“HOT TOPICS” FOR INSURERS IN 2017

IT SECURITY UPDATE: 2017 PLANS

ENABLING INNOVATION: LESSONS LEARNED FROM SILICON VALLEY

BUSINESS AND TECH TRENDS IN SPECIALTY LINES

PROPERTY/CASUALTY & LIFE/HEALTH/ANNUITY POLICY ADMINISTRATION SYSTEMS VENDORS

BEST PRACTICES FOR XAAS STRATEGY
Welcome to the Novarica Research Quarterly! Each issue provides a summary of recently published reports, including studies of insurers’ technology experiences, capabilities, and plans from our Research Council; business and technology trends; CIO best practices; vendor information in our Novarica Market Navigators; and recent webinars and presentations. All of the research summarized here is available for download by our advisory clients at novarica.com. Research reports can also be purchased individually.

If you’d like to learn more or arrange a conversation to discuss any of these topics with our senior team, please contact us at inquiry@novarica.com or 617-342-8100.
Hot Topic areas like social, mobile, analytics, big data, cloud, digital, and Internet of Things are still discussed more than they are deployed in most cases, but the balance is shifting. Growing deployment rates, increasingly understood value propositions, and fears of being lapped by well-funded InsureTech players are making these Hot Topic areas increasingly mainstream for US insurers.

**Topics**
- **Product innovation**, driven by market and technology evolution
- **Predictive analytics** impact
- **Cyber-security** risks from new quarters
- **Digital distribution** starting to affect traditional insurers

**Key Points and Findings**

**Analytics, SaaS, and Mobile adoption have grown substantially over the past few years.** Interest in SaaS core systems is high, with one in four insurers planning a pilot in this area in 2017.

**Use of Social Media for Data Analysis has more than doubled since 2014,** but is still used by less than half of insurers.

**ROI is widely understood and rarely calculated.** Fewer than 20% of insurers have performed hard ROI calculations on their investments in these areas, but most of those that have deployed report the value is widely recognized within their companies.
Demand for IT capabilities continues to grow and diversify while IT budgets remain relatively constant as a percent of revenue. In response, CIOs are driving multi-faceted and multi-year IT practice process improvement programs.

This report covers the adoption rate and degree of planned expansion of both well-known and newly emerging IT practices. The challenges encountered and lessons learned are also discussed.

**Key Points and Findings**

CIOs are generally satisfied with their core systems vendors’ products. Maturing products and rigorous selection processes focused on functionality and technology of potential solutions has led to fewer unpleasant surprises in these areas.

In cases where insurers are less happy with their vendors, it’s mostly vendor staff and organization issues, not functionality and technology issues that are driving their poor experiences.

This report, based on rankings and interviews with more than 30 insurer CIOs, provides a window into current insurer experience with their software providers.

**Topics**

- **Focusing on all of the “SOFT” areas**, including Staff and Organization in addition to Functionality and Technology.
- **Importance of staff and organizational issues** in driving positive experience with vendors.
- **Words of wisdom from CIOs**. Direct advice for peers evaluation vendor partners.

**Key Points and Findings**

CIOs are fairly satisfied with their core systems vendors. While only about 25% of CIOs rate their vendors a 9 or 10 in any area, most give them a 7 or higher.

Project management and vendor staff are often more important than technology and functionality. In cases where overall average satisfaction scores were 7 or less, the real low scores were in project management, responsiveness, and staff knowledge.

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**Key Points and Findings**

Optimizing IT organizations is CIOs’ top challenge for 2017. Demands for additional IT services, improved business processes, and increased analytic capabilities have not subsided.

Improving Quality Assurance and testing has become the top concern. Between one-half and two-thirds of insurers are expanding their capabilities in these areas.

Expanding and improving IT services while keeping IT investment and expenses at constant levels is a challenging mandate. CIOs are focusing on what they need to do to support business initiatives, then asking themselves how they can do it without increasing IT expenses.

Agile adoption continues to expand. While not yet replacing all waterfall methodology-based projects, Agile has become almost ubiquitously accepted as a way to accelerate delivery and improve internal customer satisfaction with IT.

Other IT practices targeted in 2016 like Architecture, MDM, Bimodal, and FAST are working and are being expanded upon in 2017. While some may still be works in progress, we saw no evidence of IT organizations discontinuing or reducing these programs.

**Topics**

- QA/Testing
- Agile Development
- Master Data Management/Data Stewardship
- IT Governance
- Enterprise Architecture
- Bimodal IT or FAST/CORE IT
- User Experience (UX) or Human Factors Engineering

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As the insurance industry changes in response to continued digitalization, IT leaders must continue to maintain and improve their ability to protect confidential data and customer information. While technological advances can streamline processes, they can also open the door for potential risks. Modern digital systems and procedures must be fully secure to retain the trust of agents and insureds, and to protect the companies from liability.

This report looks at 2017 plans among US insurers across a wide variety of IT security areas to help insurer CIOs understand how their peers are addressing this key issue.

Topics

- **Security Plans**, including device and application security, intrusion detection, and data encryption.
- **Security Frameworks**, and adoption rates for NIST, SSE-CMM, and NYS cyber regulations.

Key Points and Findings

**Insurers are enhancing security capabilities across the board.** Nearly half of all insurers are enhancing capabilities in intrusion detection, application security, device security, and data encryption.

**Insurers still plan to enhance audits and procedures**, but the volume focus has dropped somewhat in this area due to high investment in 2016 when many insurers adopted NIST for the first time.

**Insurers are preparing for new regulations.** Insurers are taking a wait and see approach on the recently loosened New York State cybersecurity regulations.
Re-thinking talent acquisition strategies is becoming a top priority for insurance carriers. As the nature and composition of both IT organizations and the Millennial talent pool landscape continue to evolve, carriers will need to consider how to make themselves attractive to this group which is projected to represent fully half of the US Labor Force by 2020. While managing the flow and pipeline of the future labor force for carriers is key, they also need to be mindful of the issues, and opportunities, that they will have when dealing with at least three different generations concurrently working in their organizations with potentially different, if not conflicting, objectives for their relationships with an employer. Part of the challenge for IT leaders will also be that existing policies and procedures from a Human Resources standpoint may not recognize nor be prepared for this evolving space.

This report details several approaches and considerations regarding talent management.

Topics
• Creating Competitive Differentiation
• Sourcing Talent
• Geography and Remote Work
• Bimodal IT Development
• Enabling Employees
• Reconfiguring Workspaces

Key Points and Findings
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Insurers are preparing for new regulations. Insurers are taking a wait and see approach on the recently loosened New York State cybersecurity regulations.
Gamification is becoming more than just an industry buzzword as insurer digital capabilities continue to grow and mature. Although gamification is not a “silver bullet,” it can help insurers round out their digital offerings and reach a new generation of digitally-immersed consumers. Through incentives for lower-risk behavior, gamification has significant potential as a tool for marketing, policyholder engagement, and eventually risk mitigation.

This brief reviews the possible value and use cases of gamification in the insurance industry, with a dozen examples of recent initiatives at insurers.

Silicon Valley has long been a leading destination for innovation, housing some of world’s most forward-thinking technology companies and exceptional talent. As insurers look to bring their organizations into the future, operationalizing innovation is increasingly becoming imperative. The insurance industry is ripe for the type of disruption that the Valley offers, and this region can offer valuable lessons to help carriers stay in stride with the pace of change.

This brief explores insights and best practices for insurers from Novarica’s Silicon Valley Innovation Tour.
The emergence of deep learning as a powerful tool, along with more accessible data, increased computing capabilities, and a greater availability of funding, are combining to drive innovation towards business uses for AI. Insurers are in the early stages of catching this wave. Artificial intelligence eventually stands to disrupt existing analytical models and methods within the insurance industry, especially pertaining to underwriting, customer service, claims, and actuarial science.

Despite the many applications for true AI in insurance, the term is often applied incorrectly. For this reason, it can be difficult for executives to sift through the hype and parse out exactly how AI will affect the industry. This brief attempts to map out a definition of AI and outline specific use cases for the insurance industry.
This report provides an overview of group benefit providers’ business and technology issues, data about the marketplace, and 40 examples of recent technology investments by group benefit providers.

True sales growth, as opposed to increases in face amounts or takeovers, is a challenge for many lines apart from group annuities. Combined with price sensitivity on the part of plan sponsors, this makes efficiency of operations a key driver for carriers, along with improved marketing across multiple channels.

Top technology initiatives for group benefit providers include benefit and policy administration systems and distribution enablers such as underwriting workbenches, customer portals, agent portals, and easy enrollment capabilities.

**Topics**
- Recent market and financial trends
- Active insurer landscape
- Technology issues, priorities, and examples by functional area
- Top technology priorities for 2017 and beyond

**Key Points and Findings**

**True sales growth is a challenge** in group business, with much activity consisting of carriers trading business or increases in group term life face amounts rather than cases or lives covered.

**Private exchanges are emerging as a new distribution channel** for voluntary products, though enrollment is modest to date. Changes to the ACA may alter these dynamics in the future.

**Mobile devices continue to make inroads.** Both members and plan sponsors see benefits, such as the ability to submit claims or view policy information.

**Insurers are still heavily focused on bread-and-butter issues of product design, enrollment, marketing and continuing improvement of administrative systems.**
Reinsurance remains highly competitive, with technology playing an ever larger role in insurers’ ability to attract, retain, and profitably serve clients. Reinsurers are focusing on core systems replacement, as well as business intelligence and modeling.

This report provides an overview of reinsurers’ business and technology issues, data about the marketplace, and 19 examples of recent technology investments by reinsurers.

**Topics**
- Recent market and financial trends
- Active insurer landscape
- Technology issues, priorities, and examples by functional area
- Top technology priorities for 2017 and beyond

**Key Points and Findings**

**Business intelligence and modeling.** Data analysis is viewed as central to the reinsurance business. Pressure from competitors means moving from Excel-based analysis to more sophisticated technology.

**Carriers are replacing core systems.** Reinsurers are focused on centralizing the business and dealing with an increase in audits and regulation, rather than a drive for modern technology.

**Alternative capital entering the marketplace is squeezing an already soft market.** Many small and mid-sized reinsurers are using alternative capital as an opportunity, using partnerships with hedge funds as a way to grow their capital pool and gain access to business they wouldn’t have otherwise. Reinsurers are also looking for better product and geographic diversification to increase return on capital to remain competitive.

Specialty lines continue to be hypercompetitive, with technology playing an ever larger role in insurers’ ability to attract, retain, and serve clients and agents/brokers profitably. Specialty carriers are trying to hold the line in a low-growth market, with a focus on targeted (e.g. profitable) growth, expense reduction across the enterprise, and operational effectiveness leading to increased speed to market for new products.

This report provides an overview of specialty carriers’ business and technology issues, data about the marketplace, and 47 examples of recent technology investments by specialty insurers.

**Key Points and Findings**

**Carriers are pursuing long-term data strategies,** starting with data quality initiatives and focusing on data warehouses, operational data stores, and appropriate data marts. Carriers are prioritizing reporting tools to allow the business to run ad hoc reports and obtain insights.

**Improved underwriting and product development flexibility are key considerations.** Carriers are continuing to upgrade to highly configurable policy administration systems to improve underwriting and enable product development flexibility to speed entry to profitable niches.

**Billing efforts focus on handling both retail and wholesaler billing needs.** Account billing is becoming a higher priority as part of a shift to a more customer-centric approach.

**Specialty carriers are extending functionality to agents and policyholders.**

**New technologies** such as IoT are already impacting specialty carriers.
AGENT AUTOMATION: BEST PRACTICES IN HELPING THE HAND THAT FEEDS YOU

JANUARY 2017

Know your agent
Create an inventory of opportunity
Define metrics for success
Understand mobile use cases and value
Consider the impact of emerging technology

Automation that enhances the agent experience and ultimately their selling and servicing capabilities is fundamental to enabling their success. But with so many potential areas to focus on – from portals to licensing and contracting to mobile – it can be challenging to know what to prioritize. Additionally, other factors such as competition for funding as part of a larger portfolio of initiatives or transformation agendas can complicate setting this agenda.

Whether supporting career and/or independent agents, evolving Agent Automation (at times referred to under the umbrella of Field Technology) to optimize value requires a deep understanding of agent activity and an equally deep understanding of the challenges they may encounter to sell and service their respective client base.

This brief offers best practice considerations that will help CIOs and their business partners focus attention to the most value-added elements of agent automation.

BEST PRACTICES FOR XaaS STRATEGY

JANUARY 2017

Review current business processes with a critical eye
Define value add processes and align to benefit targets
Implement Rent vs Buy vs Build model
Prepare for organizational shift, not just technology shift
Shift primary focus to data and analytics capabilities

There are sea changes that impact IT organizations that create significant value, transform how business is transacted and cause IT strategies to be redesigned. XaaS is one of these sea changes. XaaS will change how IT organizations are structured, financially managed, and interact with internal and external partners.

XaaS (“Anything as a Service”) continues to build momentum as more service providers add features, solve technical concerns, improve performance, and understand business operating models of various industry verticals. This is certainly the case with the Insurance industry.

This checklist is designed to help insurer CIOs think broadly when evaluating how and where to implement XaaS into the IT strategy. This checklist provides important areas of attention to ensure the impact and potential of XaaS is completely realized.
This report provides an overview of the business intelligence software solutions currently available to US insurers. The report contains profiles of each of 21 vendor solutions, summarizing the vendor organization, technology used, differentiators, client base, lines of business supported, deployment options, implementation approaches, upgrades/enhancements, and key functionality.

Vendors included: 1insurer, 4Sight Business Intelligence, Hexaware, IBM, Information Builders, InsFocus Systems, Insight Decision Solutions, Insurity, Intellect Design Arena, Kofax, Majesco, Microsoft, Oracle, Policy Administration Solutions, Qlik, S&P Global Market Intelligence, SAP SE, Semantify, SpatialKey, Tableau Software, and Yodil.

This report provides an overview of 37 major IT services providers to North American insurers with a focus on their experience levels in key functional areas. The information in this report was collected directly from the providers using a proprietary Novarica RFI. The report contains a brief profile of each vendor, including a chart detailing the provider’s experience levels in specific, targeted, functions.

This report provides an overview of the available policy administration systems and suites for US property/casualty insurers. The report contains profiles of each of 49 vendor solutions, summarizing the vendor organization, technology used, differentiators, client base, lines of business supported, deployment options, implementation approaches, upgrades/enhancements, and key functionality.


Martina Conlon and Jeff Goldberg discuss the findings of this report in a corresponding webinar. The Webinar can be viewed at https://novarica.com/webinars.
This report provides an overview of the available policy administration systems and suites for US life/annuity/health insurers. The report contains profiles of each of 24 vendor solutions, summarizing the vendor organization, technology used, differentiators, client base, lines of business supported, deployment options, implementation approaches, upgrades/enhancements, and key functionality.

Vendors included: Accenture, Andesa Services, Concentrix, CSC, EIS Group, EXL, FAST, FINEOS, FIS, Infosys McCamish, InsPro Technologies, LIDP Consulting Services, Majesco, Management Data Inc., OneShield, Oracle, QLAdmin Solutions, Sapiens Americas, StoneRiver, Tata Consultancy Services, Vitech Systems Group, and Wyde Corporation.

Rob McIsaac and Chris Eberly discuss the findings of this report in a corresponding webinar. The webinar can be viewed at https://novarica.com/webinars.
Popular Novarica Blog Posts

Novarica’s senior team blogs actively about new developments in the industry. Some of our most popular blog posts this quarter were:

**TrumpCare and the Voluntary Benefits Market**

“Whether Congress is able to pass TrumpCare this month or not, the continued uncertainty makes the for-profit healthcare marketplace increasingly unstable.”

**Lessons from Novarica’s Trip to Silicon Valley**

“Innovation is what we might call, in most companies, table stakes of operating. The employees don’t go into the office and read a sign on the wall that says we are innovative — they simply come to innovate.”

**When It Comes to Innovation, No Simple Answers**

“When trying to tap into the notion of innovation as a force for future success, insurance carriers should be mindful of all the factors, in combination, that are required to make this possible. Like any good recipe, knowing both the key ingredients and the proportions to include can make all the difference between magic and mediocrity.”

**Cyborgs Are Better Than Robots**

“Similarly, recent stories about robotic automation and the use of AI in insurance have focused on the notion of robots taking over from people, setting up an us-or-them framework between people and technology. But this unnecessary dualism detracts focus from the most important challenge facing knowledge industries — combining human understanding and emotional awareness with automated data access, analytics, and transaction processing speed.”

**Lessons from Tesla for Overhauling Digital Consumer Experience**

“Like Tesla, companies outside of the insurance industry may look to improve the experience of insuring their products and services. The innovations from these companies are changing the ways insurers view their digital customer experience, and insurance CIOs should consider these new approaches to customer experience when planning technology roadmaps and digital strategy.”

**Revenge of the Mutuals**

“In any case, as carriers plot their technology strategy for the future, addressing these old systems and blocks of business running on them will become increasingly critical. The investments and planning horizon required to make them successful may be easier for mutually owned companies to execute than it will be for their publicly traded competitors given their respective focus on long- versus short-term results.”

In addition, our weekly *News and Views* series, published each Friday, provides exclusive commentary on important news stories. Some of the topics our team has commented on this quarter include:

- The future of driving
- Industrial IoT
- Wearables for wellness
- Blockchain consortium
- Insuretech investment trends
- Artificial Intelligence
Novarica helps more than 90 insurers make better decisions about technology projects and strategy through research, advisory services, and consulting.

We publish frequent, independent, in-depth research on trends, best practices, and vendors. Our research projects are directed by senior executive-level experts, and leverage the knowledge of more than 300 insurer CIO members of our Research Council.

Our Strategy-as-a-Service advisory services provide on-demand phone and email consultations on any topic in insurance or technology. Our clients have told us it's like having a team of experts down the hall, for a flat annual fee that is a small fraction of the cost of a single employee.

Our consulting services include vendor selection, benchmarking, project assurance, and IT strategy development. They are based on our deep knowledgebase, extensive relationships, personal experience, and proven methodologies. Our clients get rapid, actionable insights and guidance, delivered directly by our senior team.