Why unstructured data is critical to insurer success

Automating to drive greater process efficiencies and ROI

RICOH

Today's insurers are experiencing exponential growth in the volume of data, largely unstructured, that they collect and manage — from front office customer engagement to back office compliance and risk management. This unstructured, and initially unusable, data is critical to functions across the entire insurance enterprise: sales and marketing, product development, and customer service, among others. But raw data is not easily actionable, and putting it to work for your organization requires an informed, strategic, and measured approach.

> "Enterprise data is 80% unstructured, and that number will continue to grow. The rate of unstructured data's growth is climbing rapidly at a rate of 55-65% each year.[1]"

The data evolution

Today's data arrives at your organization from a wide variety of sources and forms. It was not long ago that data sources were far more limited, and far less dynamic, with data arriving in predictable, structured formats. This "predictable" data is numbers and values based, such as the details relating to customer demographics and financial transactions, i.e., names, dates, addresses, credit card numbers, and more. As a result, the traditional data management system is limited to numbers and values-based data.

By contrast, unstructured data — or "big data" — is the data associated with a whole new world of data sources that includes social media, image and video files, document scans, webpages, blog posts, call center recordings, emails, analytics, metadata, and more. This data lacks a defined organization or pre-set pattern, can range in size from a few bytes to very large documents and represents, by far, the lion's share of the data that insurers process daily. It's estimated, in fact, that 80-90% of data generated daily is unstructured.[1]

[1] CIO Insight. How Businesses Use Unstructured Data for Business Intelligence. February 15, 2023.

Legacy systems can't handle unstructured data

Unsynchronized, redundant data is more common than not, and the complexity and volume of today's unstructured data can easily overwhelm the decades-old, legacy data management platforms that were built for structured or semi-structured data.

> "Traditional data management systems (that is, data warehouses and data lakes) aren't able to support all of the workload demands for today's data volume, velocity, and variety of formats."[2]

Your legacy systems rely upon traditional, manual methods of data organization and analysis. These methods cannot begin to manage and utilize the sheer volume of data types that are inherently complex; often reside in silos; and are difficult to search, analyze, and query.

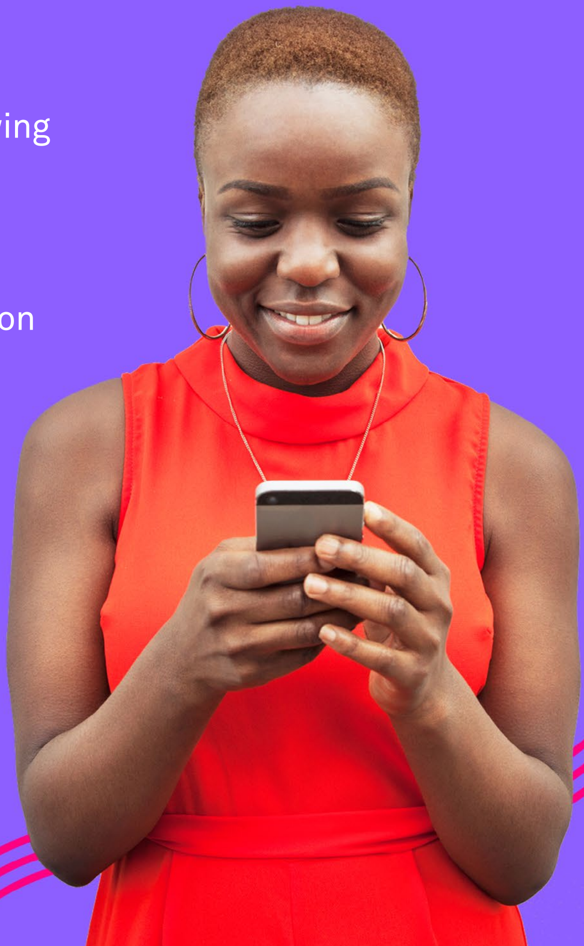
[2]Snowflake. Best practices for managing unstructured data. 2021.

Automation: Bringing structure to unstructured data

Transforming this vast volume of complex data into useful, accessible, and actionable information can revolutionize an insurer's data-driven systems and processes — enhancing risk management, improving customer experience, identifying market trends, and driving innovation through real-time, better-informed decision making.
But you need to take the right approach.

To manage data effectively, extract value from it, and realize the vast potential it offers, insurers must evolve to a modern data management platform that will eliminate data silos; provide fast and flexible data processing; and ensure easy, secure access. Only then, putting into play some of the below automations, can you extract valuable insights, improve operational efficiency, and grow your share of wallet.

- **Natural Language Processing (NLP)** models can analyze and interpret text, allowing for the extraction of key entities, sentiment analysis, and topic modeling.
- **Optical Character Recognition (OCR)** systems are employed to convert scanned documents and images into searchable and editable text, enabling easy extraction of data from various sources.
- **Machine Learning (ML)** algorithms can be trained to categorize unstructured data based on predefined criteria, enabling rapid sorting and organization. This significantly reduces the time and effort required for manual classification, enabling insurers to unlock valuable insights and make data-driven decisions more swiftly, while minimizing human error.



Let's look at the positive impact these automations can have on specific insurance operations.

Automate for improved customer experience

Cleaner claims = improved customer experience

For insurers, claims management offers the greatest opportunity for meaningful digital transformation, automation, and an enhanced customer experience. Considering that typical straight-through processing rates sit at less than 10%[3], it's easy to see how digitization and automation technologies can dramatically boost data accuracy and help set up "clean claims." And cleaner claim processing ultimately drives what your customers care about most: fast and easy claim experiences that drive loyalty over time.

A recent survey of 1,900 Americans with home/auto insurance, conducted by The Harris Poll and commissioned by Ricoh, revealed that:

- Nearly 1 in 3 Americans who filed a home or auto insurance claim within the last 5 years (31%) rate their claim filing experience as fair/poor/terrible.

- Younger adults ages 18-44 who filed a home/auto insurance claim within the last 5 years were more likely than those ages 55+ to describe the experience as terrible, poor, or fair (34% vs. 21%).

- The top reason those who filed a home/auto insurance claim in the past 5 years and describe their most recent claim experience as terrible, poor, or fair is that the claim filing process was too long (38%).

Harnessing unstructured data efficiently, and transforming that data into actionable insights, allows insurers to gain a more comprehensive understanding of their customers, bringing greater efficiency and accuracy to claims management. With its ability to capture and analyze customer interactions across various channels — such as call logs, emails, and social media — automation can assist in gauging customer satisfaction levels and pain points, as well as responding more promptly to questions or concerns. ML algorithms can, for example, sift through emails, reviews, and other customer interactions to understand the sentiments behind them, thereby helping to predict customer behavior, enhance their experience, drive loyalty, and improve retention rates.

[3]Insurance thought leadership. Straight-through processing. March 17, 2021.

Automate for cost reduction

Manual data processing is not only time-consuming, but also prone to human error. Automation eliminates the need for labor-intensive, repetitive tasks, freeing up valuable resources and enabling staff to focus on more strategic initiatives. All while adding greater accuracy to "human-in-the-loop" processes by, for instance, automatically populating claims data across your day-to-day workflows and operations. The efficiency gained through automation leads to reduced costs, increased productivity, and improved operational performance.

> "Data gathering and optimization can help financial services streamline and optimize their internal processes using technologies such as artificial intelligence and machine learning. As a result, financial services companies can cut operating costs and boost overall performance. They can use their customers' data to reduce operational risks and cut business processing costs.[4]"

[4] Forbes. How data-driven banking can transform the financial landscape. June 21, 2022.

Automate for enhanced compliance

Claims and costs are driven by regulations and compliance, and there are few industries as heavily regulated as insurance companies. Meanwhile, the gap between the surveillance capabilities of regulators and the insurance company teams responsible for compliance is widening.

Utilizing AI-driven compliance solutions, insurers can ratchet up their workflows to effectively navigate an increasingly complex and evolving compliance landscape. Automation facilitates compliance by efficiently processing and analyzing unstructured data that can assist in identifying potential breaches or inconsistencies. By automating regulatory reporting, insurers can reduce the risk of errors, streamline compliance processes, and ensure adherence to legal requirements.

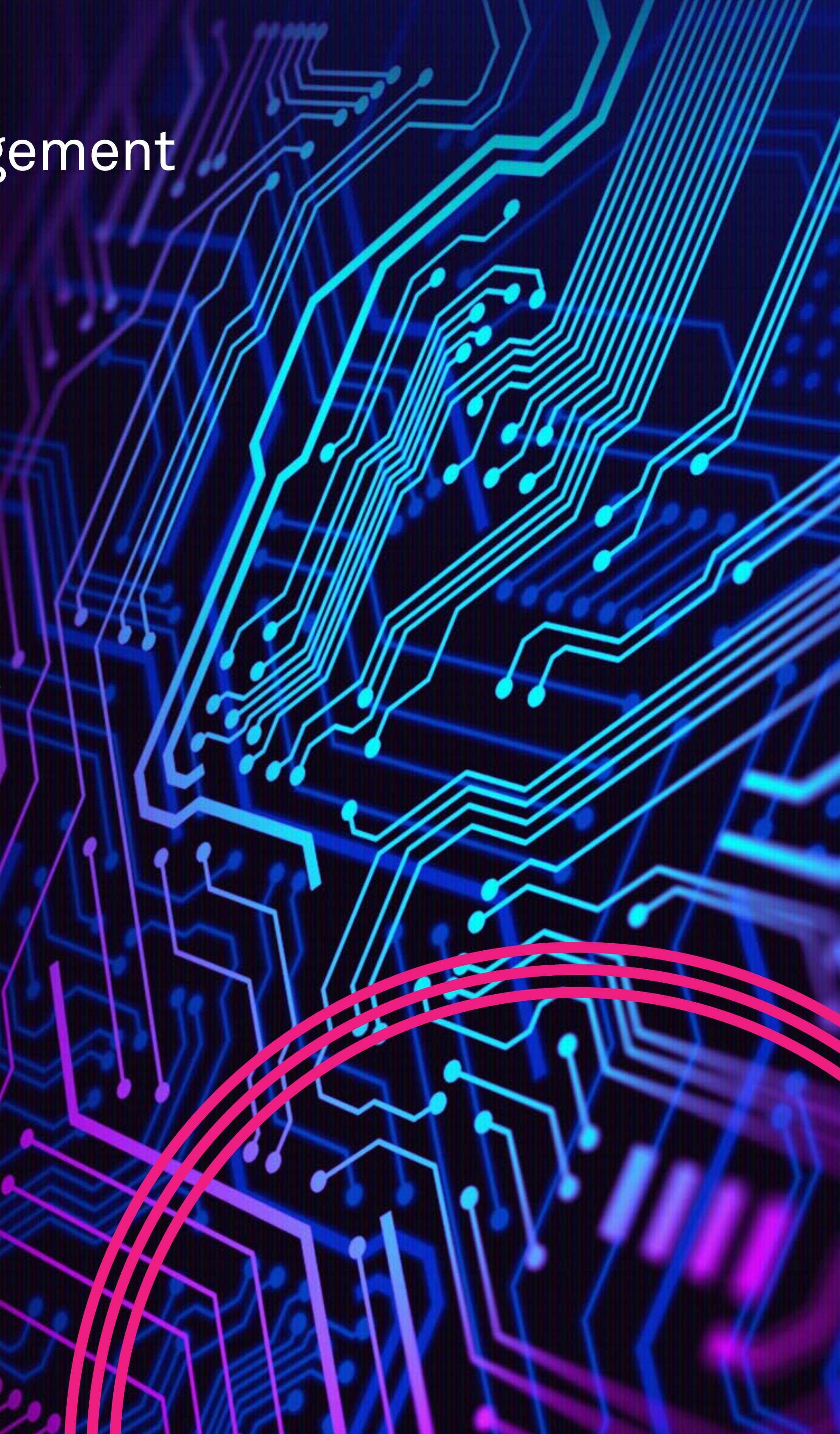
AI solutions can drive workflows in the areas of auditability and transparency. These workflows enhance your compliance team's ability to protect and validate data and with that, mitigate the risks associated with regulations set forth, for example, by the California Consumer Privacy Act (CCPA), its amended California Privacy Rights Act (CPRA), the Gramm Leach Bliley Act (GLBA), and the Health Insurance Portability and Accountability Act (HIPAA), to name just a few.

Automate for enhanced risk management

Ironically, cyber threats present both challenges and opportunities for insurers. On the one hand, insurers are prime candidates for attack and significant damage can be done in the form of fines, customer attrition, and irreparable reputational damage. On the other hand, cybersecurity is a growing business for insurance companies. The revenues for insurance organizations are set to grow from $6.4 billion in 2020 to $10.6 billion in 2025.[5]

This is yet another reason why cybercriminals view insurance companies as high value targets. A cyberattack on an insurance company, and access to cyber liability insurance data, can provide hackers with just the kind of information and insights they need to launch an attack against one — or more — of that insurer's corporate clients. And this type of stolen information is extremely valuable.

Unstructured data often contains valuable indicators of potential risks, such as fraud or regulatory non-compliance. Automation can analyze unstructured data in real-time, flagging suspicious patterns or anomalies that may indicate fraudulent activities. By leveraging automation to identify and mitigate risks, insurers can protect themselves and their customers from financial losses and reputational damage.



[5] Global Data. Cybersecurity in Insurance. June 28, 2022.

Choosing the right automation solution

In the era of big data, unstructured data can either be an overwhelming burden or a goldmine of opportunities for insurers. Together, AI-driven solutions and unstructured data are providing that goldmine of opportunities, transforming the way insurers do business by:

- Enhancing risk management
- Speeding claims
- Raising NPS and CSAT scores
- Improving customer experience
- Identifying market trends
- Driving innovation through real-time, better-informed decision making

After all, the future of insurance lies in embracing automation and harnessing the power of data to unlock new avenues of growth and success. And, that future is now.

So, what steps can you take to begin finding and implementing the right automation solution?

Remember — digital transformation is organizational change

Why are so many decision makers unsatisfied with their progress toward digital transformation? The approach CEOs often take to buying technology does not fully recognize that the transition to digital is, first and foremost, organizational change. As a change leader spearheading a technology purchase, it's critical that you invest time early in the process to ensure that everyone — from C-suite to front-line — is not just on board, but fully engaged.

> "When we ask CEOs how their transition to digital is progressing, they often respond with a list of initiatives under way across the business. But when we ask them to quantify the impact on the bottom line, there's usually a long silence.[6]"

[6] McKinsey & Co. How do you measure success in digital? Five metrics for CEOs. January 29, 2021.

Identify and engage all stakeholders

A common misperception in building consensus is that stakeholders are users. They're not. A stakeholder is any individual who is impacted by a decision. When identifying stakeholders, cast a wide net, since their adoption of any new processes is critical to its success.

Stakeholders who are not fully involved often fail to understand the importance of buying into the change or what their part should be in making the change successful. They simply understand that a change is happening "to them," and not "with them." Instead, they need to clearly understand the purpose of the investment, why it's necessary, how it aligns with your strategic business goals and how it achieves an enterprise-wide, net-positive gain. Doing so saves time and money — and eliminates friction down the road.

Agree upon measures of success

Arbitrary definitions of success can and will hinder progress. What is considered a win? Automating a process by 50% could, for instance, be deemed a success by some, while others could be aiming for 80%. ROI, key to measuring the value of any tech implementation, is nearly impossible to calculate when stakeholders have varying definitions of success.

Avoid SOS (Shiny Object Syndrome)

Breakthroughs in technology are occurring on an almost daily basis, and it’s human nature to wonder if one should, perhaps, shift one’s focus from yesterday’s solution to today’s. SOS most often occurs when leaders are managing (and distracted by) multiple initiatives, underestimate the complexities of executing the transformation, or fail to fully involve all stakeholders.

Chasing bright shiny objects can lead to continual comparison and fear of missing out. Avoid it by setting clear, measurable, agreed-upon, and achievable goals ... right from the start.

Make the best use of user stories

Business leaders have the opportunity, and responsibility, to provide their perspective on business needs at the beginning of the technology procurement process. Here, user stories can be quite effective as they 1) guide the buying team along their journey toward vendor partnership, and 2) articulate in a simple way the "who, what, and why" of the desired outcome.

Transform user stories into use cases

Once captured, distill your case studies into use cases that include all stakeholder parameters, goals, and benefits. Prioritize them, and eliminate any that are incompatible with existing technologies or lack clarity in measurement. Then, identify those use cases that are aligned to your current strategic goals (1-3-year roadmap) versus those that reflect longer-term investments (3-5-year roadmap). Now, you're ready to take them to vendors.

Much can be learned from vendor collaboration, such as insights gained from past engagements. Ideation workshops, for example, can be useful — not only validating the vendor's expertise, but also helping to identify any unrealistic expectations or false assumptions.

What's next?

Once you unleash the power of your information, there's no going back. With all the improved efficiency and insights you'll gain from optimizing your information and unlocking its full value, you'll wonder why you didn't start sooner.

At Ricoh, we are unlocking the power of our customers' information, processes, and abilities so they can respond to change and provide the best possible experiences for their employees and customers. By unleashing the full power of trapped information, organizations can unlock the full potential of their people, respond to change with actionable insights, and create more meaningful human experiences.

For further information, please visit www.ricoh-usa.com

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