CIOs Solidify Value, Feasibility and Ethics as the Initial Steps to Enable Successful Insurance Data Monetization

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Initiatives: Financial Services Digital Business Strategy and Innovation

Data monetization efforts can be derailed unless insurance CIOs take steps to overcome major hurdles such as gaining consensus on data asset valuation, project feasibility and regulatory compliance. Insurance CIOs can use these practices to overcome those challenges.

Overview

Key Challenges

■ Insurance IT professionals are actively working on calculating the economic value of data. But data in the form of databases, files and other repositories of raw information are not currently recognized by the accounting profession as a tangible asset for inclusion in a balance sheet. This makes it hard to gain consensus on business value.

■ Insurance CIOs who attempt to exploit data as an asset will jeopardize data monetization feasibility unless they bridge the gap between the potential value of vast amounts of enterprise data and using it to solve tangible and concrete business problems.

■ Customers and regulators are concerned over the use of personal data for data monetization. The top challenges to sharing or exchanging data externally are perceived regulatory prohibitions or legal restraints, risk assessment of security vulnerability or liability, and stakeholder resistance.

Recommendations

CIOs focused on financial services digital business strategy and innovation should:

■ Partner with your chief financial officer (CFO) to create a standard methodology for measuring the financial value of your organization's data assets. Demonstrate how the new data will also improve reporting, ensure compliance or reduce risk.

■ Use quantifiable evaluation criteria to test the feasibility for a data modernization idea. Communicate the findings to build consensus with senior executives and business stakeholders about the potential value, costs and risks of data monetization.
Introduction

Data used in business processes is a digital asset with potential economic value. Insurance companies clearly sense a need to take advantage of them to improve their businesses (see Note 1). According to recent Gartner research:

- Many financial services and insurance companies are actively attempting to monetize data. ¹
- 44% of insurance business and IT professionals indicated that they were currently working on calculating the economic value of data. ²
- Another 37% said that they planned to start within the next 12 months. ²
- Less than 20% of consumers trust insurance companies to manage their personal data safely and responsibly. ³

Furthermore, 33% of 70 insurance companies attending the 2019 Gartner Data & Analytics Summit were actively trying to measure the value of data through financial means. However, the same cohort of summit attendees indicated that only 11% of 70 insurance company attendees have a data monetization game plan in place.

Gartner expects data monetization initiatives to continue through 2020 and 2021 despite the economic slowdown precipitated by the COVID-19 pandemic. Financial services executives including insurance executives will continue to identify new opportunities to innovate the business over the next 60 to 90 days by investing in analytics. ⁴

However, there are significant barriers separating raw data assets and monetizing insurance data that must be overcome to be successful, such as the need to:

- Shift mindset from an IT/systems-centric understanding to that of a “data as an asset.” Find internal or external customers who value it and are willing to pay for it.

- Establish a monetary value for the data asset.

- Overcome the technical and data management hurdles needed to transform raw data into something of value.

- Assure consumers of data that it remains private and protected from inappropriate use or cyber risk. A component of this includes a clear understanding of “what’s in it for me” if a consumer or policyholder shares private data with an insurance company.
Figure 1 provides an overview of the barriers that sit between raw insurance data and a marketable asset that can be monetized.

**Figure 1: Steps to Achieving Insurance Data Monetization Business Value**

**Steps to Achieving Insurance Data Monetization Business Value**

- **Data Assets**
  - Actuarial Data
  - Claims
  - Customer Data
  - Preferences
  - Telematics
  - Behavioral Data
  - Biometrics
  - Weather
  - Data Exchanges
  - Credit History
  - Electronic Health Data

- **Initial Barriers**
  - Unclear Market Value
  - Consensus on Feasibility
  - Consumer Trust

- **Initial Actions**
  - Create Standard Data Valuation Method
  - Build Consensus on Feasibility
  - Build Consent Management Services

- **Data Monetization**
  - Improved Business Outcomes
    - Improve Risk Selection
    - Optimize Fraud Detection
    - Consumer/Product Match
  - Automation and Efficiency
    - Facilitate an Interaction
    - Automate a Transaction
  - New Value Creation
    - New Relationship
    - Barter Data
    - Sell Data
    - New Value-Added Service

Insurance CIOs working with CDOs must break down these barriers in order to make the potential value of vast amounts of enterprise data tangible for concrete business problems. The three best practices that CIOs can apply immediately for data monetization success are:

1. Generate support by creating an insurance data valuation framework.
2. Create objective criteria for testing the feasibility of the data monetization effort.
3. Define a concrete plan to mitigate regulatory and ethical risks.

**Analysis**

**Generate Support With Other C-Level Executives by Creating an Insurance Data Valuation Framework**

Data in the form of databases, files and other repositories of raw information are not currently recognized by the accounting profession as a tangible asset for inclusion in a balance sheet. This matters because it makes valuation of data monetization difficult. Gartner contends that adopting formal methods for measuring the value of data is a significant step in realizing the potential benefits of available information.
CIOs working with CFOs and data and analytics leaders, including CDOs, should be collaborating to assign value to data as the basis for a data monetization business case. This can be done using infonomic measures to quantify and communicate the value of data assets. Infonomics is the discipline of managing and accounting for information with the same or similar rigor and formality as other traditional assets such as financial, physical, intangible and human capital (see Data Monetization Will Be the Next Frontier for Digital Insurance). As a start, insurance CIOs need to work with data and analytics leaders to begin inventorying their data and mapping it against concrete business outcomes. Table 1 gives an example of the elements of a data inventory mapped to valuation.

### Table 1: Example of Insurance Data Monetization Framework

<table>
<thead>
<tr>
<th>Transaction Type</th>
<th>Example</th>
<th>Frequency</th>
<th>Data Product</th>
<th>Potential Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell</td>
<td>Real-time data collected from distracted drivers in commercial fleets</td>
<td>Recurring</td>
<td>Aggregate data on distracted driver behaviors</td>
<td>Commercial insurance customers, Legal counsel, Claims management</td>
</tr>
<tr>
<td>Barter</td>
<td>Provide new business and underwriting data to industry benchmarking organizations in exchange for benchmarking information</td>
<td>One-time</td>
<td>Granular, deidentified dataset containing underwriting operational data and decision outcomes</td>
<td>Research firm or industry consortium</td>
</tr>
<tr>
<td><strong>Transaction Type</strong></td>
<td><strong>Example</strong></td>
<td><strong>Frequency</strong></td>
<td><strong>Data Product</strong></td>
<td><strong>Potential Customer</strong></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>License</td>
<td>Provide automobile claims data for a specific geography as input to urban traffic planning</td>
<td>Recurring</td>
<td>Granular deidentified driver data that contains accident data augmented with insights provided by complementary telematics data</td>
<td>Local government planning organizations</td>
</tr>
<tr>
<td>Internal Data Analysis</td>
<td>Leverage internal data on the percentage of first notice of loss submitted via websites or mobile devices to identify areas where additional automation would reduce costs</td>
<td>Recurring</td>
<td>Data and analytics findings that lead to concrete actions</td>
<td>COO and CDO</td>
</tr>
<tr>
<td>Barter</td>
<td>Alert, advise or nudge the policyholder on the insurance coverage pricing based on how the policyholder is performing against a stated set of health-related objectives</td>
<td>Recurring</td>
<td>Health and wellness rewards and recognition</td>
<td>Policyholder</td>
</tr>
</tbody>
</table>
It is important to note that the insurance industry is a highly regulated industry so monetization ideas from other industries might not be applicable. The key is that CIOs evaluate the value of a data monetization idea within the constraints of applicable guidance such as those issued by state or government insurance commissions or government regulators (see Predicts 2020: Digital Challenges Slow Down Insurance Industry Transformation).

Recommendations

Insurance CIOs and their business partners should take the following specific steps:

- Establish an information monetization or information product management function tasked with proposing and developing business cases with a focus on generating immediate business value (see Essential Product Management Practices to Monetize Data and Analytics Assets).

- Maintain a catalog of information assets throughout the organization, as well as from second- and third-party sources (see Augmented Data Catalogs: Now an Enterprise Must-Have for Data and Analytics Leaders).

- Evaluate alternatives for information monetization, and adapt high-value monetization ideas from other industries (see Applied Infonomics: Seven Steps to Monetize Available Information Assets).

- Work with each senior executive to review their key performance indicators (KPIs) to determine which area would benefit most from a data monetization effort. For example, underwriting cycle time or policy sales growth. Use design thinking techniques to develop use cases and analytical scenarios that would materially improve their performance. Identify and document the categories of data against which algorithms could be applied to realize those insights (see Tool: Enable Data Literacy Through Stakeholder Analysis and Linking to Business Outcomes).

- Work with the CDO to establish a standard methodology for measuring the financial value of your organization’s data assets as if they were balance sheet assets and liabilities. Tie data assets to specific insurance P&L line items such as gross written premium to create a clear line of sight (see Applied Infonomics: How to Measure the Net Value of Your Information Assets).

Create Objective Criteria to Determine Feasibility of the Data Monetization Initiatives

According to the 2020 Gartner CIO Survey, most insurers are not effective at making timely data-driven decisions and managing information assets strategically (see Digital Insurance Success Requires Leveraging Data, Analytics, and Artificial Intelligence). It is imperative that insurance CIOs and CDOs match up their data monetization aspirations with their ability to be successful in the
endeavor. For example, an insurance organization with low digital and data maturity might start by monetizing customer data. It could leverage policyholder preference data that is stored internally in operational systems, as opposed to trying to gain deep insights using complex algorithms against large volumes of third party data (see Digital Success Requires Leveraging Data, Analytics and Artificial Intelligence and Toolkit: Data Mastery Model for P&C and Life Insurance Version 2.0). Insurance organizations that overinvest in technology before mastering other fundamentals such as data governance will soon discover that they’ve built an unsustainable structure yielding little to no business value, which is a key aspect of determining feasibility. However, a data monetization feasibility effort should extend beyond technology considerations to be successful.

Ideas about monetizing data have to be realistic. CIOs and CDOs should develop a well-rounded assessment of feasibility from a variety of dimensions, some of which are technology related and some of which are not. Feasibility dimensions that should be considered include:

- **Marketability** of the data monetization end product and a clear line of sight into the planned practical benefits of the endeavor.

- **Sustainability** to ensure a data monetization idea can move from a concept to a scalable solution that can be managed affordably.

- **Data mastery** must match the needs of the initiative and the right technology infrastructure must be in place either within the organization or with third parties.

- **Legal and ethical nature** of the data monetization effort. CIOs and CDOs will need to move beyond a simple compliance checklist to enable value-added capability that encourages policyholders and agents to be actively willing to share their data.

Gartner recommends putting data monetization efforts to the test using a simple feasibility matrix before proceeding to a more detailed level of analysis (see an illustrative example in Figure 2).

**Figure 2: Sample Data Monetization Feasibility Assessment Guide**
CIOs should use the feasibility assessment to assess the pros and cons of undertaking a data monetization effort before a commitment of time and money is made. CIOs should be an essential part of any business case document presented to senior management (see Five Strategies for the CIO Building a Business Case for Data Monetization in Asset Management and The Core Elements of a Business Case). Feasibility criteria will change by situation and CIOs should choose their own feasibility criteria related to their own environment.

Use the matrix as a quick assessment at the early stages of a data monetization effort to weed out unfeasible initiatives. For the ones that score the highest, the next step should be a formal feasibility analysis which is much more detailed as part of developing a formal business case. This should be used as an early stage go/no-go evaluation.

As a data monetization idea generates more senior leadership interest, CIOs should supplement a feasibility study with a formal risk assessment that evaluates the severity and likelihood of a risk related to the data monetization effort (see Develop a Financial Risk Assessment for Data Using Infonomics). A detailed risk assessment is different from a high-level feasibility assessment in that a risk assessment focuses on specific hazards that have the potential to cause harm and the risks that they pose to an organization.

### Sample Data Monetization Feasibility Assessment Guide

<table>
<thead>
<tr>
<th>Type of Feasibility</th>
<th>Feasibility Question</th>
<th>Feasibility Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practicable</td>
<td>Will this idea clearly result is the creation of new premium, client retention or “bookable” operational savings?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Marketable</td>
<td>Would the idea have sufficiently broad appeal to insurance markets that are expanding versus a niche opportunity?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Scalable</td>
<td>Can the idea be developed and implemented to the extent required or intended?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Manageable</td>
<td>Does your current insurance data mastery level match or exceed the requirements of the data monetization idea?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Technological</td>
<td>Do you have the tools, information and skills or third-party partnerships to develop and roll out the idea?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Economical</td>
<td>Will the idea require too much investment, or will it generate sufficient return on investment?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Legal</td>
<td>Does the idea conform to local insurance regulators requirements with respect to the use of personal data?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Ethical</td>
<td>Is this idea consistent with current expectations regarding the use of personal data in insurance interactions or will this result in a backlash that further diminishes consumer trust in your business?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Ecological</td>
<td>Does this idea conform with your company’s current environmental, social and governance (ESG) policy?</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Source: Gartner

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The feasibility matrix serves another function. It’s a tool for building consensus with senior executives, IT leaders and business unit stakeholders about the potential value of information — as well as a high-level view of costs, requirements and risks of monetization. Testing monetization ideas by openly asking, considering and evaluating how practical, marketable, scalable, technologically feasible and economical they are is a measure of seriousness of intent.

Recommendations

Insurance CIOs and their business partners should take the following specific steps:

- Pose these questions to project sponsors to assess their execution and risk management capabilities as well as the organizational impact of the investment.
- Pressure-test and revalidate project assumptions based on the best information and insight available at the time. Revisit your feasibility assessment prior to making a formal decision to proceed.
- Drive organizational consensus by incorporating input from a variety of stakeholders to attain a diverse viewpoint on feasibility.

Create Consent Management Services

Managing consumer consent is part of the broader topic of digital ethics. Digital ethics comprise the system of values and moral principles for the conduct of electronic interactions among people, organizations and things. Consumers are increasingly aware that their personal information is valuable and is subject to misuse. Insurance companies recognize the risks involved in securing and managing personal data. And governments are implementing strict legislation in this area.

Monetizing customer consumer data invokes critical data privacy requirements. Examples of use cases where consumer customer data would be valuable include:

- Location data from smartphones to offer relevant insurance products such as travel insurance
- Providing agencies with consumer web traffic to predict customer churn or for cross-selling
- Providing policyholders with health and financial data to measure goal achievement
- Tracking of consumer habits to influence behavior and reduce risk
- Collection of consumer health data to reduce mortality and morbidity risks
- GIS location technology to get up-to-the-minute location-specific data to reduce fraud

However, the state of privacy and personal data protection and the willingness of consumers to share private data are major hurdles to a data monetization effort. Gartner’s 2019 Financial
Services Consumer Trust Survey indicates that more than 80% of consumers do not rate insurance companies among their top three most trusted providers to manage their personal data safely and responsibly. Insurance CIOs and their C-level data monetization partners must have an executable plan for managing these risks when implementing a data monetization effort. This includes actively building trust by obtaining consent. For example:

- In the new business onboarding process, the acquisition of consumer data or health data from electronic health records (EHR) can greatly reduce the time it takes to underwrite a life insurance policy.
- Automobile insurance premiums can also be adjusted using telematics data concerning driving habits.

However, despite this low level of trust, consumers could be persuaded to share data with an insurance company. Organizations can utilize some form of quid pro quo and put mechanisms in place to assure consumers that the data is used within their approved boundaries.

Figure 3 provides insights into reasons why consumers would be willing to share more personal data with insurers.

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**Figure 3: Consumer Trust Mitigation**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the Above Would Motivate Me to Share More Data or Start Sharing Data With an Insurance Company</td>
<td>14.7%</td>
</tr>
<tr>
<td>Ability to Request an History of How My Data Has Been Used by the Insurance Company</td>
<td>36%</td>
</tr>
<tr>
<td>Get More Details Regarding How My Information Is Being Used by the Insurance Company and an Ability to Prevent and Block Certain Usage</td>
<td>37.6%</td>
</tr>
<tr>
<td>Get Real-Time Confirmation (via a Mobile App) When My Data Is Being Used and for What Purpose by the Insurance Company</td>
<td>38.1%</td>
</tr>
<tr>
<td>Ability to Block at Any Time the Use of Any of My Data by the Insurance Company</td>
<td>45.4%</td>
</tr>
<tr>
<td>Benefit From a Lower Premium on My Insurance Policy</td>
<td>46.5%</td>
</tr>
</tbody>
</table>

n = 11,529 All respondents, excludes not sure responses
Q. Which of the following reasons/factors would motivate you the most to share more data or start sharing data with an insurance company (such as car, home, travel insurance)?
Source: Gartner Financial Services Consumer Trust Survey
As shown above, consumers are willing to share personal data under the right conditions. For example, 38% would be motivated by getting real-time confirmation when their data is being used and for what purpose. This leaves the door open for insurance companies to monetize consumer data. One key element of assuaging the issue of policyholder trust is by putting in place consent management services (see Key Challenges Related to Consent Management). There are four key workflow areas in the consent management process:

1. Determining which processes and data require consent
2. Obtaining consent
3. Recording consent
4. Monitoring internal use of consumer data according to consent

CIOs can attempt to build their own consent management system. However, while the four steps above seem simple enough, managing consent on a digital insurance platform that allows for open integration with third parties that are freely sharing private data through APIs is complex. Consumers are being granted increased privacy rights, such as with the EU's General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA). Therefore, CIOs working with insurance privacy leaders, CDOs and consumer-facing departments must ensure consent is obtained, recorded and monitored efficiently across the company, ensuring not only compliance with regulations, but also to motivate consumers to share private data (see The State of Privacy and Personal Data Protection, 2019-2020).

An alternative for insurance CIOs is to seek a third-party OEM as a supplier of a consent and preference management platform. Consent and preference management platforms consolidate end-user choices regarding how their personal data should be handled. Choices are synchronized across a variety of legacy and external sources both on-premises and in the cloud. The intent is to extend visibility and control to consumers, allowing them to determine and change at will how much of their data to expose, to whom and for what purpose. There is a balancing act for insurers with respect to the degree of consent management offered to consumers. Forcing too many privacy choices can degrade user experience and lead to high opt-out rates. Offering too few privacy choices can limit the legal ability to process private data or raise compliance questions.

**Recommendations**

Insurance CIOs and their business partners should take the following specific steps:

- Stay ahead of the consent management knowledge curve by surveying OEMs in the consent management software market to understand availability of potential OEM solutions that meet the needs of your insurance company.
Avoid oversimplifying consent management requirements. Incorporate an assessment of consent management needs in your data monetization feasibility scoring from not only a customer experience perspective but from a privacy law compliance point of view.

Avoid ethical conflicts with data monetization by working with legal counsel and privacy leaders to create an ethics board that challenges your organization’s data monetization plans. Choose members who are representative, independent and authoritative. Give your data monetization team unrestricted access to the ethics board. Ensure that customers are represented by including your insurance company’s chief customer experience officer (for additional guidance, see Data Ethics Enables Business Value).

Evidence

1. **2019 Chief Data Officer Survey**: Gartner’s Fifth Annual Chief Data Officer Survey was conducted to explore the business impact of the CDO role and the Office of the CDO. The research was conducted online from September through November 2019 among 293 respondents from across the world.

   Respondents were required to have the title of CDO or chief analytics officer (CAO), or to have the responsibilities of an executive-level data and analytics (D&A) leader in their organization (in the case of organizations without an official C-level D&A title). The survey sample was gleaned from a variety of sources (including LinkedIn), with the greatest number coming from a Gartner-curated list of over 2,000 CDOs and other high-level D&A leaders.

   The study was developed collaboratively by Gartner D&A analysts and the Primary Research Team. Results of this study do not represent global findings or the market as a whole but reflect sentiment of the respondents and companies surveyed.

2. **Gartner’s Data and Analytics Adoption Survey, 2019**: This study was conducted to learn how organizations use data and analytics.

   The research was conducted online during November and December 2019 among 272 respondents from North America, Western Europe and APAC. Companies from different industries were screened for having annual revenues less than $100 million.

   Respondents were required to be at managerial level or above and should have a primary involvement in and be responsible for the organization’s data and analytics solutions, including purchase and investments.

   The study was developed collaboratively by Gartner analysts and the Primary Research Team who follow data and analytics management. Results of this study do not represent global findings or the market as a whole but reflect sentiment of the respondents and companies surveyed.
Gartner, Inc. | 730562

3 2019 Financial Services Consumer Trust Survey: Gartner’s Financial Services Consumer Trust Survey, fielded from December 2018 through February 2019 via online (online and face-to-face in UAE) among 12,329 consumers in the U.S. (n = 1,248), Canada (n = 1,222), U.K. (n = 1,258), France (n = 1,256), Poland (n = 1,240), UAE (n = 1,211), India (n = 1,202), China (n = 1,200), Australia (n = 1,257) and Brazil (n = 1,235).

Respondents ranged from 18 through 74 years old, with quotas and weights applied within each country for gender, age, region and household income.

Results are representative of the respective online populations (excluding the lowest household incomes) with respect to age, gender, region and household income. Indicative precision level: At full count, sampling error is +/- 3.1% at the 95% confidence level. Levels vary depending on the number being measured as well as specific data cuts applied.

4 Gartner Financial Services Business and Technology Priority Tracker, April through June 2020: Respondents include 62 CIOs and IT leaders across insurance, banking and investments within financial services. The survey was developed to understand how the COVID-19 pandemic is changing business and IT priorities of financial services CIOs and IT leaders.

**Note 1: Data Monetization**

Data monetization refers to the process of using data to obtain quantifiable economic benefit. Internal or indirect methods include using data to make measurable business performance improvements and inform decisions. External or direct methods include data sharing to gain beneficial terms or conditions from business partners, information bartering, selling data outright (via a data broker or independently) or offering information products and services (for example, including information as a value-added component of an existing offering).

**Recommended by the Author**

Digital Insurance Success Requires Leveraging Data, Analytics and Artificial Intelligence

Five Strategies for the CIO Building a Business Case for Data Monetization in Asset Management

Case Study: Ethical AI With an External Board (Axon)

**Recommended For You**

Market Guide for Integrated HR Service Management Solutions

Summary Translation: Broaden Application Performance Monitoring to Support Digital Business Transformation

Summary Translation + Localization: Top 10 Application Predictions Through 2025

Value Driver Scenario Workshops (ON Semiconductor)

Amplifier Risks (GraySpring*)