

INSURANCE TECHNOLOGY CASE STUDY COMPENDIUM 2019

JUNE 2019

Summary

Novarica's eighth annual case study compendium includes more than 30 detailed examples of IT initiatives that delivered real business impact.

Each case details business goals, project sponsors, team structure, project timeline, tools and technology used, challenges faced, success factors, and business results delivered.

Novarica Impact Awards, voted on by 50 CIOs, recognized winners in four categories: digital, data/analytics, core, and IT practice or infrastructure.

2019 Winners

- **Amerisure** for its Digital Innovation practices (*IT practice or infrastructure*)
- **AXA XL** for its use of NLP in property risk engineering surveys (*data and analytics*)
- **Bankers** for its IM platform and chatbot for claims/underwriting inspections (*digital*)
- **CapSpecialty** for its cloud-based straight-through processing platform (*digital*)
- **Farm Bureau Financial** for its stand-alone IT intern team (*IT practice or infrastructure*)
- **Gerber Life** for its digital sales and underwriting system (*core*)
- **Northbridge Financial** for its core platform supporting commercial business (*core*)
- **StarStone** for its use of machine learning to classify risks (*data and analytics*)

Key Points and Findings

Artificial intelligence, big data, and analytics adoption is growing and has produced tangible, quantifiable benefits in underwriting and risk selection.

Core is moving to the cloud, especially for *de novo* systems for new lines of business.

Digital capabilities like self-service and mobile access have made their way into more complex lines like workers' compensation and commercial auto.

Innovation remains an area of proactive investment, and insurers are investing in formal practices that have led to measurable results.



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Authorized Excerpt.
For full report, see

<https://novarica.com/compendium2019>

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INTRODUCTION

This report is the eighth in an annual series designed to highlight IT initiatives that have a real, positive impact on insurers' businesses. Novarica's goal in assembling this compendium of case studies is to provide as broad a set of complete examples as possible. The criterion for inclusion is that each initiative clearly demonstrates a positive business impact.

About the Case Studies

Novarica collects information from the CIO members of the [Novarica Insurance Technology Research Council](#), along with other insurer technology executives, and drafts case studies in collaboration with each insurer. In some cases, vendors work with their insurer clients to submit information, but all cases are drafted by Novarica in consultation exclusively with each insurer. Vendors have no input during the drafting or reviewing of the case studies.

About the Impact Awards

Prior to publication, the anonymized case studies were shared with all Council members. 50 members voted for their top choices in each category: digital, data and analytics, core systems, and IT practice or infrastructure. No vendors or media, or even Novarica team members, have a vote in selecting the winner, making the Impact Awards one of the largest purely peer-juried awards in the industry.

Winners were selected for their real-world business impact and their demonstration of the effective usage of currently available technology to meet business goals. The focus of the awards is not necessarily innovation or the use of emerging technology.

The categories are somewhat subjective, since so many successful initiatives combine elements of all four areas. Cases were categorized based on Novarica's assessment of best fit.

MEASURING IMPACT

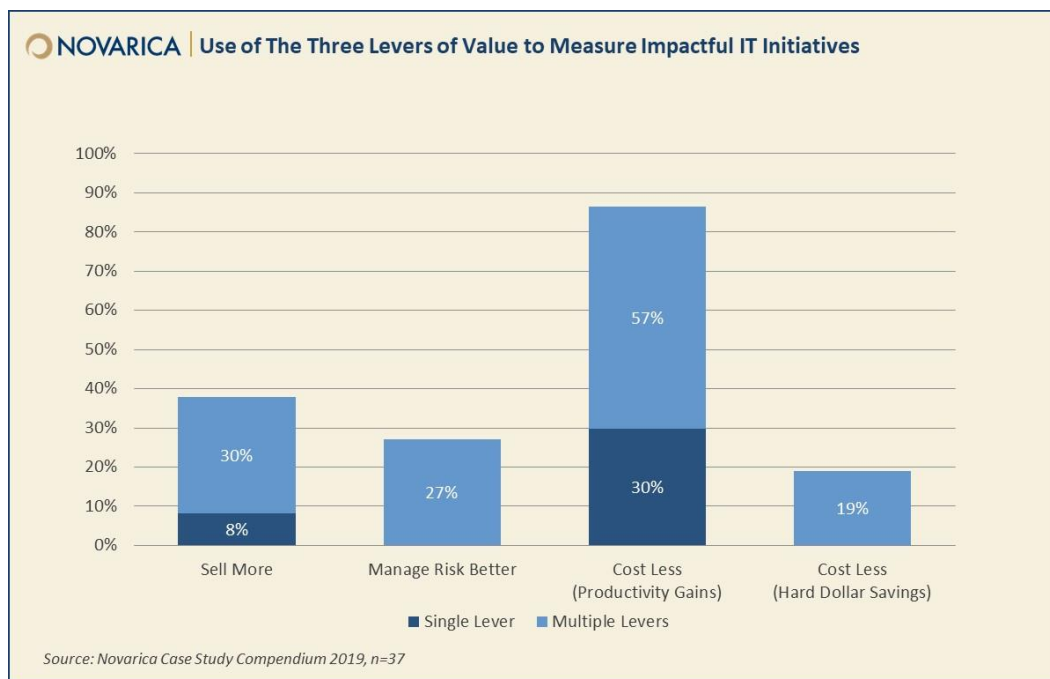
Novarica launched the Impact Awards to provide insurer business and technology leaders with concrete examples of IT initiatives that delivered real business impact.

Measuring the value of IT continues to be a challenge for insurers. Novarica recently introduced a new framework called The Three Levers of Value to help insurers frame their technology objectives in business terms. According to the framework, the three ways to create business impact with technology are: (1) sell more, (2) manage risk better, and (3) cost less to operate.

- **Selling more** means launching new products, serving new segments, and improving service levels or throughput volume to drive growth. More than a third of the cases in this compendium cited growth and expansion as an impact of their initiative.
- **Managing risk better** means improving underwriting results, claims results, or both, generally through an improvement in analytics. About a quarter of the cases cited impact in this area.
- **Costing less to operate** can mean generating hard dollar savings, but more commonly it means enhancing productivity and handling more volume without adding additional staff. Enhancing productivity was the most commonly cited impact. More than 85% of cases cited productivity gains, compared to fewer than 20% that cited hard dollar cost savings.

The figure below shows how frequently each lever was cited as either the single area of impact or one of several areas.

Figure 1: Use of The Three Levers of Value



For more on the Three Levers of Value, see the [2019 Research Council Meeting Report](#).

PEKIN INSURANCE: BIG DATA AND ENTERPRISE REPORTING

Pekin transformed its data environment from mainframe to Hadoop and introduced improved dashboarding for business users. Deployed in two years concurrent with a major core systems project, it eliminated a five-year reporting backlog and contributed to a 70% acceleration of speed to market.

Business Need

Pekin Insurance was undergoing a core system modernization and, in order to gain the full benefits, the company needed to update its data practices and infrastructure from a legacy mainframe, which required data manipulation in spreadsheets and flat-file databases. This became a compliance risk as it duplicated data with no single source of truth.

Project Team

The project sponsors were the CEO and the AVP of IT data, infrastructure, and delivery. The company established a 28-person data governance committee to help drive change. The 53-person implementation team was a mix of internal and external resources. The company used SAFe methodology, utilizing three Scrum teams and one Kanban.

Phases and Timeline

The project took two and a half years, starting in April 2016. Initial requirement-building and planning took nearly a full year. The build-out included establishing a data governance committee and deploying the Hadoop-based data lake, enterprise data warehouse, master data management, and enterprise reporting. Then, 1.5 billion records were extracted, reconciled, and transferred onto the new platform.

Tools and Technology

The company used ValueMomentum's Data Leverage service, along with several vendor packages, including Hortonworks for Hadoop (the data lake), Orchestra Networks for master data management, MS-SQL for the EDW, Qlik Sense for dashboards, and Attunity, Microsoft SSIS, and Sqoop for transferring data from the mainframe and integrating with the new core system (Guidewire).

Overcoming Challenges

One challenge was a lack of urgency about enterprise data quality and accessibility within much of the company. This was addressed by the data governance committee conducting an internal education and marketing campaign which continues today. The company also struggled with a talent gap, which they overcame by targeting specific hires and bringing in external partners.

Success Factors

The company attributes the success of this project to the support of the Board of Directors and executive leadership. The leadership provided support to the team by adding members. The Data Governance Committee also helped change the company culture, raising the demand for quality data and analytics.

Impact

The project helped accelerate speed to market by 70% in combination with the new core systems environment. It eliminated a five-year backlog for report requests through the introduction of 40 new self-service dashboards for business users. It also eliminated shadow data factories, which improved business accuracy and reduced compliance risk.

CONCLUDING THOUGHTS

- **Digital** initiatives like self-service and mobile access have made their way into more complex lines like workers' compensation and commercial auto.
- **Data and analytics** initiatives are expanding to include artificial intelligence, big data, and analytics. Adoption of these capabilities is growing and has produced tangible, quantifiable benefits in underwriting and risk selection.
- **Core** is moving to the cloud, especially for *de novo* systems for new lines of business. Insurers' need for speed to market is driving new strategies and willingness to experiment with cloud.
- **Innovation** remains an area of proactive investment, and insurers are investing in formal practices that have led to measurable results.

NEXT STEPS AND RELATED RESEARCH

- Contact Novarica at client-support@novarica.com to set up a conversation to discuss any of the cases or topics in this report.
- Read related reports:
 - [2019 Research Council Meeting Report](#)
 - [Case Study Compendium 2018](#)
 - [Case Study Compendium 2017](#)
 - [Case Study Compendium 2016](#)
 - [Case Study Compendium 2015](#)
 - [Case Study Compendium 2014](#)
 - [Case Study Compendium 2013](#)

ABOUT NOVARICA

Company

Novarica helps more than 100 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, IT strategy development, and more. 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.

More information at www.novarica.com

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