and regulatory requests for the application. The ability to configure changes enabled by an enterprise solution with the common data model streamlines implementation, shortening the time to production. Once the system is implemented, a new line or new state can be implemented in about one month. Changes such as a rate change can technically be done in one hour but with testing and other company tasks, the change can be in production in a week or two, depending on the company's processes.

The fully integrated enterprise solution also increases the ease of doing business for the business operations, agents and other third-party partners. Fully automating and linking the workflow of application submission, underwriting, policy issuance, and billing is standard for every implementation. Straight-through processing can be at whatever level an insurer would like.

Property and casualty insurance organizations can use SurePower Innovation® to automate a single function, a single department, or an entire company. It is possible to complete implementations in months rather than years. The implementation rollout strategy can start small with one or two lines or one or two states and then grow. The optimal starting point is policy administration. However, if the most severe pain point is claims, for instance, that can be the starting point. Unlike enterprise solutions before 2000, this product can be bundled with the business and technology features that are required.

For more information about ISCS's SurePower Innovation, visit **www.iscs.com** or email **info@iscs.com**.
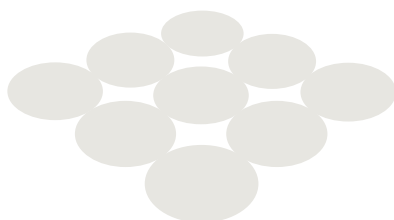
SMA's Strategy Meets Action Commentary

ISCS's SurePower Innovation solution is a wise investment for many insurers. A robust and exceptionally complete offering, it covers almost all areas across SMA's conceptual architecture. This solution can be purchased as the foundation for one or all core applications in a hybrid solution or as a whole, complete and modern enterprise solution.

SurePower Innovation should be on the short list for insurers looking to resolve the continuing problems with legacy systems, those needing to create a more responsive and dynamic business model, and those seeking a modern approach to creating future value. SurePower Innovation offers an attractive option for laying the foundation or being the foundation of a highly functional and flexible, modern, integrated architecture.

As stated upfront, insurers cannot afford any missteps in technology investments. A core system replacement must have a modern architecture with ease of integration for all advanced application components. A solution without a fully integrated set of core applications, easy integration with external third-party data, and advanced application components would be more than a poor investment; it could stop implementation of company strategy. As IT spending in the insurance industry accelerates, insurers must be prepared to turn challenges into opportunities. If they have a plan for selecting a solution that links their business tactics with an overall strategy, they can do it once and do it right, flipping challenges into opportunities.

SurePower Innovation® should be on the short list for insurers looking to solve continuing problems with legacy systems, those needing to create a more responsive and dynamic business model, and those seeking a modern approach to creating future value.

About SMA: Strategy Meets Action and SMA's Perspectives

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 ensures that its advisory service offerings are actionable, business driven, and research based where strategy meets action.

This SMA perspective highlights SMA's ongoing research on policy administration and application architecture. ISCS has purchased distribution rights for summary results of selected research and opinions.

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