# Artificial Intelligence (AI) Risk Management

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# What is Artificial Intelligence and Data-Driven Risk Management?

Artificial Intelligence influences individuals and businesses every day, in ways that often go unnoticed. Businesses can use AI or machine learning for tasks to make work more efficient. Some more well-known types of AI are natural language processing and image recognition. AI is also important in risk management. Data-driven risk management is using data to make decisions about risks. For example, if previous data shows that a decision had negative effects, it is probably a decision that business wants to avoid.

Although AI has been <u>around since the 1950s</u>, the past decade has seen more significant changes. This is especially true of AI and how it relates to risk management. This has been a gradual progress, but one that changes how businesses operate. By 2024 the compact annual growth rate, is <u>expected to be 18.4%</u>, with revenues being around \$37.9 billion.

#### What is AI Used For?

#### Small Tasks

AI can simplify smaller, monotonous tasks through a process called <u>robotic process operation</u>, or <u>RPA</u>. RPA can help with tasks such as moving data into records systems. RPA can also replace ATM cards and take over the task of communicating with customers and updating critical records. RPA can extract important information from more complex documents, which helps with understanding difficult language in legal forms or contracts.

# Larger Tasks

Larger tasks that are more difficult for humans to understand become simplified with the use of AI. Understanding algorithms is one of the more complex uses. AI can be used to target individuals for digital ads through these algorithms. Most people have probably seen an ad pop up in their e-mail or Facebook page and thought, "How did they know I was looking for that?" Digital ads can target individuals that are likely to be interested in a product or make a purchase. Other complex uses are uncovering credit fraud or looking at quality control issues in manufactured goods. Algorithms use <a href="neural networks">neural networks</a>, also known as deep learning. These networks are based on patterns and work a little like the human brain. Larger processes such as these are called <a href="Cognitive Insight">Cognitive Insight</a>.

Whether businesses are using machine learning for large or small tasks, these are a few important ways they can use this technology to make decisions that are based on risk. These uses are also

focused on information that businesses can gain from AI, and ways that businesses and individuals can use this critical data.

# **Integrated Strategies**

Businesses rely on technology to run successfully. With more technology comes more risk, which is why it's important to <u>integrate risk management strategies</u> into business. There are ways that leaders can integrate risk management into their company culture. One way to do this is by making sure all employees understand the risks and have a solid background in finding ways to lower risks. Businesses should think about their goals and how risk management can play a role. Risk management should become a normal part of business discussions. Employees involved should be up to date on this data as well. <u>Professional development</u>, through organizations such as RIMS, is also beneficial. This organization alone educates over 10,000 professionals.

#### The Role of AI in Integrated Strategies

It's important for people to be aware of integrated strategies, but AI will play a role in that integration. AI is how humans will get the information they need to put together data and reports on risk management. AI can help with gathering information on risks and finding ways to lower risks.

# **Increased Complexity**

There have been several advances in risk management over the last few years. These advances provide more <u>support to businesses</u>. AI allows businesses to explore different ways to address risk management.

### New Growth in Risk Management

<u>Ventivtech</u> provides important tools for companies. There are tools that help with incident management, where employees can report incidents that affect their risk management procedures. There are processes that automatically renew insurance or build safety protocols, with recommendations for businesses. There are also calculators that help with various risk management costs businesses might face.

Analytics and data are other critical parts of risk management. AI has technologies that help businesses with these types of data, which can be quite complex. <u>Ventivtech</u> can generate standard, enterprise, and compliance reports. Businesses can also look at <u>loss triangles</u>, which show losses over a period of time.

### Bias

Whenever there are humans involved, bias is bound to be an issue. It will be important to take this bias into consideration and make decisions accordingly.

#### The Human Factor

According to <u>Harvard Business Review</u>, bias in risk management and the use of artificial intelligence is important to address because it can have a negative impact on the use of AI. Humans have a hand in creating AI, and those biases they might already have can become more apparent to the users of AI. In the past, algorithms in the criminal justice system discovered racial bias. Hiring algorithms can be biased as well, which was the case with Amazon when there was a focus on words that were more commonly used by one group of people.

### Effect of Bias on Risk Management

Data businesses use in risk management is ideally based on facts. If those facts are biased, the data may not be accurate. Companies can use AI in decisions related to <u>credit cards or loans</u>. When the AI is biased, it might unfairly discriminate against groups of people who would otherwise qualify. AI also relies on past data to make future decisions, but that data can change over time. Using older data can negatively affect current decisions because technology evolves and changes.

# **Workforce Disruption**

Artificial Intelligence can make work easier for businesses, but it also changes the way we work. As AI continues to evolve, that influence will grow. A study by Genesys revealed that there may be fewer jobs in industries such as manufacturing, retail, and data entry due to the use of AI. In a survey included in the study, manufacturing jobs appear to be the most at risk.

# Why is This a Concern?

Research completed by <u>Brookings</u> suggests that a quarter of jobs could be replaced by AI in the future. That is up to 36 million people who might be without a job due to machine learning and automation. This is a concern for people who have built their careers around industries that might not need humans anymore. As AI continues to expand, there's always the risk of machine learning taking over other industries as well.

# **Data Analysis**

One more trend in AI and risk management is data analysis. It's important to not just collect data, but to analyze and understand what it means as well. In the future, it is likely that there will be more emphasis on the analysis of data.

## Data Collection Vs. Analysis

Collecting data is often just imputing numbers. Analyzing data is a more detailed process. Analysis is about looking at the numbers and making sense of them. Analysis might include graphs, charts, and summaries. Analysis clearly states ideas that come from the data collection.

Analyzing data has benefits for organizations. Analysis gives a clear picture of problems and can create solutions. If there is an incident related to risk management, a company will want to do what it can to stop that from happening in the future. Ventivtech provides businesses with software that can make analyzing data less overwhelming. The software provides visuals and information in an easy-to-understand format. Analysis can help track the performance of different business goals that affect the risk management plan and can help make risk-based decisions, which can lead to the future success of the business.