

Harnessing the Potential of Data In Insurance



Financial Services Practice

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Introduction

In September 2016, AIG and Hamilton Insurance Group announced a joint venture with hedge fund Two Sigma to form Attune, a data and technology platform to serve the \$80 billion U.S. small and midsize commercial insurance market. Through Attune, the companies are seeking to transform the small commercial segment by harnessing data, artificial intelligence capabilities and advanced modeling techniques. Attune will partner with brokers, agents and other intermediaries to streamline the pricing, selection and underwriting of insurance for small business owners.

Insurers have historically collected a wealth of data, but they have been slower to monetize this asset—by creating new business lines or models to capture the value of data and analytics. As more insurance consumers move online to interact, compare products and prices, and make purchases, the volume of available data is increasing exponentially. Even more significantly, powerful new analytics technology enables insurers to use that data in ways they had not previously considered. However, many insurers face organizational challenges to becoming data-driven companies. Others are waiting for business opportunities

to emerge before enhancing their analytics capabilities. As a consequence, insurers have lagged behind other industries in their investment in and adoption of analytics.

As first movers among insurers create new business models and seek to harness the potential of their data, those that wait will be at a significant competitive disadvantage. To become a data-driven insurance organization, firms must rethink their approach to building and managing data and analytics assets and develop distinctive go-to-market capabilities that allow them to offer clients data-centric solutions.

New Technology, New Opportunities

The explosion in available customer data (both personal and commercial), the growth in analytics technologies and the rapidly declining cost of computing power and data storage are prompting companies to invest in data analytics as a means to innovate. Forward-thinking leaders across industries are pursuing opportunities to create data-driven businesses in core and adjacent markets.¹ United Healthcare's subsidiary, Optum, monetizes its proprietary consumer data and offers technology, consulting and other services to providers, payors, government agencies and life science organizations. Caterpillar's investment in Uptake, a predictive maintenance platform, allows Caterpillar to tap a quintillion bytes of data to help customers make real-time maintenance decisions that can dramatically reduce the costs of ownership and operations.

Such examples have spurred early movers in the insurance industry to employ analytics across functions such as marketing and distribution, underwriting and claims. In addition to traditional data aggregators such as Acxiom, Epsilon and Experian, carriers are using new online data sources such as Argus, Datalogic, DemystData and specialty providers such as Judy Diamond and ATTOM Data Solutions to create 360-degree views of consumers and channels and identify new opportunities in several ways.

- **Enhancing existing business models.** Carriers are using data analytics to radically redefine their role by providing

agencies with the tools to integrate data-driven decision making into areas such as cross-selling and reducing customer churn. These analytics tools spotlight the highest-value clients and high-potential leads so agents can invest resources more efficiently, predict customer churn more accurately to help improve retention, and generate broker-peer comparison analytics to identify additional sales opportunities.

- **Strengthening channel relationships.** Carriers are using data analytics to strengthen broker relationships. AXA's EB360 platform, for example, offers a suite of analytics-powered tools to help

¹ For more on how analytics is shaping a range of sectors, see "The age of analytics: Competing in a data-driven world," McKinsey Global Institute, December 2016.

brokers track the status of applications, manage compensation and commissions and monitor progress on business goals. The tools, which are optimized to minimize data entry and enable rapid quoting, help brokers manage their business more effectively, and thus strengthen the broker-carrier relationship.

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- **Changing relationships with consumers.** Insurers are fundamentally changing their relationship with consumers through the use of real-time monitoring and visualization. Consumers who agree to let insurance companies track their habits can learn more about themselves, while insurers can use the data to influence behavior and reduce risks. In auto insurance, for example, telematics are being used to monitor consumer driving habits in real time. By harnessing the resulting insights, insurers can offer usage-based policies and determine claims liability easily and accurately.
- **Redesigning products.** The Climate Corporation is using data and analytics to redefine the crop insurance market. The company uses data on weather patterns, soil characteristics and other key crop attributes at the field level to reduce

farmers' risks by designing policies that protect farmers from losses due to weather and other adverse events.

- **Creating new business models.** Sonnet, Canadian insurer Economical's entrance into the direct channel, relies on a "data hub" to allow consumers to efficiently obtain online quotes and bind coverage for homeowner's and auto insurance. The data hub quickly aggregates information from numerous databases to streamline the buying experience. At most insurers, consumers must answer more than 20 question to get an auto insurance quote; Sonnet requires fewer than 10. The approach appeals to tech-savvy consumers with relatively straightforward insurance needs, while those seeking more assistance with their insurance decisions can purchase through Economical's broker partners.
- **Establishing new adjacent businesses.** A large commercial insurer has formed partnerships to offer policyholders just-in-time solutions such as the maintenance of heating, ventilation and air-conditioning equipment in commercial buildings. The solutions are based on monitoring and diagnosing vibration and sound patterns to detect declining performance and predict failures, which reduces the total cost of ownership.

Increasingly, carriers are creating entirely new business models and disruptive offerings that generate non-risk, fee-based income. These "data as a business" models allow insurers to take advantage of their vast data pools and existing investments in data and analytics to offer unique data-driven insights to partners and end customers.

The Data-Driven Insurer: A Journey in Five Phases

The arguments for harnessing the power of data and analytics are convincing. However, the question often asked by insurance executives is, “Where and how do we start?” Insurers should follow a five-phase approach to design, launch and successfully manage a data analytics business (Exhibit 1).

Phase 1—Define aspiration and set vision

The first step in shaping a “data as a business” strategy is for an organization’s senior leaders to define a compelling aspiration for the new business. Given the enormous economic potential the data hold, the aspiration should be bold and include business-backed, strategic use cases. A rallying cry for the organization could be, “Through launching a new data business, we expect to radically redefine the homeowner’s insurance market and double our market cap in three years.” Creating a yardstick to measure progress will ensure that the organization is thinking boldly enough. A high-level business and economic model based on the aspiration should also be developed during this phase. Throughout the following four phases, these elements will be pressure-tested and adjusted as appropriate.

With the aspiration set, senior leaders must determine the most appropriate course to mobilize the organization to pursue it. This task includes appointing and visibly backing a leader to drive the next four phases.

Phase 2—Evaluate assets, capabilities and value creation opportunities

With the aspiration and strategic use case as the foundation, insurers must next determine which of their assets they can harness to build the capabilities required to achieve the strategic use case. This process includes not only understanding the types and value of existing data but also building the analytical and business capabilities needed to transform raw data into valuable insights for partners and customers.

Understanding the ecosystem of analytics partners is critical to generating impact from analytics. Carriers should identify best-in-class companies that deliver impact through data, analytics and insights across the industry value chain. Equally important is finding “white spaces” in the market where no solutions exist. The key here is to understand how to create value in these opportunity areas and which analytical capabilities matter most to the solution. For example, partners to evaluate can include those with:

- Proprietary data sets, machine-learning models and approaches to continuously improving the model
- Flexible data and analytics infrastructure to execute high-priority use cases
- Tools that allow customers to efficiently access, understand and act on data and insights
- Go-to-market capabilities including commercializing and pricing high-impact analytical solutions
- Capabilities to quickly make improvements to meet customers' changing needs and stay ahead of competitors

At the conclusion of Phase 2, management should align on the data assets and capabilities that best fit the strategic use case, the gaps that will need to be addressed and the high-level business case. To rally stakeholders, leaders need a compelling reason for the changes they intend to make, and must clearly describe

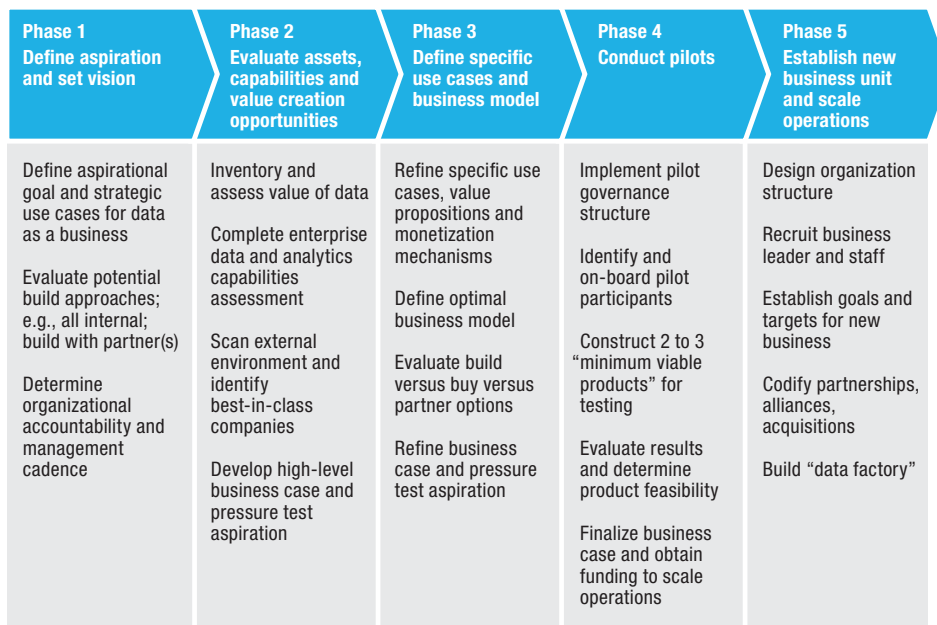
the impact that analytics can have on the organization, its clients and employees. The key challenge is to ensure that these assets link clearly to business value; without this connection, the resulting assets will have no real impact.

Phase 3—Define specific use cases and business model

The next step is defining specific use cases and associated customer value propositions—in other words, the building blocks of the aspiration and strategic use case. Where applicable, management should consider further refining the list of potential use cases through market research with potential partners and customers. This exercise gives the team a clearer understanding of potential demand for each use case and the primary monetization mechanisms (for example, price premiums for current products or incremental subscription fees for new data products). As building the necessary capa-

Exhibit 1

Launching an insurance data and analytics business



Source: McKinsey & Company

Monetization business models

Organizations are exploring a number of business models to monetize data and deliver against business-backed use cases. These models range from providing raw data to providing insight-based consulting solutions and services to customers and channel partners. Across industries, five categories of business models are emerging (Exhibit A).

In insurance, some early movers are aspiring to develop “utilities” by taking advantage of their size and access to a disproportionate share of data to create solutions that improve industry economics and firms’ ability to serve clients. For example, Aon’s Global Risk Insight Platform (GRIP) contains a proprietary database of insurance industry placement data, a source of insights across carriers, industries and products from individual transactions to global trends. This collection of data enables Aon to benchmark similar risks worldwide, including pricing information, to help clients evaluate performance and anticipate shifts in the market.

Insurance executives must consider many factors when exploring potential business models, such as the use cases, the ultimate customer value proposition, the specific business problems being addressed, and the profit formula (for example, how much profits depend on quickly achieving scale). In data-centric business models, a key factor is data quality and how much processing will be required to make the information usable. In general, moving from the data provider model toward the others requires more processing of the underlying raw data, and hence higher levels of investment.

The good news is that the more companies refine the data, the more value is created for end customers and the higher the resulting pricing power. To get started, management teams should evaluate potential models based on the data that can be monetized with little additional processing (for example, data provider) versus putting all the organization’s efforts behind a longer-term play (for example, full solution provider).

Exhibit A

Monetizing data: Five business models

		Examples
Data provider	Offer data in raw formats, often in real time	Reuters provides text, pictures and video to news agencies
Data aggregator	Collect and aggregate data across firms for a function or industry	IMS aggregates prescriptions written by every doctor by region; pharmaceutical companies use data to compensate salespeople
Data-driven platforms	Provide data as well as a software platform for accessing and using the data	DealerTrack provides car dealers with the industry's largest online credit application network as a software-as-a-service application
Data analytics and insight provider	Help clients analyze or visualize large and disparate data sets on generalized platforms or tailored solutions	GE's Predix enriches data from industrial equipment to deliver actionable insights (e.g., combines airline engine sensor data with weather information to offer fuel management and flight risk management services to reduce miles flown and improve airport access)
Full solution provider	Offer end-to-end analytics services, including data, infrastructure, insights and implementation	UnitedHealth created a subsidiary (Optum) to monetize its proprietary consumer data and offer technology, consulting and other services to providers, payors, government agencies and life science organizations

Source: McKinsey & Company

bilities might also require partnerships or acquisitions, insurers should conduct the external assessment with an eye toward this possibility. This assessment can help to identify potential business models (see sidebar, “Monetization business models”).

Phase 4—Conduct pilots

The team proves the value of the new business by piloting two or three minimum viable products (MVPs). Carriers should take an iterative, test-and-learn approach to pilots, with each lasting no more than 8 to 10 weeks. It is important to keep the scale of these pilots manageable and not attempt to perfect final offerings. Also, metrics to gauge a pilot’s success should include a mix of learning and financial impact (with more emphasis on the former) as well as test-versus-control experiments where applicable to measure the incremental value delivered by analytics.

Phase 5—Establish new business unit and scale operations

Scaling successful prototypes and establishing foundational capabilities by recruit-

ing talent and building the “data factory” will position an insurer to formally launch the new venture and begin the scaling process. The new venture will call for new roles in the organization, including not only data scientists who can analyze big data and solution architects to manage the delivery road map, but also experts who can translate business needs into analytics language.

As the data-driven business matures, firms should explore establishing a new branded unit based on its capabilities and revenue growth projections. Insurers should also establish and manage key metrics to assure implementation is on track and that the business unit is delivering anticipated value. The primary focus should always be on value delivered and on investments based on clear value realization milestones.

Building a data-driven business is often a multiyear journey requiring parallel efforts in such areas as data and analytics modeling and business building, along with a heavy customer engagement and go-to-market component.

Implementing an Agile Cross-Functional Operating Model

Developing a data monetization business calls for strong go-to-market capabilities. Insurers must quickly develop the data analytics offerings, conduct tests with real customers, refine them in quick iterations, and price solutions based on the value delivered and the customer's willingness to pay. For most insurance carriers, this approach will represent a change from their traditional way of operating. However, leading digital companies around the world are using such agile approaches to deliver business and customer value quickly and effectively. Carriers should consider taking the following actions:

- **Get close to customers and collaborate with them on solution design.** Instead of relying on the judgment of select stakeholders such as sales executives or on market research, insurers should base each step of a solution's design and development on active customer engagement and feedback. This focus should also help inform the value at stake for customers and their willingness to pay.
 - **Adopt a test-and-learn approach and focus on launching in weeks rather than months.** Rather than aiming to build feature-rich, comprehensive solutions that take months and years to design, develop and launch, carriers should focus on quickly delivering an MVP followed by subsequent releases to expand and improve on features, functionality and reach. Each release should be based on meeting a set of milestones and success criteria agreed upon in advance.
 - **Create cross-functional teams that own well-defined business and customer outcomes.** Typical insurance carrier silos such as sales and marketing, product, IT, finance and HR create significant coordination overhead. Dedicated cross-functional teams (preferably with dedicated resources) can own the solution end to end and focus on customer outcomes.
- Since this approach to developing and running a business represents a sharp break for most carriers, executives should consider establishing the new business so that it does not get burdened by the larger organization's requirements and processes. For example, a new business will need to attract different talent profiles

and develop unique partnerships, so established processes and lead times (for instance, hiring processes) might not be effective. Senior leaders should proactively think about addressing these issues while building momentum, generating excitement and celebrating successes.



The exploding volume of data available to insurance carriers is giving rise to new

business models, revenue streams and enormous opportunities to increase value. Embarking on the journey to monetize data requires insurers to rethink their approach to building and managing data and analytics assets and to develop distinctive go-to-market capabilities to bring new data-centric offerings to their clients. Executives that can manage investments in analytics while identifying new business lines can capture significant rewards.

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