

CELENT

CELENT MODEL INSURER 2017

PART II: CASE STUDIES IN DATA MASTERY AND ANALYTICS

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This authorized reprint contains material from a Celent report profiling Model Insurer Award winning technology initiatives and was not sponsored by LexisNexis Risk Solutions Inc. in any way.

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EXECUTIVE SUMMARY

KEY RESEARCH QUESTIONS

<p>1 <i>What would it look like for an insurer to do everything right with today's technology?</i></p>	<p>2 <i>What are some best practices and measurable business results of technology projects?</i></p>	<p>3 <i>What can other insurers learn from the Model Insurer initiatives?</i></p>
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The vision for Celent's Model Insurer research is to try to answer an apparently simple question: "What would it look like for an insurer to do everything right with today's technology?" In today's still uncertain global economy, market challenges are forcing capital-constrained insurers to leverage all available resources to improve sales and reduce expenses. Technology is playing a more important role in every insurer's strategy.

Since our Model Insurer program (originally known as Model Carrier) started 11 years ago, Celent has identified Model Insurers by looking at best practices in the use of technology across various areas of the industry — whether in components of the product and policyholder lifecycle or in general areas such as IT infrastructure and management. These areas were illustrated by case studies of specific initiatives and capabilities, selected from the many submissions received and presented in this report as "Model Insurer Components."

We look beyond the individual process areas and take into consideration major technology trends that insurers are implementing. These trends include Legacy and ecosystem transformation, Innovation and emerging technologies, and Digital and omnichannel. Along those lines, we have identified insurers whose IT programs were submitted to Celent for awards that epitomize best practices for technology projects and stand out in each of the Model Insurer themes.

The themes are used to group the case studies in this report. The themes represented in the 2017 report are:

- Legacy and Ecosystem Transformation.
- Data Mastery and Analytics.
- Digital and Onmichannel.
- Innovation and Emerging Technologies.
- Operational Excellence.

We received a record number of submissions, well over 100, and awarded 16 initiatives across those categories. The competition was intense, but we are confident that each of our chosen initiatives is a worthy winner and deserves an award. The winners represent a diverse group of insurance companies spanning multiple countries and several continents.

This year Celent is publishing a series of Model Insurer reports, each containing case studies of winning initiatives in a specific category. Table 1 shows the Model Insurer 2017 report series and lists the award winners and case studies included in each report. This particular report documents case studies in Data Mastery and Analytics.

Table 1: Model Insurer Report Series and Award Winners

MODEL INSURER 2017 REPORT SERIES	AWARD WINNERS AND CASE STUDIES
Part I: Legacy and Ecosystem Transformation	<ul style="list-style-type: none"> • Republic Indemnity • ERS • Insurance Corporation of British Columbia
Part II: Data Mastery and Analytics	<ul style="list-style-type: none"> • The Savings Bank Life Insurance Company of Massachusetts • StarStone Specialty Insurance Company • Meteo Protect
Part III: Digital and Onmichannel	<ul style="list-style-type: none"> • CUNA Mutual • Lincoln Financial Group • New York Life
Part IV: Innovation and Emerging Technologies	<ul style="list-style-type: none"> • Suramericana de Seguros S.A.- Wesura • Church Mutual Insurance Company • Markerstudy Insurance
Part V: Operational Excellence	<ul style="list-style-type: none"> • AFLAC • Saxon • MassMutual
Model Insurer of the Year	<ul style="list-style-type: none"> • CSE Insurance Group

Source: Celent

Finally, just like in the last few years, we recognized one initiative as the overall Model Insurer of the Year, our top honor. In 2017 this award goes to CSE Insurance Group for developing and implementing an innovative Next Generation Landlord Insurance product to replace its legacy Dwelling Fire insurance product. A more detailed CSE case study is published in a separate report.

Celent is grateful to have been exposed to so many extraordinary initiatives and the talented individuals responsible for their success. We look forward to continuing with the Model Insurer program next year to identify and award the most impressive insurance technology initiatives from around the world.

Note to the readers of the entire series: the Executive Summary, Introduction, and Common Best Practices are the same for all reports in the series, but are repeated for the benefit of readers only interested in specific Model Insurer categories.

INTRODUCTION

MODEL INSURER OVERVIEW

The vision for Celent’s Model Insurer research is to try to answer an apparently simple question: “What would it look like for an insurer to do everything right with today’s technology?” Of course, the question is not nearly as simple as it appears. The terms “everything” and “right” mean very different things to different insurers depending on their size, the complexity of their operations and product sets, and their technological starting points.

Key
Research
Question

1

What would it look like for an insurer to do everything right with today’s technology?

Celent’s approach is to evaluate, at a high level, key best practices in the implementation and use of technology that a “Model Insurer” would use. The nominated insurers that display the most successful use of the key best practices within theme categories like digital, data analytics, innovation, and legacy transformation are named Model Insurers.

MODEL INSURER THEMES

Each year Celent examines trends in insurance technology use. The 2017 trends expanded upon the trends of the previous year; however, the technology we saw as innovative in the last few years is now more common and creating opportunities for the insurance companies that implemented it. For example, straight-through processing is becoming a reality for life insurers, and using data analytics to predict new business or audit existing business is becoming commonplace within property and casualty insurance. Many insurers are well on the way to transforming their legacy systems. It is through these and similar technology trends that Celent’s Model Insurer themes are brought to life in other companies.

This year’s trends build on the past trends of legacy and ecosystem transformation, innovation and emerging technologies, and digital and onmichannel. All three are potential differentiators for an insurance company. Insurers that are experiencing changing customer demographics and values as well as increased demands for transparency are finding that these technology trends have a role to play in their efforts to increase sales, control costs, or even meet customer expectations. But increased regulation and privacy concerns must also be considered when new technologies are integrated with legacy environments.

We believe these trends deserve serious consideration as insurance companies plan for the immediate and long-term future. By embracing them now, technology leaders can give their business counterparts the practical tools they need to succeed in a challenging environment. This year’s Model Insurer Awards look beyond the individual process areas and take into consideration the following major technology themes.

Legacy and Ecosystem Transformation

Legacy technology can hinder innovation, since insurers must typically offer backward compatibility. Insurers must not only modernize, but also transform their internal systems and how they interact with customers, counterparties, and regulators. This theme recognizes projects related to core system replacement or transformation including policy administration, document management, customer relationship management, new business, illustrations, billing, claims, and rating/underwriting.

Data Mastery and Analytics

Data has become a source of competitive advantage for identifying profitable niches, managing risk, and improving service. New external data sources, data derived from devices, and new techniques for interpreting data are pushing the competitive boundaries for insurers at an accelerated rate. This theme recognizes projects such as predictive analytics (claims fraud, underwriting, pricing, climate analysis); prescriptive analytics (triage, sales automation, “next best action”); and virtualization (dashboards and heat maps, catastrophe management, network analysis, geopolitical risk analysis).

Digital and Omnichannel Technologies

Digital transformation is moving from person-to-person interaction toward person-to-machine or machine-to-machine. Integrating and coordinating among disparate and siloed delivery channels will be critical to satisfying ever-increasing customer expectations. Using the definition that digital automates complex tasks, allowing them to be mastered, then reproduced and distributed at no cost, this theme recognizes projects such as online customer portals; industrialization of processes; engaging user interfaces; online sales with STP; integration with business partners; leveraging social networks; and the use of mobile technology.

Innovation and Emerging Technologies

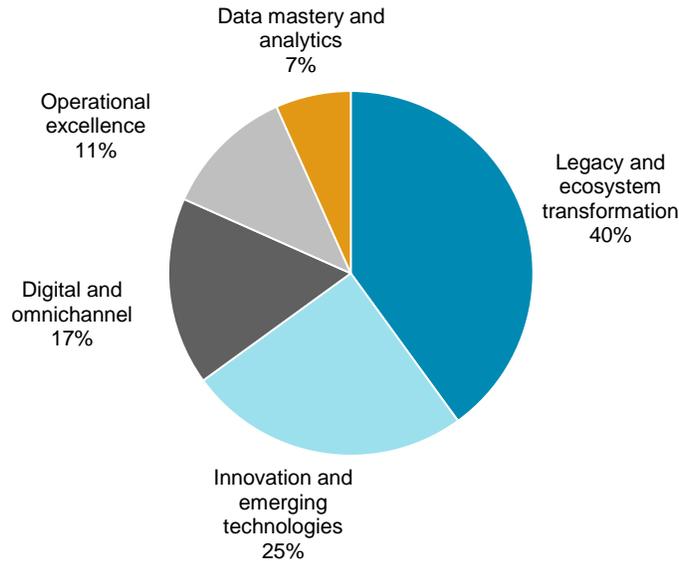
Celent defines innovation as fundamental changes to products, services, or business models that break existing tradeoffs and provide value to the customer. New hardware, software, and network technologies feed insurance innovation. This theme recognizes projects such as the expansion into previously untapped markets due to technology; the use of technologies not previously used in the insurance industry; or the development of an innovation culture within an IT organization.

Operational Excellence

What does it take to safeguard investments in technology and improve upon IT processes? This theme recognizes projects such as successful reuse of technology for new initiatives; implementation of a non-core system such as illustrations, document automation, electronic applications, best practices in IT governance, IT operational management, or IT risk management and security policies. Achieving operational excellence requires transforming processes and systems into competitive advantages by making them leaner, faster, more flexible, and of higher quality.

This year's themes examine how insurance companies are achieving successes in implementing, integrating, and instilling the technology theme into how they do business, offering a new set of tools and opening the door to new rules for operations, performance, and competition. The submissions for this year's awards were mainly concentrated across the three themes: legacy and ecosystem transformation, innovation and emerging technologies, and digital and omnichannel.

Figure 1: Theme Distribution in Submissions



Source: Celent

The Model Insurer Awards epitomize best practices for technology projects and stand out in each of the themes as well as best IT management practices.

Celent's Model Insurer Asia program is run in a similar manner, and we suggest that the reader review the winning projects in Asia as well. Although the APAC region may have different drivers, understanding how successful projects were implemented by insurers across the globe may spark ideas that can work in your organization.

Nomination and Selection Process

For this series of reports, Celent identified 16 Model Insurer winners through the following process:

- Invitations were sent to Celent clients and non-clients. In addition, to assure the broadest public outreach, the model insurer initiative was promoted through various marketing initiatives and industry publications.
- Nomination forms were reviewed by Celent insurance analysts, and submissions that demonstrated innovative or effective uses of technology were selected as potential Model Insurers based on weighted assessments of several factors including the insurer's approach to IT best practices, demonstrated business results, and technology or integration excellence.
- Celent emailed several of the insurers to provide additional data and information to complete the final selection process and narrow the list of Model Insurer winners.
- Celent analysts drafted a case study for each Model Insurer which was reviewed by the insurer for accuracy and confidentiality.

Each theme had at least three winners. Consistent with its past program, Celent selected an overall Model Insurer of the Year for its outstanding application of multiple best practices. We are pleased to report that CSE has been chosen to receive this recognition in 2017. CSE Insurance group developed and implemented an innovative Next Generation Landlord Insurance product to replace its legacy Dwelling Fire insurance product.

Client Disclosure

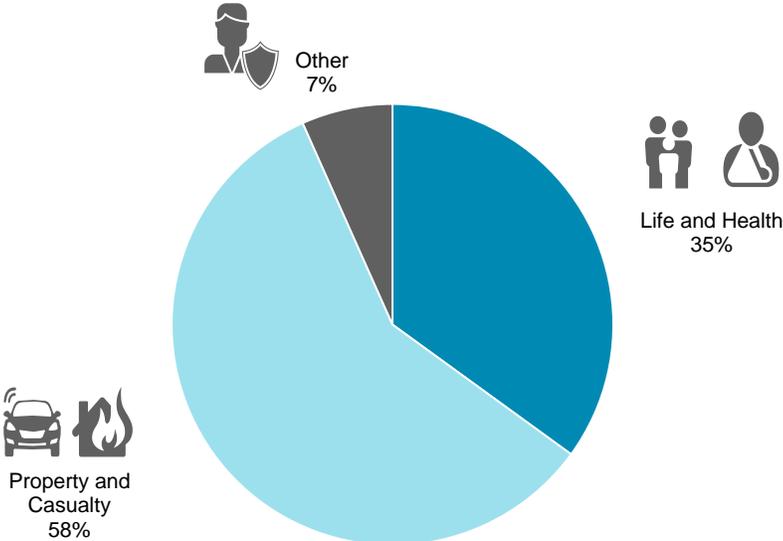
There were no fees charged to insurers or vendors mentioned in this report. Some of the nominating vendors, and many of the selected insurers, are or have been clients to Celent’s retained advisory service. (Celent serves dozens of insurers across the globe in this capacity.) However, Celent was not directly involved in the creation or deployment of any of the initiatives that have been recognized, and no preference was given to clients in the selection process.

ABOUT THIS REPORT

This report is divided into sections for each of the Model Insurer trending themes. Each section contains an overview of what makes the theme important and how a Model Insurer can distinguish itself in this area through technology. This is followed by the Model Insurer theme case studies.

The breakdown of the receipt of Model Insurer nominations by sector can be found below. Fifty-eight percent of the nominations are from property and casualty insurers, 35% are from life and health insurance companies, and 7% are from other lines of business such as specialty or workers compensation.

Figure 2: Celent Model Insurer 2016 Nominations by Sector (n=60)



Source: Celent

This year Celent Model Insurer expanded its boundaries drawing interest of Insurance companies from Asia and Latin America. The majority of nominations were from North America. Other countries with submissions are: United Kingdom, Canada, Netherlands, South Africa, India, Malaysia, Philippines, Switzerland, Brazil, Cayman Island, Colombia, Austria, France, Germany, Hong Kong, Japan, Mexico, and Peru.

Celent received over 100 cases from around the globe, including those that applied for Asia Model Insurer. To read about Asian Model Insurer winners, please see Celent’s Model Insurer Asia report, which highlights the case studies of best practices in information technology for Asian insurers.

Figure 3: Celent Model Insurer 2017 Nominations by Country



Source: Celent

Although Celent intends this report and future Model Insurer reports to be equally applicable to non-US insurers, US terms (e.g., “property/casualty” rather than “general insurance”) are used throughout.

COMMON BEST PRACTICES AND RESULTS

No two projects in the insurance industry look exactly the same, making it difficult to judge which ones qualify as Model Insurers. The projects that rise to the top, however, tend to demonstrate a number of similar elements, a cross-section of best practices and quantifiable gains regardless of category.

**Key
Research
Question**
2

What are some best practices and measurable business results of technology projects?

While this report does not present an exhaustive list of best practices or expected results, Celent has identified several common best practices such as use of industry standards, optimization of infrastructure, positioning for future reuse, automation, STP, and system integration as being integral to the success of an IT project.

Any insurer striving to be a Model Insurer in its approach to an IT initiative should consider the common best practices listed in Table 2. Celent uses this list to evaluate the submissions. Additionally, any insurer looking to achieve Model Insurer results should plan in advance to measure business gains and returns on investment as suggested below.

Table 2: Common Best Practices and Results

IT BEST PRACTICES	MEASURABLE BUSINESS RESULTS
Use of industry standards	Higher productivity, lower staff expenses.
Optimization of infrastructure	Increased revenue or market share.
Positioning for future reuse	Faster cycle times and more consistent processes.
Automation, STP, and system integration	Better decisions, more accurate pricing, and reduced losses.
Data transparency and compliance	Decreased time to market.
Improved use of channels	More efficient document and content management.
Project risk management through proper development, testing, and project management	Green organization.
Use of metrics	Improved compliance and reduction in market conduct penalties.
Solicitation of end user review and feedback	Improved customer/agent satisfaction.

Source: Celent

IT BEST PRACTICES

Industry Data Standards

Model Insurers understand that they need to think beyond successful point solutions and create lasting systems that work within a larger infrastructure. Critical to this is the use of industry data standards, such as XML and ACORD. Using data standards means that an insurer avoids reinventing the wheel and instead manages risk by working with accepted, well-tested, and well-defined models. Even if it requires a little extra work or planning, the reduced risk will save time overall.

Perhaps more importantly, working with industry data standards helps position a new system for easier integration with internal and external systems. As more and more systems within the organization conform to the same industry standards, it becomes easier to have them communicate. When looking to bring in vendor software or integrate with a third party source, such data standards enable a common ground from which to start.

Not every project needs to define itself around industry data standards, and it's likely that even the most disciplined team will find the need to add some customizations to suit their needs. However, any model insurer will spend a good deal of time in the planning phase determining how best to utilize these standards, deciding to reject them only when the benefits and risks have truly been weighed.

Optimization of Infrastructure

Model insurers do more than just build or buy modern systems; they also work to rationalize and optimize their existing systems when modernizing their infrastructure. This can mean different things depending on the project and the circumstances. An insurer with several policy administration systems may consider consolidation a higher priority than a modern system. Alternatively, an insurer looking to manage expenses in a difficult financial market might seek ways to better leverage its existing legacy system in a modern environment rather than replace it.

The optimization of the infrastructure does not have to trump other business realities. An insurer that licenses a modern policy admin system might decide that rather than going through an expensive conversion process, it will keep the legacy system in place for existing business and utilize the new PAS for new business. Although this may create a suboptimal infrastructure, the Model Insurer knows that the optimal scenario balances many factors.

Positioning for Reuse

Any insurer struggling with a legacy system that is decades old understands that today's technology investment might become tomorrow's burden. And any insurer with multiple systems duplicating similar functionality knows that bringing in a new system might add to the burden even before the day's end.

This is why a Model Insurer thinks about reuse when investing in new technology. Any system added to the infrastructure will likely be stretched beyond its original intentions, in terms of both functionality and shelf life. It will be easier to achieve these goals by using a service-oriented architecture, industry standards, and easily configurable systems, but a model insurer knows the challenge is not just about the technology, but about the way a system is tested and used by the enterprise.

For example, a new rating engine needs to be leveraged by the policy administration system, the agent portal, and any other user who needs to obtain quotes. Otherwise the investment has resulted in additional processes to keep multiple rate models synchronized. And later, when the legacy policy administration system is no longer

supporting the business, the now-older rating engine needs to easily adjust to support the replacement.

Automation, STP, and System Integration

Many of the technology best practices involve thinking about an IT project as a full enterprise strategy rather than an isolated solution. Nowhere is that as crucial as when planning a reduction of manual processes and an increase in automation. Manual processes are a burden on an insurance organization because they increase errors and require additional staff. Manual processes most frequently arise for one of two reasons:

- A system does not provide the correct functionality and cannot be easily adjusted, requiring manual workarounds.
- A system does its job well but is poorly integrated with other systems, requiring a manual process to pass data or jobs from one system to the next.

In order to reduce these burdens, it is important to build or buy a system that can be configured to fit the company's business process needs and also be integrated into the larger infrastructure.

Manual processes are not just about flaws in the technology, of course. Straight-through processing is increasingly becoming a reality in insurance. However, some decisions, such as complex underwriting, may still need human intervention. The goal is to maximize STP, extending or bringing in systems that can be configured to automate as many decisions as possible. When a process requires human intervention, the workflow should be simple, allowing staff to focus on their high-value activities rather than dealing with systems.

Like the best practice of *Positioning for Future Reuse*, these goals will be helped by service-oriented architecture, industry standards, and easily configurable systems, but they require foresight and planning, and, in many cases, a change to corporate culture.

Data Transparency and Compliance

In an economic environment where regulations are likely to be increasing while expenditures are shrinking, the importance of having a good view into corporate data has not been clearer. Many otherwise excellent projects fail to consider how data will be utilized by other systems, how actions will be audited, or how historic records will be archived and made accessible. Even projects focused exclusively on business intelligence sometimes create silos of data that only exacerbate the larger problem.

Data is critical in the insurance industry, and Model Insurers know that any project needs to fit into a broader data strategy. This does not mean an insurer can only be a model if it has a centralized enterprise data warehouse — in fact, at many insurers, failed attempts at such projects linger as models of how not to approach an IT initiative. But new projects will make data accessible and usable, allowing for strong reporting even if it happens in a later phase. This allows model insurers to make good decisions about their business and prepares them for audits and compliance with whatever regulations the industry may face.

Improved Use of Channels

The IT best practices listed in this report focus on an approach to a project rather than a specific “feature” of a system, which is why Celent does not demand that new technology utilize the web in order to be considered a Model Insurer initiative. It is crucial, however, that insurers think about all their channel options when implementing new technology or enhancing systems. Clearly, being a modern insurer typically requires providing agents and customers with easy-to-use web applications, though direct integration to agency systems or simplifying existing paper processes is also important. And while the use of a

new mobile application or text messaging channel might push the envelope of technological innovation, it will not win any Model Insurer awards if it is not adopted by agents and customers.

A Model Insurer project that succeeds in this best practice might be an initiative entirely focused on improving an existing channel, such as a new producer portal, or opening a new one, like a new direct channel.

Risk Management Through Proper Development, Testing, and Project Management

Model insurers don't need to have highly paid or prestigious IT teams in order to succeed, nor does a project timeline have to accomplish huge amounts of revolutionary change in a minimized schedule. By following best practices in project execution — development, testing, and project management — an insurer can accomplish great things over time. Although best practices in execution help guarantee many things, when it comes down to it, they are there to help companies manage risk and answer questions like, “What is the risk the project will be late?” or “What is the risk there will be system errors post-implementation?”

The best practices associated with execution are too numerous to list, but involve effective requirements gathering, proper interaction with the business, use of both automatic and manual test cases, support at the executive level, and buy-in from users. One of the most crucial practices is having a team of players who can communicate effectively. Many projects finish late and over budget not because execution failed but because the IT group failed to properly estimate and explain the true timeline.

A team that, on the same day, rolls out several new nationwide systems for multiple lines of business can point to its accomplishment as a huge success, but this is not a best practice. Maximizing results by maximizing risk is not typically best for an insurer. Celent considers a company that plans several stages of development, with smaller, localized pilot programs to be a true Model Insurer.

Solicitation of End User Feedback and Review

While it may not sound like an IT best practice, the solicitation of input from end users can be crucial to a project's success. Many times in the industry, after immense efforts are put forth by an IT organization to launch a new system, the response to a solution is only lukewarm. This is not because of a failure to deliver the requirements, but because the requirements were misaligned from the beginning. By building a user group to review early designs and milestones, a project path can be readjusted before time has been wasted on low priority features.

Sometimes a user group consists of internal staff who sit right down the hall, and getting their participation is easy. But other times, such as when building a portal for independent agents, an insurer must go out and build relationships. Typically, agents and others who will be using a system are happy to participate, if not excited at the chance to give feedback. Model Insurers use this as an opportunity not just to build the best system but also to get a head start on training.

Use of Metrics

Without the ability to quantify results, it is impossible to know what constitutes project success. Achieving measurable business results requires the use of metrics, meaning that metrics are an implied best practice for all winners.

Using metrics does not mean an insurer needs to practice Six Sigma or a highly repeatable and measurable review methodology to succeed. It does mean that an insurer needs to take a good look at the important metrics of a system before and after a project. It is not enough to measure the time to underwrite new business in a new system if that

cannot be compared to the previous environment. It is difficult or impossible to determine the highest priority IT needs if such self-analysis is not available.

By identifying critical business factors and performing realistic measurements, a Model Insurer is able to focus on the most important IT efforts, point to successes, and continuously discover areas for improvements.

MEASURABLE BUSINESS RESULTS

Higher Productivity, Lower Staff Expenses

The insurance industry — like most industries in today's market — is looking for ways to cut expenses without sacrificing service quality or speed. Smart technology can help insurers achieve more with less. Technology can reduce cycle times, automate tasks (and occasionally entire processes), and give workers the information they need when they need it. Increased productivity allows the same number of staff to handle increased volumes of work (submissions, service requests, claims, etc.), or fewer staff to handle the same volume of work.

In either case, the key for a model insurer seeking this benefit through a given initiative is to identify where and how things will change, establish baseline measures, track actual project improvements, and then measure the difference post-deployment. The largest cost impact will generally be among operating staff, but savings will be seen in IT operations as well.

Increased Revenue or Market Share

Growth is a goal for nearly all insurers. Growth may be absolute (increase NPW by 8%), or relative (increase market share to 4%). Growth in a shrinking market means taking business away from competitors. A Model Insurer also remembers that improving retention of current business is a foundation of growth (and profitability as well).

Measuring growth is a challenge, but sometimes secondary metrics (for example: number of submissions received, or approved, or renewal rates for claimants) are more readily available.

Faster Cycle Times and More Consistent Processes

Manual, inconsistent, and time-consuming processes are expensive and error-prone. Many new initiatives automate tasks and/or simplify processes. Specifically, several Celent Model Insurer winners automated claims or underwriting rules and shortened the cycle time for these processes. Since complex processes span systems, better system-to-system integration reduces the need for staff time to accomplish hand-offs.

To optimize labor costs, an insurer needs to look across the entire infrastructure before beginning an IT initiative. How will a new system link to existing systems? Will it reduce or add to the overall burden on staff? Sometimes an organization needs to recognize that the first phase of an implementation will actually increase everyone's manual process load, especially when the new system has gone online but the old system still maintains half the business.

A Model Insurer also knows that new systems do not just take existing processes and put them online. Rather, these new projects provide an opportunity to rethink processes including their minimizing complexity, automating linkages, and improving effectiveness.

Better Decisions, More Accurate Pricing, Reduced Losses

IT projects can help the bottom line by helping grow new areas of business, but they can also help an insurer be smarter about the business the company already has. Managing insurance risk is what insurers do, and that is best done with good data and insight into the customers and policies, and good tools for all the people involved in the process of

pricing, selling, and approving business. Measuring this, however, can be difficult, and many IT initiatives are started not to make better product decisions but simply to provide the tools and data needed to understand the decisions that are being made.

Not every project is directly tied to making these kinds of risk decisions, but Model Insurers recognize that all initiatives do involve new opportunities for gathering data. The IT department must think about all systems as an opportunity to feed data to the business.

Decreased Time to Market

Time to market is a “cycle time,” but it differs from the previous category *Faster and More Consistent Process Cycle Times* in that the time to market is a cycle that takes place before any business is transacted. Whether a company attempts to roll out an entire new line of business or make one change to a rate table, the time to market can take anywhere from minutes to months. Being nimble enough to adjust pricing strategies and provide competitive new products is crucial to a company’s ability to adapt to a difficult marketplace, but overburdened IT departments required to write code for every alteration can create huge bottlenecks for the business. Time to market is one of the most frequently cited reasons for licensing new systems.

It is not enough, however, to recognize that time to market is a problem. Many insurers see an unacceptably long delay for product adjustments and leap into a new technology acquisition instead of calculating ROI for a new project. While decreasing time to market may be a critical factor in the business, an IT initiative is not always the right or only solution. Once IT is able to implement a change to a rate in a day, an insurer may discover that a six-week bottleneck still exists in another area, whether it is business users seeking approval or the time spent updating marketing material. A Model Insurer knows to analyze the whole process and to measure each step before any projects begin.

More Efficient Document/Content Distribution

The interaction of an insurer with its agents and clients all comes down to content: product information, application forms, policies, marketing materials, policyholder statements, adjuster reports, bills, and all manners of correspondence. Moving all of these documents off paper and into an electronic format has been an industry focus since computers first started showing up on desktops. It is not just about reducing printing and mailing costs; it is also about creating easier, less error-prone ways of interacting. Many companies have gone through the effort of providing agents or customers an online channel for submitting business, only to print out those submissions in-house in order to feed them back into an older process. For a certain insurer this might be the right first step, as long as there are plans in place to update the back end document process as well.

As with the result *Faster and More Consistent Process Cycle Times*, a Model Insurer doesn’t just take a paper process and put it online. Instead, a Model Insurer looks to use new channels to interact in a better way, allowing agents and customers options as to how they will receive policies and information. With more efficient document and content distribution, an insurer can reduce the costs associated with printing and mailing, reduce manual process times, reduce storage needs, and reduce errors associated with rekeying data. In addition to these reductions, an insurer can increase agent and customer satisfaction.

Improved Agent/Customer Satisfaction and Adoption

There has been a great focus in the last few years on providing portals and tools to agents and customers to allow them to more easily interact and transact business with the insurer. Many of the reasons for this investment tie to previously listed business results: reduced cycle times, more efficient content and document distribution, higher

productivity, and increased revenue. But these investments also result in a less tangible increase in agent and customer satisfaction. Increased agent and customer satisfaction itself leads to higher productivity and increased revenue, so it may be seen as a means to an end rather than an end in itself, but a Model Insurer knows differently.

One way for an insurer to measure agent and customer satisfaction is to talk to their agents and customers. Though only briefly touched upon in the IT Best Practices section, an important part to making any IT initiative succeed is to involve input from the targeted users of a system, even if those users are outside the organization. This also allows an insurer to track how changes are being received and adjust accordingly. Another way to measure satisfaction is the more concrete metric of system adoption. If a new agent portal is being used by only 5% of the agent force, it's a sure thing that the agents are either unhappy with it or do not know about it. Working with the agents to determine their opinions will both help an insurer build the best possible system and kick-start the agent education and training process.

Measuring system adoption is not just to gauge user satisfaction. Presumably, a system has been put in place to achieve certain benefits to the organization, and unless the system is being used, those goals will not be realized even if the features are there.

Improved Compliance and Reduction of Market Conduct Penalties

Doing business in the insurance industry means conforming to a broad set of regulations at the state and, increasingly, federal levels. Noncompliance can impact the bottom line, both through market conduct penalties and even more significantly by a tarnished image among producers, prospects, and policyholders.

Given legislators' and regulators' proclivity to pass laws and issue new regulations and guidance, the job of compliance is a constant. And given that any insurance process can be the subject of regulation, achieving compliance is a job for both business and IT leaders, using the best available governance and project management methodologies. These include process, rules, and document management; and reporting and data transparency.

DATA MASTERY AND ANALYTICS AND ITS IMPACT IN THE INSURANCE INDUSTRY

Analytics is a domain that has been given a new birth in the financial services industry recently. The crucial role new, sophisticated analytics systems play in insurance comes from different factors that are driving interest in the industry:

- New data sources: data insurance companies can leverage nowadays has grown exponentially. Data sources are not only to be found in internal insurance information systems but also in external sources.
- The need to improve technical ratios: the insurance industry needs to find new ways to improve profitability, and in mature markets growing the business has become difficult. Therefore insurance companies understand they need to make investments in core business areas including: underwriting, pricing, claims, etc.
- Emergence of new data analysis techniques: data sciences have made considerable progress over the past decades, and the emergence of new technologies has enabled drastic improvements in data analysis techniques including big data and machine learning.

In the short period of time since the previous Model Insurer, insurers' attitude to applying data has moved on. Rather than being a process of analysing data, data mastery is now concerned with having an immediate impact on operational tasks.

- In terms of Big Data, the velocity and the variety of data remain the most important challenges insurers have to face, while volume, value, and veracity are less problematic.
- Insurers understand the potential value of leveraging external data sources. One of the major problems, though, is finding an efficient approach to include these data sources in their daily analysis.
- Insurers are increasingly putting models and assets built from data analytics in an operational setting — as we see below, in these cases this could be the analysis of unstructured data, analysis of structured data faster, or use of data and models to create more efficient processes.
- Last year we observed that insurers increasingly understood the value of data. This year insurers are capitalising on data in new automation and smarter processes.

The Model Insurers highlighted in this section are taking advantage of the data that is available and creating value for their organizations and clients. Mining, managing, and operationalising the massive amounts of data coming from various sources will continue to be a key investment insurers will pursue in the coming years.

- Meteo Protect uses in-memory analytics to enhance weather data analysis.
- StarStone Specialty Insurance Company deploys an AI solution to leverage unstructured data to improve underwriting.
- The Savings Bank Life Insurance Company of Massachusetts leveraged advanced analytics and predictive modeling to accelerate life underwriting and remove the need for invasive tests.

THE SAVINGS BANK LIFE INSURANCE COMPANY OF MASSACHUSETTS: ACCELERATING UNDERWRITING

The Savings Bank Life Insurance Company of Massachusetts (SBLI) provides life insurance products to individuals and families in the United States.

Table 3: The Savings Bank Life Insurance Company of Massachusetts Snapshot

HQ LOCATION AND KEY GEOGRAPHIES	Woburn, MA, USA
YEAR FOUNDED	1907
LINE OF BUSINESS	Term life insurance, whole life insurance, whole life insurance
DISTRIBUTION CHANNELS	Primarily bancassurance, as well as independent brokers and agents.

Source: The Savings Bank Life Insurance Company of Massachusetts

Opportunity

SBLI is a provider of competitive term and whole life insurance. SBLI believes in providing innovative customer-centric approaches in reaching the middle market, and in 2016, introduced one of the most innovative and revolutionary underwriting process in the industry. SBLI has made a commitment to always be easy to do business with and the quickest process to place the policy with the insured. SBLI's average processing time was 25 days prior to implementing this new process. With this new process, a number of policies can be approved within 24 hours!

Solution

SBLI implemented an advanced risk assessment solution using predictive modeling and data analytics to help reduce cycle times and dropout rates and eliminate the need to pull fluids and conduct exams, while pricing policies more competitively, placing applicants into appropriate risk classes and improving customer experience.

SBLI used the data analytics model in combination with existing and other market offerings, to build a quicker and more cost-effective method to achieve this goal. Using this data analytics, SBLI utilizes data from attributes derived from public records and distill it into a numeric score with reason codes to help better assess a proposed insured's risk profile — all done in real time and without the need to pull fluids or conduct medical examinations.

Delivery/Implementation/Project

The project consisted of adding multiple vendors to utilize their services for underwriting requirements that protected mortality in SBLI's usual accelerated underwriting process. Overall roughly 25 individuals put time and effort into the accelerated underwriting process implementation.

The initial implementation of SBLI's drop ticket platform utilized 103 feeds and integrated the application data in to the administration and imaging systems.

The biggest challenges SBLI had implementing this change was the "culture shock." This happened both with internal staff processing the business as well as external customers. Neither had experience in making the decisions from the new requirements. In addition, SBLI also had a number of stakeholders that needed to adapt to the concept as well. These stakeholders included SBLI's board of directors, reinsurance partners, actuaries, and senior management team, as well as their internal sales team.

Results

The following table lists and details the results of the project by objective.

Table 4: Results

BUSINESS DOMAIN OBJECTIVES	RESULTS
EASE AND SPEED OF DOING BUSINESS	<p>The accelerated underwriting initiative has been a successful endeavor for SBLI. It has allowed SBLI to improve speed of SBLI has expedited the process by having the AU cases sent from the fulfillment center, where the teleinterview is completed, right to the underwriter for review. The carrier had some cases approved within 24 hours of receipt. In addition, SBLI has been able to reduce the overall underwriting expense cost per application with a reduction of examiner gather and APS requirements.</p> <p>Finally, application count since the initial implementation in late May 2016 has increased SBLI's business in the smaller face amount bands by 30%.</p>
INNOVATING	<p>SBLI has been able to be one of the first life carriers within the industry to embrace the predictive modeling initiative in lieu of traditionally gather paramedical requirements. This has given SBLI an edge above their competition to prove that they are focused on the overall customer experience.</p> <p>In addition, SBLI has a broad understanding of the needs of their multiple distribution channels that include national marketing organizations, personal producing general agents, direct marketers and internal direct to consumer agents. The carrier needs to appeal to customers that come to SBLI in various ways and with this initiative, the company feels that it has designed a process that complements all of their distribution partners.</p>

Source: Celent based on The Savings Bank Life Insurance Company of Massachusetts information

CONCLUSION

The meaning and relevance of Data Mastery and Advanced Analytics has evolved significantly in the past few years and is still evolving.

The radical increase in capability of today's solutions compared to those just a few short years ago is astounding. The move of startups and incumbents in increasing the usability and accessibility of the tools — a democratization of data science and AI, if you will — means that these tools are seeing ever wider adoption and new solutions are coming to market.

It is difficult to predict how this trend will ultimately affect the insurance industry, but it is clear that the tools and processes are creating new opportunities and capabilities.

**Key
Research
Question**

3

What can other insurers learn from the Model Insurer initiatives?

In each case the Model Insurer is using data in an operational setting to impact their processes. Also in each case the Model Insurer had an expert partner and leveraged a data product applied to insurance.

Insurers brave enough to invest can create new opportunities by leveraging data, new technologies, and their partners to make a real difference in how the business operates.

The role of partners, of expertise, and the right tools clearly contribute to the likelihood of success, and Celent congratulates these Model Insurers and looks forward to seeing the next Model Insurers and how Data Mastery evolves in 2017.

Was this report useful to you? Please send any comments, questions, or suggestions for upcoming research topics to info@celent.com.

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If you found this report valuable, you might consider engaging with Celent for custom analysis and research. Our collective experience and the knowledge we gained while working on this report can help you streamline the creation, refinement, or execution of your strategies.

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RELATED CELENT RESEARCH

Model Insurer 2016: Case Studies of Effective Technology Use in Insurance
April 2016

Celent Model Insurer 2015: Case Studies of Effective Technology Use in Insurance
March 2015

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