Using AI For Risk Management And Efficiency Gains

technology risk management artificial intelligence

Summary: Artificial intelligence (AI) is being used extensively throughout the financial industry. One area that many CFIs are finding AI especially helpful is risk management. In fact, Forrester has found that AI can increase ROI by 4x for risk management and efficiency. Here are five ways to use AI and increase your ROI.

Many comedy shows really pack the jokes into the characters' dialogue. Consider Big Bang Theory, Brooklyn Nine-Nine, Modern Family for their quick humor and faster comebacks. One reporter calculated that for the show 30 Rock, there were 7.44 jokes on average per minute. That calculates to 186 jokes over a 25-minute show! Quite a lot of comedy in a short period of time.

Before thinking of recording past episodes of 30 Rock to confirm this statistic though, we bring you to a more serious topic — risk management. There is more risk today than ever with continuing economic uncertainty and the prolonged effects of the pandemic. So, it is fortunate that artificial intelligence (AI) is becoming more useful for many community financial institutions (CFIs) in managing this risk. AI allows them to analyze usage patterns in various data sets for a more robust understanding of their risk levels.

Indeed, a majority of institutions of all sizes surveyed by Forrester are now applying AI, along with machine learning and advanced analytics, to reduce risk and increase efficiency. According to the survey, AI has increased their ROI more than fourfold. Here are five areas where CFIs are using AI to lower their risk.

1. Regulatory compliance

Leveraging AI can reduce both the risk and the cost of regulatory compliance, which amounts to $270B a year industrywide — a full 10% of overhead. For smaller CFIs, the cost could amount to as much as one in five employees' time being devoted to compliance.

One CFI in the Midwest uses AI to more efficiently comply with BSA/AML requirements, by substantially reducing the number of false positives. That way, compliance staff need only scrutinize the most likely infractions.

2. Identity theft and fraud

A NJ CFI leverages AI tools to detect possible fraudulent activity within its online account opening process. "They can improve your know-your-customer process by an order of magnitude," says the CFI's technology chief. "Over 80% of the accounts were opened with only minimal human intervention."

AI can also detect fraudulent transactions in real-time, including digital payments. According to Juniper Research, institutions stand to collectively lose more than $200B in digital payment fraud between 2020 and 2024, but AI can reduce some of these losses.

3. Cyberattacks

According to Cognyte research, the number of ransomware attacks almost increased twofold in the first half of 2021. There were 1,097 organizations affected by these attacks in the first six months compared to 1,112 for the entire year of 2020. While ransomware is not the only cyber threat, it consistently tops the list.

"*Ransomware continues to be a real threat for most organizations,*" says a CIO at a CFI in TN. The institution employs AI to block cyberattacks by instantly shutting down employees' computers. "*If you don't have something like this implemented, you probably should,*" the CIO adds.

4. Loan fraud

CFIs suffer the most from small and medium business (SMB) loan fraud, according to LexusNexus. CFIs with less than $10B in assets have up to 5.8% of fraud losses as a percentage of annual revenues, compared to 2.9% for larger institutions. For CFIs that use AI to prevent loan fraud, losses are reduced to 3%.

The same NJ CFI leveraged AI to detect potential loan fraud from would-be borrowers of PPP loans. Not only did this reduce the chance of losses, but it also lowered overhead. "*Often, one person could do the work that four or five would have done in the past,*" the technology chief says. "*Our employees can be much more directed, as opposed to trying to find a needle in a haystack*."

5. Diversified credit risk

AI tools can also analyze lending patterns to ensure a CFI is diversified enough for credit risk, as well as compliant with fair lending laws. One community development financial institution in NY uses AI to analyze borrowers' properties, zip codes, and incomes to determine whether 60% of its portfolio is for low-income borrowers. "*That used to be a full-time job,*" says its chief innovation officer. "*Now, not only do we not have the cost, but we can manage our business so much more easily.*"

Still, as with all technology, AI tools have their own set of risks, too. Before adopting AI technology, be sure to understand the risks and rewards you assume. Like other risk management tools, the use of AI must be constantly evaluated and adjusted, not just a one-and-done.

If you find yourself interested in AI for risk management, some of your peers are right there with you. AI is getting more cost-effective for many institutions as well, making it easier. Now may be the time to research ways to use AI tools to optimize your risk management.

HOW DO INTEREST RATE SWAPS BENEFIT MY INSTITUTION?

ECONOMY & RATES

Rates As Of: 11/09/2021 06:21AM (GMT-0700)

Treasury	Yields	MTD Chg	YTD Chg
3M	0.06	0.01	-0.03
6M	0.07	0.00	-0.02
1Y	0.15	0.00	0.04
2Y	0.44	-0.06	0.32

5Y	1.10	-0.09	0.74
10Y	1.47	-0.09	0.55
30Y	1.85	-0.08	0.21

FF Market	**FF Disc**	**IORB**
0.08	0.25	0.15
SOFR	**Prime**	**OBFR**
0.05	3.25	0.07