

# Unlocking the value of unstructured data for insurance



The Unstructured Data Company

**INDICO**  
DATA

## The future of insurance is unstructured

The digital transformation arms race is on for insurance companies. The necessity to drive out costs and inefficiencies, as well as elevate customer experiences, has lit a fire among life, property and casualty, and health carriers alike. It's easy to see why:

- At least 40% of customers are ready to switch insurance providers if not satisfied with their experience<sup>1</sup>
- Insurance technology companies are revolutionizing customer service, generating policies and quotes at least 10x faster than incumbent insurers<sup>2</sup>
- 45% of US insurers will be offering new data-driven customer-centric experiences in the near future<sup>3</sup>

At the heart of this transformation is data – or, more aptly, documents. Documents are the lifeblood of the insurance industry: Applications. Quotes. Policies. Claims. Reports. Risk assessments. Thousands upon thousands of valuable digital artifacts, with the only thing they have in common being their lack of uniformity. In fact, 85% of all data in large enterprises is unstructured.

As its name implies, unstructured data by its nature does not follow an established format or model, making it challenging to search and analyze. It can be generated by humans or machines. It can be text based, or not. Examples range from business documents such as invoices, contracts, emails and call center transcripts, to rich media such as photos, videos and audio files.

So, while many progressive insurance companies have attempted to leverage their proliferating data with technologies like Robotic Process Automation (RPA), they've only been able to harness a meager 15% of what they have at their fingertips. Until now.

This eBook will examine the unstructured imperative for insurance companies, as well as best practices and technologies being employed by forward-thinking enterprises in order to successfully leverage their unstructured data for the first time ever.

“

45% of US insurers will be offering new data-driven customer-centric experiences in the near future.”

”

– IDC

Read on to discover how world-class organizations like MetLife are reducing risk, improving win rates, driving out costs, increasing capacity and capturing new opportunities for customer satisfaction and competitive advantage through their unstructured data.

---

# The unstructured imperative for insurance companies



A perfect storm of new and established challenges exacerbated by the COVID-19 pandemic pose significant risks and amplify the imperative for action for insurance companies when it comes to their unstructured data. At the same time, new AI-driven technologies are changing the face of unstructured data, turning this once untouched resource into an invaluable tool for accelerating revenue, increasing efficiencies and elevating customer experience.

## The opportunities

RPA or other automation technologies can deliver bottom line improvements. On the other hand, unstructured data can unlock both bottom- and topline revenue through new product or service opportunities.

### 1. Reduce expense ratios

The number-one priority for modern insurance companies is reducing underwriting expense ratios, and it's an issue that's been significantly exacerbated by the pandemic: according to research and advisory firm Celent, 67 percent of large insurers indicated that cost reduction and process improvement had become more important in light of COVID-19.<sup>4</sup> Leveraging unstructured data through AI-driven automation platforms has the potential to change the game for insurers, radically reducing the time and costs associated with the traditionally manual labor associated with document intake and review. This, in turn, can help transform underwriting into a profit center and a source of competitive advantage.

### 2. Create competitive advantage through efficiency

The speed at which a carrier responds to a broker directly correlates with their likelihood of winning the deal – based on industry averages, the first responder wins the business more than half the time. Yet, even as technologies have advanced and PDFs have replaced paper submissions, the review process has not evolved or accelerated in decades.

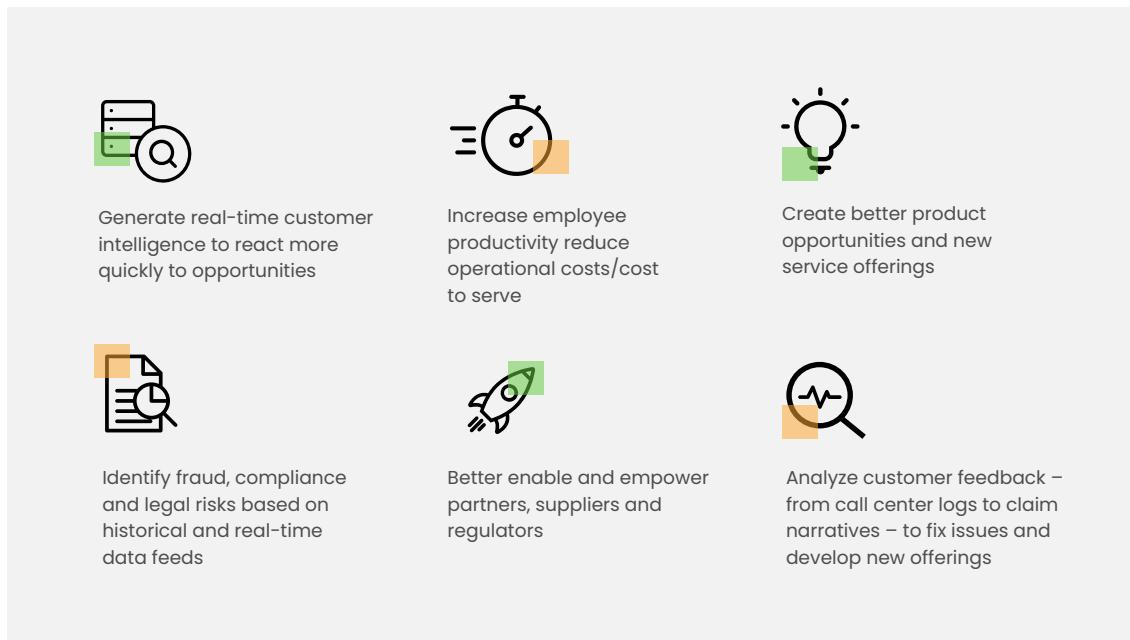
Underwriting teams sift through multiple documents to manually source the data needed to assess and price the risk, assessing opportunities on a first in/first out basis. The impact of this manual process is staggering. According to Accenture, on average only 25% of an underwriter's day is spent on selling and broker engagement, while more than 50% is spent on core processing and repetitive tasks like data entry.<sup>5</sup>

AI and automation could increase speed and accuracy by completing the intake process before it reaches the human underwriter, freeing the underwriter to provide better, more hands-on service and focus on higher-value activities. Suddenly, the numbers Accenture reports can be flipped – creating higher odds of success and greater advantage over competitors still operating manually.

.

### 3. Spot trends, reduce risk, increase customer satisfaction

Consider many of the unlimited ways an insurance company could leverage the untapped potential of unstructured data.



## The risks

### 1. Regulatory compliance

Aptly named, unstructured data is by its nature unorganized. This creates a considerable challenge when it comes to complying with the requirements of complex privacy regulations, ranging from GDPR to HIPAA and state-level personally identifiable information or personal health information (PII/PHI) laws. And, as unstructured data continues to proliferate, so does the risk.

### 2. Cybersecurity

An enterprise's unstructured data could include sensitive information, such as intellectual property, employee's personal information, or other strategic documents. This makes unstructured data incredibly appealing for hackers, thieves or other bad actors. And, although enterprises have faced a continually rising onslaught of incidents over the past five years, the threat has grown even greater in the past eighteen months.

### 3. Customer experience

An insurance company's inability to effectively ingest, manage and leverage its data can have a cascading – and potentially catastrophic – impact across its business and customer experience. Consider the explosive impact of document inefficiencies: manual data extraction leads to slow and inefficient intake; which leads to the inability to quickly and effectively analyze data leads to more slowdowns, which leads to increases error rates and inaccuracies; which leads to friction in the customer experience; which, in turn, leads to lost business.

“

Only enterprises that implement effective semistructured and unstructured data analysis methods to their insight-building process will see significant competitive advantages.”

”

– Gartner

### 4. The war for talent

For employees who have been mentally or physically burned out by the pandemic, and for the many more who have reassessed their personal priorities amid a once-in-a-century health crisis, the prospect of taking or remaining in a job that does not fulfill them has taken its toll. Consider insurance data entry and data processing professionals who spend hours of their work lives keying and rekeying unstructured form data. Insurance companies that don't consider how they can augment the roles of these individuals risk losing them. And, they risk being unable to recruit against other more satisfying digital jobs in software development or project management.

### 5. The unknown

When it comes to unstructured data, enterprises don't know what they don't know. And that presents tremendous risk on several levels. Less obvious than compliance or security risks can be the uncalculated costs of growing process inefficiencies and lost productivity. Consider the thousands of work hours spent on manual data processing that could be accelerated or eliminated – and the value created, not to mention errors reduced – by empowering teams with unstructured data automation technologies.

At the same time, to remain competitive in their markets and attractive on The Street, enterprises need to act now. Or else, they'll be forced to face the music when digital disruptors steal share and outshine them thanks to their impeccable expense ratios.

**Identify:**

**Selecting the right use cases for unstructured data**



Unstructured data throughout the custom lifecycle present opportunities for insurance companies to drive out costs, reduce risk, and unlock new opportunities for revenue acceleration and customer delight. Consider these use cases.

## Enrollment

Getting new clients is a good thing, but for insurance companies it also creates a challenge: processing all the required unstructured documents. To date, it's been a largely manual process that, for large insurers, can easily involve 15 million documents per year.

## Appraisals

An unstructured data platform can process both written and image-based information for property and casualty-related appraisals to verify the assets being covered. Home insurance is a prime example, where photos of each room in a house, as well as exterior photos, can be matched to the written property description.

## Commercial underwriting

Often involving thousands of pages of documentation, major commercial underwriting processes can be dramatically improved by creating underwriting criteria attributes that can automatically be recognized and "scored" using an unstructured data platform, significantly reducing response times when submitting proposals.

## Claims processing

Leveraging unstructured data could be used to automatically classify and annotate a new claim, such that it can be effectively routed to the right SME for evaluation and processing. This results in faster turn-around times and improved accuracy for a processed claim, driving improved customer satisfaction and organizational efficiency.



## Regulatory compliance

Insurance is a highly regulated industry with dozens of state and federal regulatory bodies. Responding to regulatory inquiries in a timely manner represents a great expense for most insurance companies – and one that could benefit greatly from automation.



## Policy analysis

A common challenge in insurance is the need to be able to traverse very large collections of policies that often span several decades to understand how the language within the policies is affected by changes in regulatory policies. An unstructured data platform could understand specific clauses in policies, and score and classify them for any given use case.



## Broker intake

Intake is a gnarly, labor-intensive process that often wreaks havoc on underwriter productivity and impacts the ability of an organization to respond to brokers, agents and customers. As noted above, about half an underwriter's time is spent on this taxing task! Automating this process with an unstructured data solution could unlock productivity and competitive advantage by making the process exponentially faster and underwriters dramatically more responsive.



## Loss run analysis

One of the thorniest parts of the commercial insurance underwriting process is getting an accurate picture of the applicant's loss history, generally gleaned from loss run reports. But it can be a cumbersome process to collect all the reports and accurately extract data from them for input into the underwriting system – making it an excellent candidate for automation.

**Impact:**  
**Unlocking value from  
unstructured data**



Insurance companies have long struggled with their unstructured data. Though effective with structured data challenges, RPA vendors and point solutions have fallen down or fallen short with traditional approaches to automation. But now, the tide is turning thanks to breakthrough deep learning technologies.

At its simplest, deep learning is a type of machine learning that simulates the behavior of the human brain, allowing it to be trained and learn from very large data sets. It can adapt and recognize patterns in unstructured data in ways that RPA can't – enabling it to take unstructured documents and then restructure them for utilization.

At the forefront of this revolution is Indico Data and its pioneering Unstructured Data Platform. Through its innovative AI and ML software, the Indico Platform allows enterprises to ingest unstructured data at massive scale and add structure, enabling them to do what's been impossible with traditional automation and analytics tools: realize the unlimited potential of their unstructured data. With the Indico Platform, enterprise can.

## Automate

Automate the intake of unstructured documents, emails, CSVs, images, videos, audio and more.



## Analyze

Analyze unstructured data, extracting actionable business insights and intelligence.



## Apply

Apply this data, creating new application experiences to transform manual processes into automated advantages.



For the first time, Indico gives insurance companies a single solution that allows them to ingest and structure a diverse range of unstructured formats – text, CSVs, videos, audio files, PDFs, contracts, emails, and much more – and gain rich insights, as well as maximize the value of their existing software investments, including RPA, CRM, ERP, analytics, and more.

At a time when only 20% of AI-enabled initiatives make it to production, Indico's approach has delivered a 97% success rate in moving customers' unstructured data projects successfully into production. From there, the business impact of the Indico Unstructured Data Platform has been immediate and pronounced for customers – including 150-year-old insurance leader MetLife.

## Empowering citizen data scientists everywhere

What's more, the Indico Platform was built to automate processes without advanced data science expertise. The process through which companies use Indico to build data models is simple and highly effective. Business subject matter experts label the data points they deem most important to whatever process they're looking to automate. As they apply labels, the model is updated on the fly and will start to show predictions on subsequent datasets. Once you're comfortable with the predicted results, you're done building your model.

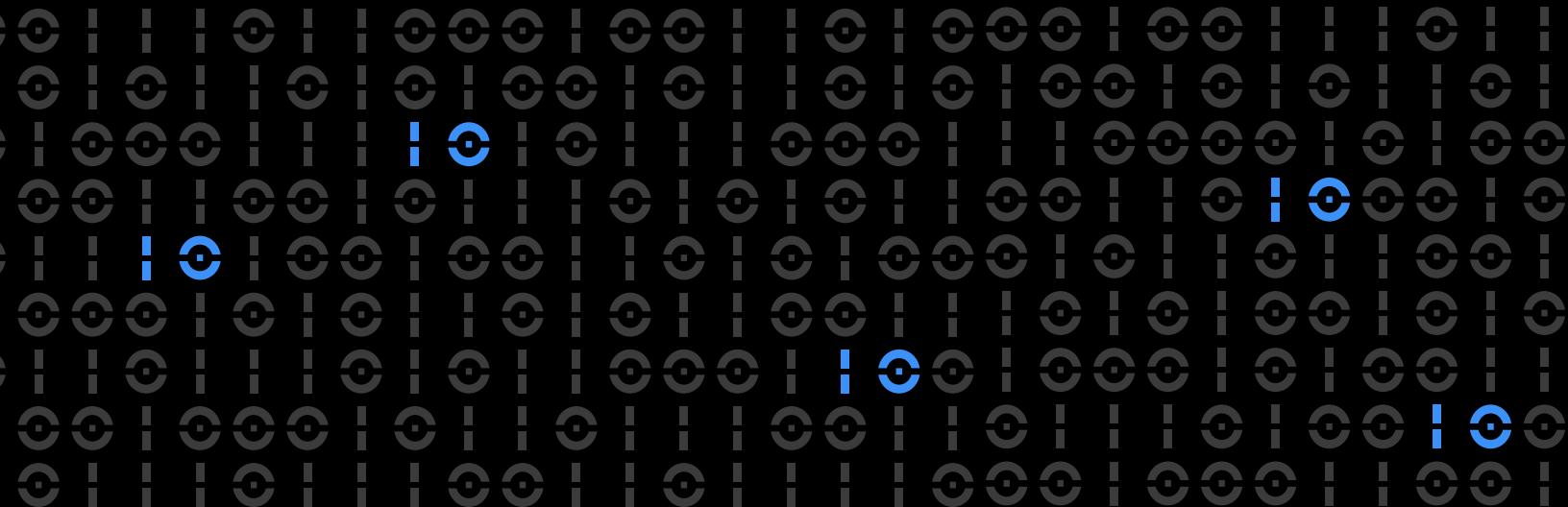
The beauty of this approach is that the people who understand the business problem and the desired results – those on the business side of the house – are the ones who train the model. With Indico, there's no need to try to explain to a data scientist what you're after and then hope you get the appropriate results. Citizen data scientists can create models themselves. Everything is in plain English and users can have fully working models in a matter of hours or days, not weeks or months.

At a time when only 20% of AI-enabled initiatives make it to production, Indico's approach has delivered a 97% success rate in moving customers' unstructured data projects successfully into production. From there, the business impact of the Indico Unstructured Data Platform has been immediate and pronounced for customers – including 150-year-old insurance leader MetLife.





**Bringing \$100m in savings to life**



As a leading global insurance provider for more than a century and a half, MetLife has no shortage of unstructured documents to deal with. The company had tested the waters for process automation with Robotic Process Automation (RPA), but found that these solutions were ill equipped to handle unstructured content for use cases ranging from automated insurance contract analysis to customer onboarding. At the same time, MetLife's innovation team was tasked with supporting line of business with new technologies to solve emerging challenges.

Sean Nicolello, VP of Intelligent Automation at MetLife, recalls: "The innovation team came to us saying they were seeing a common problem that was being articulated in different ways. One, for example, was examining contingencies in contracts, but they would have to go through every word to figure them out. Or, two, they would have all these invoices and have to manually review them, because they're [formatted] differently every time. Or three, they have an email inbox with a small army of people that read hundreds of emails a day, just so they can move the email to the right team to take action."

At the heart of it, MetLife's challenge was finding a solution that could comprehensively solve digitization and analysis across its structured, semi-structured and unstructured content.

**"** We have identified about \$100M in potential savings over the next five years from automating processing that rely on unstructured data. **"**

– Sean Nicolello, VP of Intelligent Automation, MetLife

## How MetLife maximizes its unstructured data

MetLife selected the Indico Unstructured Data Platform to address its proliferating unstructured data problems – and they began to realize rapid impact, as well as unparalleled accuracy.

"I was surprised by how little data was needed to train a model to get very high accuracy," comments Nicolello. "I was expecting a machine would need thousands or high hundreds of sample documents, but to see results from a data set of 50 to 100 with Indico is amazing. At the same time, we saw accuracy scores of 80 out of 100, when other vendors [we had tried] scored only 5 of 100."

With the Indico Platform, MetLife addressed a number of its most pressing use cases:



### Contract analytics

MetLife creates millions of contracts for its individual and group insurance customers, as well as hundreds of thousands of contracts for its variety of investment clients. With Indico, now they can search and review these contracts and know what is inside them without having to manually review them.



### Invoice processing

With MetLife's invoices, there are dozens of insurance-specific forms that vary from customer to customer. Now, it can process these different data elements automatically and better customize its customer experience.



### Customer onboarding

The onboarding process for insurance can be onerous and painful, requiring the accumulation of dozens of documents with hundreds of pages. MetLife has enhanced its onboarding process to gather these documents more effectively, find fraud, categorize risks, and more.



### Regulatory compliance

MetLife leverages Indico's AI capabilities to quickly, accurately understand more than 1 million documents used to respond to regulatory inquiries.

## Unstructured data, unlimited results

With Indico, MetLife dramatically accelerated its ability to respond to its customers and regulators:

**3X**

increase in SME capacity for regulatory response

**40%**

savings in legal expenses for contract review and abstraction (projected)

**60%**

reduction in time to get to IGO on structured settlements

"With Indico, we saw two big things," says Nicolello. "First is the power of the platform in terms of accuracy of output and speed of output. Second, working with Indico from a customer perspective has been the best vendor-to-buyer experience I've had in my whole career."

MetLife's innovation team and automation center of excellence continue to scale its solutions with the Indico Platform, addressing a broad range of challenges and driving tremendous costs out of the business.

Nicolello adds, "The biggest, broadest and highest-value opportunity we see right now, by far, is around extracting value from unstructured documents. We have found about \$100M in value through hours saved that we can unlock in the next 5 years for our businesses by using the Indico Platform on unstructured data."



## Ready to unlock the value of your unstructured data?

With the Indico Unstructured Data platform, big data has never been more unlimited or more powerful. To learn more about how you can put all your data to use, request a demo and no-cost consultation at [IndicoData.ai](http://IndicoData.ai)

## About Indico Data

Indico Data transforms unstructured data into actionable insights. With the Indico Unstructured Data Platform™, enterprises of all sizes can automate, analyze, and apply unstructured data -- documents, emails, images, videos and more -- to a wide range of enterprise workflows. This enables them to gain rich insight and maximize the value of their existing software investments, including RPA, CRM, ERP, BI, by enabling these systems to work with unstructured data.

For more information, [visit IndicoData.ai](https://www.indicodata.ai)



#### Sources

1. EY Global Customer Study 2014 Report and EY Sweeney Reports
2. IDC research and estimates, 2017-18
3. IDC, "Connected Intelligence In Insurance"
4. Celent, "COVID-19: Impact on P&C Insurers' IT Priorities, Budgets, and Plans (North America edition)," April 2020: <https://www.celent.com/insights/879685343>
5. Silicon Valley Insurance Accelerator, <https://sviaccelerator.com/automating-commercial-lines-submission-intake-and-underwriting-with-ai/>

The information in this eBook has been prepared by Indico Data and is for informational and marketing purposes only. It does not constitute legal, financial, business or investment advice of any kind and is not a substitute for qualified professional advice. You should not act or refrain from acting on the basis of any content included in this eBook without seeking the appropriate professional advice. The contents of this eBook may not reflect current developments or address your specific situation.

Indico disclaims all liability for actions you take or fail to take based on any content in this eBook. Although the information in this eBook has been gathered from sources believed to be reliable, no representation is made as to its accuracy. This eBook is not an endorsement or recommendation of any third-party products or services of any kind.

Copyright © 2021 Indico Data Solutions, INC.