Modernizing Legacy Systems in Insurance

The Case for Transforming Core IT Systems in the Insurance Industry
Executive Summary

Like all financial services firms, insurers are highly dependent upon technology. But their core information technology (IT) systems, including mainframe technology, are aging rapidly, causing significant problems. Timeworn legacy systems require increased maintenance, which drives up costs, while specialist operating knowledge is at risk of being lost as the workforce ages and retires. Older systems cause process and decision-making friction, degrading business agility, all of which can easily degenerate into strategic risks. To correct this problem, insurers need to modernize their core systems.

Insurers are fully aware that their legacy technology, which comprises systems for new business underwriting, policy administration, claims, billing, and commissioning, is severely outdated. Many firms have put in place manual processes, adding resources and front-end technology to work around the problems caused by their creaking legacy systems rather than push ahead with expensive and disruptive modernization programs. The widespread reluctance is understandable. Core modernization projects are typically measured in years and hundreds of millions of dollars. But short-term fixes only mask the broader long-term issues, while the patchwork of old and new technology is preventing firms from innovating and becoming more agile, efficient and customer-centric companies, risking the loss of market share.

This paper examines the need for legacy modernization at insurance companies, setting out the risks and benefits of pursuing a core renewal program using a tried and tested approach.
The Need for Change

Core renewal projects are multifaceted, controversial, expensive, time-consuming and risk-laden. Daunted by the scale of such highly disruptive and costly projects, insurance companies have been deterred from modernizing their systems to date. The argument against renewal has been further strengthened by the fact that legacy systems are relatively stable and reliable in the vast majority of cases. Additionally, few decision makers are aware of the scale of the problem, which tends to be buried deep in the IT function. This attitude is changing, albeit slowly, as firms struggle to compete in a difficult and changing marketplace.

An ultra-low interest rate environment, pricing pressures, heightened client expectations, technology innovation, regulatory change, and competition from non-traditional disruptors are all factors changing the industry, which is motivating insurers to reconsider legacy modernization investment. Driven by the need to realize operating efficiencies, gain operating flexibility and leverage structured data for business analytic purposes to remain competitive, insurers are considering modernizing their insurance core systems.

A prime motivator for change is the heightened expectations of clients and distribution partners. With the advent of smartphones and digital devices, consumers are demanding financial services that are available anytime, anywhere, 24/7/365. The insurance industry is not exempt from this changing market dynamic that emphasizes real-time services with a more seamless customer experience. Clients and partners are demanding information, guidance, product comparisons, services and purchasing channels to be available in real time via numerous channels, from mobile devices, tablets and PCs to in-person.

While some insurers have taken the steps necessary to modernize specific capabilities, many remain tied to their legacy infrastructures. Firms that do not modernize will be at a distinct competitive disadvantage and risk declining business performance, failing to meet client expectations, loss of market share, continually escalating costs and elevated cybersecurity risk. Replacing old technology alone without also changing how business processes and services are performed only compounds the issue and will not realize the full benefits of modernization.

### TOP DRIVERS OF LEGACY MODERNIZATION

Financial services respondents to Protiviti’s survey of technology leaders identify the following as the primary catalysts driving them to replace core systems:

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<th>Driver</th>
<th>Percentage</th>
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<td>Risk mitigation (aging technology and/or aging workforce)</td>
<td>76%</td>
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<tr>
<td>Revenue generation (greater product/service innovation, time-to-market, omni-channel distribution, data analytics)</td>
<td>12%</td>
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<tr>
<td>Cost savings (automation, straight-through processing, self-service)</td>
<td>6%</td>
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1 Protiviti survey of 396 CIOs and technology leaders conducted in Q2 and Q3 2016.
The Benefits of Renewal

Insurers have identified three main catalysts that are driving the need for legacy modernization: risk mitigation, revenue generation and cost reduction. These benefits, which are presented in most business cases for modernization, are derived from creating a technology platform capable of far greater efficiency and effectiveness, which supports key business processes, such as distribution, new business underwriting, policy administration, claims, billing and commissions, combined with improved customer service.

A well-designed and well-managed modernization initiative can aid cost reduction by:

- Decreasing related business process unit costs by approximately 20% by increasing operational efficiencies through re-designing business processes, implementing straight-through processing (STP), increasing automation and self-service, which serves to reduce errors and data entry, while improving adherence to underwriting and claims policy and increasing productivity;
- Reducing technology maintenance costs by approximately 15% by retiring legacy systems and simplifying existing ones, eliminating redundant platforms and processes, and lowering maintenance costs;
- Increasing the use of robotics and automation, which can reduce costs by up to 80% compared to legacy manual processes.

Modernizing legacy systems can maximize revenue generation by:

- Improving new product development speed to market;
- Expanding business analytics, reporting, and data mining to acquire new clients and better service clients;
- Improving technology, which directly correlates with an improved customer experience, creating a positive impact on retention and new customer penetration.

Risk mitigation, specifically the risk resulting from diminishing supplies of talent and expertise available to continuously support decades-old systems, is the most obvious benefit of legacy modernization. Keeping core systems’ “lights on” requires significant and ongoing investment. These older legacy systems often lack adequate documentation, and the number of programmers who understand the older systems diminishes every year, along with the company’s ability to troubleshoot these systems. When aging systems do not receive the maintenance they need, they soon require more rigorous maintenance and repairs, which quickly spark maintenance challenges.

Renewing legacy systems allows the insurer to:

- Mitigate risks by improving adherence to underwriting policies and standards.
- Improve user and customer experience to attract and retain both employees and clients.
- Enhance business continuity and disaster recovery capabilities and create highly flexible and secure operating models.
- Enhance the ability to control risks associated with regulatory compliance.
Breaking Down Barriers

To be successful, legacy system modernization projects need to have a clear vision rooted in the business reality of the institution, a well-defined roadmap, and a solid risk management program.

There have been examples in recent years of core modernization efforts that have squandered tens of millions of dollars without achieving their objectives. Every core modernization effort, regardless of scope, contains certain risks that should be recognized and mitigated.

These include:

- Customer service risks: Core systems enable many critical customer-facing services, such as claims, that need to be “always on.” These types of systems need to be handled with great care and detailed customer service considerations when they are replaced.

- Regulatory risks: Regulatory compliance is similar to customer service in that it cannot be “switched off” – even as the systems that service the compliance requirements are put out to pasture. Before aging core systems are replaced, all existing regulatory controls must be present in the new systems.

- Program fatigue: Like other large-scale, multi-year corporate initiatives, core modernization efforts are prone to program fatigue, which can set in during the lengthy upgrade process.

- Competing priorities: Due to the length and scope of core modernization work, these efforts can disrupt progress on other business priorities for months – or even years. This impact can make core modernization efforts unpopular with business sponsors who would rather invest time and money in their own innovation projects.

Mitigating implementation risk is paramount but it is not an unsurmountable problem.

While these are serious project risks, they can all be managed with the proper understanding, preparation and assistance. The magnitude of these risks is less than the impact of delaying or avoiding a core modernization project, which can rise to the level of a strategic risk simply by not being addressed in time.
Mindful of the benefits and risks posed by a core modernization project, some insurers are now seeking to implement new operating platforms as a part of major business transformation programs. Life, property and casualty (P&C) and reinsurance carriers are developing transformation strategies that combine legacy modernization with redesigned business architecture to optimize business value and maximize efficiencies and benefits.

But firms need to be aware that modernizing technology without changing how the work is performed or reengineering processes without effectively deploying technology, results in significantly fewer bottom-line benefits.

A core modernization effort can span several years, during which time internal and external environments can change, sometimes dramatically. Executives may arrive and depart; strategic priorities and budgetary conditions may change. For these reasons, insurers that commit to modernizing their core systems need to develop a roadmap outlining the specific modernization strategy, as well as the processes involved and capabilities required during that period, to ensure the success of their projects.

In addition to all of the traditional project management enablers and processes that transformational enterprise initiatives call for (CEO support, an internal project management office, etc.), core modernization also requires rigorous evaluations regarding crucial who, what, when, why, where and how questions: Why are we doing this? What is the business case? When should we proceed? What will the new enterprise architecture design look like? Where will the technology be located (i.e., hosted and/or internal)? Who will help us (i.e., the selection of technology and implementation partners)? And, of course, how will a project of this size be managed in a risk-aware manner? All of these questions should be answered during the roadmap development process.
The five strategies briefly summarized below represent the most common approaches to core modernization by financial services companies:

**GREENFIELD CORE SYSTEM DEVELOPMENT**
This approach requires starting from scratch with a modern, simplified core system and components. This may be the right approach for a brand new company or one that spins off from an established financial services corporation.

**PRESERVATION AND PROTECTION**
Leaving existing core systems untouched while wrapping the core with a new layer of technology – typically, service-oriented architecture – that can support current and emerging applications, is one approach that may be appropriate for institutions that have substantial investments in legacy core infrastructure and want to mitigate the risk of change.

**SIMPLIFICATION**
Taking complexity out of the middle layers of the legacy technology environment, leaves the central core and customer-facing layers unchanged. The simplification approach extends to business processes and back-office technology, as well as to the systems that support regulatory compliance functions. An institution may consider this approach when near-term cost reduction is the primary goal.

**BIG BANG**
This “rip and replace” approach is the most comprehensive; it involves a complete overhaul of the aging core, which is replaced by modern systems.

**PHASED CORE REPLACEMENT**
In this less dramatic version of the Big Bang approach, a new core technology is implemented (usually in support of new business products) in an iterative fashion. This new core grows steadily until it is capable of handling all of the other existing layers of systems and applications, which can then be transferred over in a less disruptive manner.

The ultimate objective of each of the approaches described above is to renew the core so that all of the risks posed by those aging systems are mitigated, if not entirely eliminated. The less disruptive approaches save financial services companies from the steep challenges of a pure “rip and replace” approach, but they also may require further renewal efforts down the road.
A global life insurance company sought assistance in analyzing its readiness for a technology transformation project. The company requested a partner that could assess its existing IT environment and build a target operating model and roadmap for initiatives to help the organization achieve its strategic goals. This also included improving the quality of service of current applications.

Protiviti deployed a team of U.S. and international resources, bringing a global perspective and a wealth of experience across key focus areas for technology transformation. The engagement was conducted across four separate, but highly integrated, workstreams: (a) developing a target operating model for IT; (b) enabling the enterprise architecture and data strategy; (c) assessing the client’s existing quality of service of core applications; and (d) shifting the solution and project delivery focus toward a bi-modal organization (Fast IT and Core IT).

As part of the engagement, the Protiviti team:

- Conducted strategy interview sessions with key stakeholders to understand the current state of the environment and progress toward enabling the vision of digitizing the organization.

- Defined the strategic operating model for IT within the organization, including target capabilities and new areas of focus.

- Evaluated the maturity of both enterprise architectures and data strategy functions and defined the target state architecture to support digital, Fast IT/Core IT, and the IT target operating model.

- Analyzed the existing waterfall systems development lifecycle (SDLC) methodology and defined opportunities for shifting to agile delivery.

- Assessed current application stability issues and aligned an improvement plan with the strategic IT operating model.

- Identified opportunities for organizational change to support the digital transformation.

- Developed a roadmap of prioritized initiatives to achieve the vision for change.

- Identified change agents and the implementation of organizational change management initiatives to support the culture and organizational shift to digital.

Protiviti presented to the organization’s executive team an updated strategic plan and project charters for high-priority initiatives, which encompassed: a strategic IT operating model supporting digital transformation, including a target state enterprise architecture; a defined and prioritized roadmap of strategic initiatives, relating to the shift to Fast IT; an improved application quality of service, as well as a more robust data and enterprise architecture.

The company had experienced multiple failed attempts at making the shift to a digital landscape as they struggled with defining how to achieve the target state. The technology transformation project provided the organization with a target operating model and a prioritized list of efforts that would help achieve the vision of improving the current IT landscape in the right direction. The roadmap delivered pragmatic and practical initiatives to the key stakeholders and laid out specific plans that sought to incrementally improve the current state of the company’s environment and shift it toward a digital transformation.
Legacy Modernization: Top Ten Lessons Learned

01 Embarking on a legacy modernization program is an opportunity for the company to achieve world-class performance.

02 Such a strategically-important and encompassing project requires long-term senior executive support and “buy in”.

03 Foremost, firms need to define their strategy. Start with the end in mind: define strategy, objectives, investment, business value, and the target operating model.

04 Build a business case for change that does not underestimate the change management component.

05 Establish success criteria upfront and measure success in terms of tangible business benefits.

06 Establish governance that includes key constituents.

07 Avoid “paving the cow paths,” or investing in technology and then performing the work the same way. Instead, re-design processes for efficiency, service and agility.

08 Apply proven techniques from leading financial services organizations, such as straight-through processing, automation, robotics, data analytics and digitization.

09 Use a program management office (PMO) and manage the project with discipline; increase collaboration with key stakeholders, providing constant communication between the teams.

10 Legacy modernization projects are complex and challenging; they require the “A” team; obtain outside assistance as required.
Conclusion

Insurers, grappling with an ultra-low interest rate environment, are seeking to cut costs and drive product innovation to tap into new sources of revenue. Modernizing legacy systems enables firms to leverage new technology and improve their product offerings and customer experience. However, by also incorporating changes to their legacy business processes, firms can generate significant improvements in their cost base. Embracing digitization eliminates the need for manual processes, freeing up resources to expend on innovation and customer-facing services.

Despite the many barriers to taking action today, by developing a well thought-out road map for IT core modernization, insurers will take the first important step in their efforts to mitigate troubling risks, cut costs and, in some cases, stimulate new revenue.
ABOUT PROTIVITI

Protiviti is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders face the future with confidence. Through our network of more than 70 offices in over 20 countries, Protiviti and our independently owned Member Firms provide our clients with consulting solutions in finance, technology, operations, data analytics, governance, risk and internal audit.

We have served more than 60 percent of Fortune 1000® and 35 percent of Fortune Global 500® companies. We also work with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

HOW PROTIVITI CAN HELP

Protiviti provides insurance companies with a “leading practices” approach to core insurance systems modernization to optimize business benefits by coordinating the technology, processes and people aspects of the initiative.

Protiviti professionals possess a combination of both industry and consulting experience gained from working at leading insurance companies as well as professional services firms. Protiviti’s knowledge of insurance best practices are realized from our work with over 100 insurance clients including 80% of the top five life and top five P&C insurers. We combine our global reach, industry and technical knowledge with exceptional program management to guide the execution from strategy to implementation to achieve your business objectives. We adopt your objectives as our own and tailor our approach to meet your unique requirements.

You can expect a team that will bring key insights while collaborating with you and your staff to identify opportunities, address problem areas and improve the technology transformation process. By deploying our transformational approach, we can help your firm realize true business value.

We help insurers design pragmatic, risk sensitive solutions to this challenge. With expertise deeply rooted in insurance technology and operations, we can assist with the development of a roadmap, program and strategy for core modernization that are risk-savvy, customized to our client’s organization and deliver the desired benefits. Our team includes program managers, architects, business analysts, and insurance subject matter experts to help our clients design the best target operating model, make informed decisions, incorporate leading practices, implement and achieve maximum business value while mitigating the risks inherent in this type of project.

Our insurance industry capabilities include:

- Professionals with insurance sales and distribution, new business underwriting, claims, billing, customer service, and policy administration experience who have consulted and/or worked for leading insurers, brokers, reinsurers and insurance vendors
- A multidisciplinary team with expertise in technology, data management, business process improvement and design, program management office (PMO), and change management
- Expertise in core insurance systems and vendors, numerous projects in core systems strategy, process design, systems selection, implementation, and organizational structure
- Leading practices knowledge from firsthand insurance industry experience as well as relationships with many leading insurance clients, insurance vendors and related technologies

Our services include:

- Target operating model design
- Roadmap development
- Business case development
- Vendor evaluation and selection assistance
- Program management
- Data governance and migration
- Business process design
- Business and technical requirements
- Release management
- Change management

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