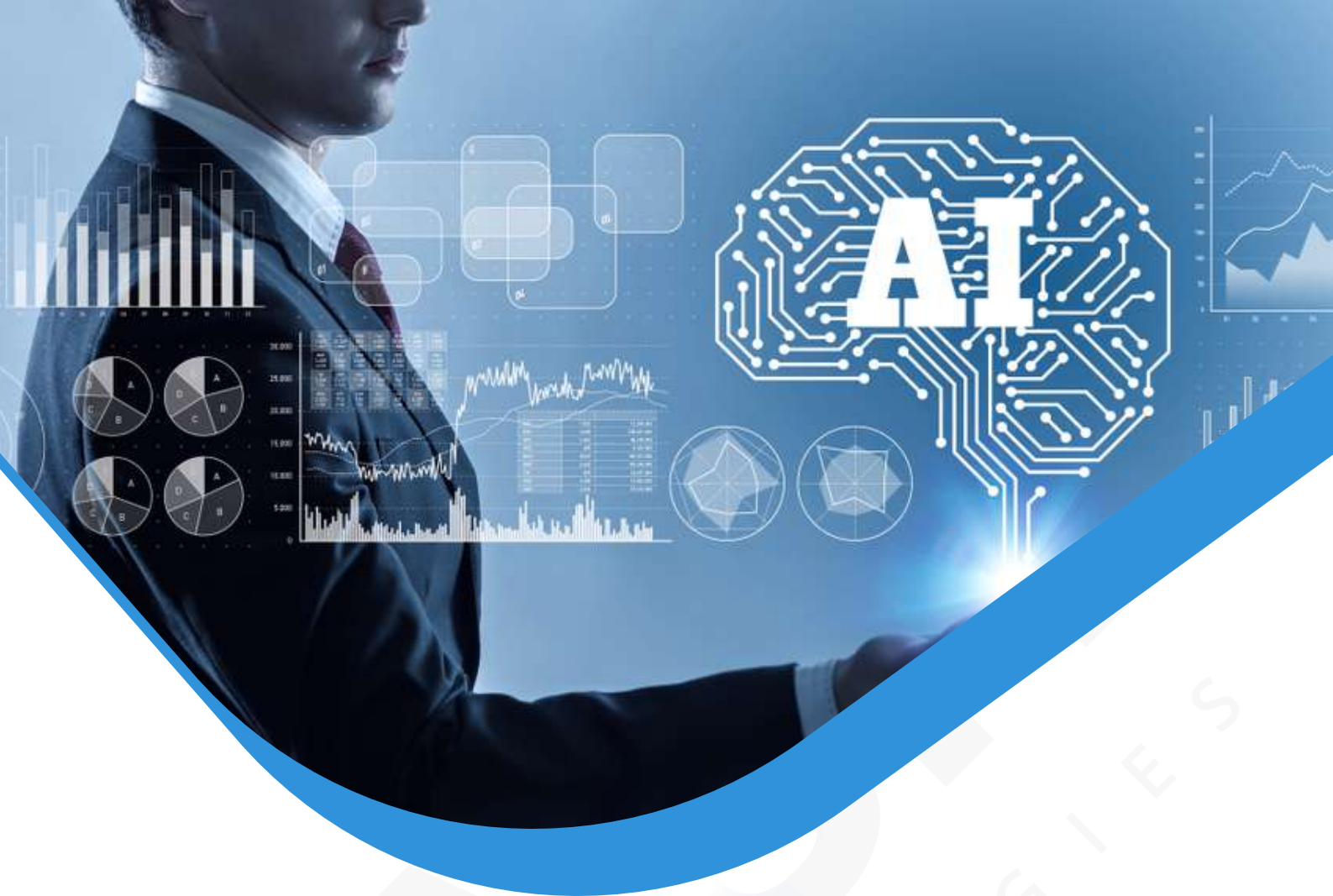




# AI-Integration for Insurance Companies: A \$100.34 Billion Annual Savings Opportunity

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New and emerging technology has the power to completely change the insurance industry as it exists today. By harnessing the power of artificial intelligence (AI) and machine learning, insurance companies will be able to drastically cut costs, improve operational efficiency, and increase customer satisfaction. This will be made possible through faster and more consistent decisions from cognitive analytics, language processing, and visualizations. Unlike static analytical models, AI will continually learn, improve, and adjust to emerging data trends in real time.

As risk for the insurance industry grows as a result of climate change and cyber security threats, AI capabilities will empower insurance companies to mitigate these profound new risks. Any insurance company that fails to leverage AI effectively will be unable to compete in an increasingly competitive and rapidly changing market.

The monetary cost-savings are in the hundreds of billions for the insurance market. Annual AI savings at the industry level are estimated to be:

- **\$100.34 billion in industry savings as a whole:**
  - \$40 billion in fraud reduction
  - \$5.8 billion in claims processing savings
  - \$28.69 billion in marketing and sales savings
  - \$25.85 billion in underwriting savings

## **Insurance companies are recognizing the benefits about AI and investing accordingly:**

- 79% of insurance companies say automation significantly reduces costs
- 91% say automation significantly or somewhat reduces cycle time
- 70% say automation significantly increases efficiency

To survive and prosper in the future, insurance companies will need to embrace a partnership between employees and AI. This will entail deploying intelligent solutions to augment the creativity and decision-making of employees while also freeing up employees to focus on more high-value activities.

## **This paper will explore four areas in which machine learning is revolutionizing the insurance industry:**

1. Claims
2. Fraud Reduction
3. Underwriting
4. Sales and Marketing

# **Claims Processing: A \$5.8 Billion Annual Savings Opportunity**

**AI can save the insurance industry a total of \$5.8 billion in annual savings. These savings come from decreases in the number of claims staff needed as well as more efficient claims processing. Overall, this leads to less hourly salary expenses for claims representatives.**

An insurance agent typically guides a client through the claims process during a 1-on-1 meeting. This meeting can either be conducted over the phone or in-person. During the meeting, the agent answers questions, directs the client to helpful resources, and checks for anomalies that might be signs of fraud.

Today, insurance companies are able to automate the entire claims process using an AI chatbot or virtual assistant. Chatbot applications can directly interact with the client to gather all relevant data and answer questions as they arise. Once these AI tools have serviced the client and gathered all the relevant data, the claims data can be placed in a processing queue. In this queue, another AI bot processes the data using machine learning. The AI then creates a readable file from the data that includes such information as:



- Name
- Address
- Date
- Policy Number
- Telephone Number
- Email Address
- Date and Time of Incident

**By automating the entire intake process for claims, insurance companies can:**

- Respond to a far greater volume of requests
- Lower the time it takes for claims to be processed
- Ultimately pay out claims much faster than they would otherwise

**Companies that have already implemented AI functions report the following benefits:**

- **3rd party property damage**
  - Reduced cycle times by two weeks
  - 47% decrease in expenses
- **Up to 50% reduction in cost per claim**

As automation and implementation have improved, more and more companies have been integrating AI into their claims processing. For those that have not invested in AI, the choice they face is becoming increasingly clear—adapt and integrate AI or lose their competitive edge.

## Customer Satisfaction

Automation certainly saves time and money, but some executives may worry that automating the client-facing process risks alienating or angering clients. While it may be hard to believe, automating the claims process actually improves overall customer satisfaction. The number one factor that predicts client satisfaction is the amount of empathy the client feels from the insurance agency.

In the past, AI chatbots were not robust enough to provide customers with a sense of empathy. However, improvements in AI technology mean that chatbots are now capable of detecting the client's tone and can respond accordingly to ensure excellent customer service. For instance, a chatbot can:

- Scan for negative sentiments and respond appropriately
- Mark a claim as high priority and transfer to a claims agent
- During high traffic times, immediately send a chat apologizing for the delay and promise a 30-minute response from a customer service representative

Most customers judge the speed at which their claim resolved as the most important factor in customer service. When asked, 86% of customers reported being very satisfied if claims processing was done within 24 hours.

The risks of customer alienation are quite low compared to the enormous upsides that faster claims processing can provide. This is especially true as more Gen X and Millennials age into the insurance market. 62% of Gen X and 65% of Millennials say technology is important to the claims process. Due to these changes in demographics, the majority of customers are excited about using emerging technology services. 96% of insurance customers appreciate when companies offer self-service options and 91% enjoy using new apps and technologies. The emergence of new technologies is not something to fear, but rather something to embrace.



## Fraud Reduction: A \$40 Billion Annual Savings Opportunity

Insurance fraud is extremely costly for insurance companies. By some estimates, the insurance industry pays out \$80 billion in fraudulent claims annually, which represents 5-10% of all claims expenses. AI can improve fraud detection by analyzing claims and computing a fraud score that determines the likelihood that a claim is fraudulent.

The score is computed by comparing a client's claim to those of his or her peer group. AI scans the claim for fraud indicators then in seconds, sifts through troves of client data to determine probability of authenticity. If the fraud score is low, the claim will be approved and money will be paid out to the client. However, if the score is medium or high, the algorithm will triage the claims and send them to an investigation team for further examination. By integrating AI in the fraud scanning process, as a conservative estimate, insurance companies as a whole could save around \$40 billion dollars annually.



## Underwriting: A \$25.85 Billion Annual Savings Opportunity

If all insurance companies switched to AI processes for underwriting, they would save a total of \$25.85 billion annually. These savings are derived from AI's increased accuracy in quantifying risk compared to human underwriters.

Underwriting is an essential part of any insurance company, as it largely determines a company's profitability. Here too, AI has tremendous potential to lower costs and raise efficiency. An underwriter's job involves creating a complete picture of a client's risk profile and pricing premiums accordingly. On some platforms, 90% of applications are now processed within minutes, and fewer than 5% of applications require a human touch. AI enables this process by sifting through thousands of third-party data elements to derive a client risk score.

This score can be monitored and changed in real time as client data changes. For instance, GPS tracking systems in automobiles provide information about whether a car is moving, how fast it is going, and where the car is driving. If a car is parked in the garage, there is a very low probability of an accident, and the algorithm can incorporate this data to lower the risk score accordingly. If, however, a car is driving above the speed limit on a busy freeway, the likelihood of an accident is much higher, and the risk score can be increased accordingly. All this can be done in real time,

which enables underwriters to write premiums that reflect the appropriate risk at a given time. Not only does this reduce losses, but it can incentivize safer behavior from clients. If clients know their premiums will increase when they drive recklessly, they are more likely to stay safe behind the wheel. Among companies that have already implemented AI into their underwriting, 77% classify it as the highest value for risk analysis, and the esteemed Lloyds of London predicts that introducing automation will improve its expense ratio by 15%.

An added benefit of introducing AI for underwriting is that it can free up underwriters to do more essential tasks. For instance, less than a quarter of an underwriter's day is spent on selling or brokering engagements. This is largely because their time is consumed by research, data collection and data input. AI can free underwriters from the more mundane aspects of their job and enable them to focus more on selling and pricing premiums. In fact, insurance companies that streamlined their underwriting process with technology saw a 14% average increase in sales volumes within the first two years.

## Customer Satisfaction

Not only does AI-powered underwriting improve the insurance company's bottom line, it also provides for a better customer experience. When clients or agents submit the data used to compile risk profiles, an estimated 15-25% of the necessary data is missing or incorrect. Instead of reaching out to clients or agents again to fill in the gaps, AI can automatically aggregate data by analyzing client information from third party data vendors. Algorithms therefore seamlessly supplement and verify client information which would otherwise need to be manually re-entered. Nor is the client pestered with the same request for information multiple times, meaning they will be happier as a result. In some instances, AI advances can shorten client application forms altogether. By some estimates it is possible to reduce the question sets by 70% and to entirely avoid asking invasive personal questions that may put the client off.

Finally, AI improves customer loyalty. In addition to informing salespeople about the opportune time to make a sale, AI can monitor existing customers and identify the right time to check in with them. While customers do not want to be pestered by their insurance company, when surveyed, 74% of customers said that they would like to hear from their carrier at the time of renewal. In fact, 47% of policyholders who switched carriers cited the carrier's failure to reach out as a factor in their decision to leave.

At this point, the function of AI is to enhance salespeople's capabilities to better serve customers, rather than to replace them altogether. Far from threatening their jobs, AI allows skilled salespeople to do what they excel at—building relationships and developing value with quality leads.



**The benefits of incorporating AI into underwriting are numerous. AI-powered underwriting:**

- Improves risk assessment by accessing troves of data
- Automates tasks and decisions to help speed up the process
- Allows underwriters to actively work with customers to reduce losses
- Frees up both underwriters and customers from pouring over mundane forms
- Enables underwriters to spend more time on their core processes

## **Sales and Marketing: A \$28.69 Billion Annual Savings Opportunity**

**The total industry savings from leveraging AI for sales and marketing in insurance could be up to \$28.69 billion annually. These savings are derived from automation of lead conversion, decreasing the need for as many sales representatives.**

AI can even offer tremendous benefit in what might be thought of as the most human element of insurance: sales and marketing. While salespeople will continue to remain essential in this process, AI can alleviate the more mundane aspects of their jobs, like data collection and lead generation.

Around one third of salespeople report spending at least an hour a day on data entry or other manual tasks. These tasks can be entirely eliminated for sales teams by using AI. To do so, AI crawls the internet and incorporates personal data to identify leads that are likely to be receptive. For example, identifying and acting on certain financial triggers, like searching for an auto loan, can lead to a 15% boost in the sales conversion rate. By identifying and then prioritizing those individuals who have searched for auto loans, insurance sales teams can ensure they are prioritizing their time and energy efficiently. Just as with underwriting, AI creates a score for possible leads that updates in real time. If a lead repeatedly engages in behavior that suggests they are about to buy a car, AI can alert salespeople to call when leads are most likely to purchase a plan.

Overall, AI will scan the internet for individuals whose actions indicate that they will have a higher conversion rate. These individuals will be prioritized for sales and marketing. AI will also search for individuals whose actions indicate that they are less likely to be converted. These individuals would then be deprioritized compared to other prospects.

AI's benefits extend to sales and marketing phone conversations. AI tools listen in on client calls and record important information, freeing the salesperson from data entry. These tools also calculate the best-predicted price for each individual prospect, to increase the likelihood of conversion while also increasing the company's profit margin. In sum, AI allows salespeople to tailor their approach with such speed and accuracy as never before seen in the industry.

## Conclusion

AI is already in wide use for broker management, risk assessment, predictive analytics, and portfolio management. However, adoption is unevenly distributed. Commercial insurance has been slow to implement this emerging technology, and instead continues to rely on a strong underwriting workforce. This however, is unsustainable. Underwriters still engage in very inefficient and labor intensive processes.

In a world that is increasingly confronted with risk, manual entry across disparate systems will no longer suffice. Beyond just underwriting, there are a plethora of fraudulent claims to identify. Big data platforms offer unprecedented insights into consumer behavior.

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To get a handle on these new developments, forward thinking insurance companies must deviate from legacy practices and embrace AI. Customers and insurance companies will both win as they are able to provide better service at a fraction of the cost in both time and working hours.

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