AI TECHNOLOGY

Driving Treasury Excellence by Unlocking the Power of AI

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AI is revolutionising corporate treasury operations by enhancing a host of critical functions such as cash forecasting, risk management, and fraud detection. Bank of America experts share insights on how AI can streamline processes, boost efficiency, and address treasurers' concerns regarding its adoption, including implementation challenges, regulatory uncertainty, and data privacy demands.

Treasurers are not shy of applying technology to enhance their operations but – in a relatively short space of time – AI has emerged as both the most revolutionary and challenging development they have had to contend with in recent years. While the technology to date has broadly, though not exclusively, been adopted by resource-rich, larger organisations, it is widely anticipated that over the coming few years it will impact financial operations across businesses of all sizes.

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For many treasurers, the fast-evolving technology still presents a major learning curve, especially regarding its technical aspects and implementation. The investment, tangible and intangible, and its adoption demands are areas of uncertainty for them. While recognising these as major challenges for treasurers Venkat ES, Head of Treasury Products, Asia Pacific, Global Payments Solutions, Bank of America (BofA), also believes they have much to gain from engaging with AI.

"There is no doubt that AI has the potential to revolutionise a host of corporate treasury operations. It is already demonstrating it can help treasurers better manage, for example, liquidity and risks such as FX and fraud in the real world. More broadly, it can help to radically transform how treasurers manage their financial strategies, enhancing both decision-making and their overall performance.

"AI is set to play an increasingly powerful role in corporate treasury operations and contribute to treasurers' mission to help their businesses maintain a competitive edge in the future," he predicts. "It's still very early days for the technology. There is much more to come over the next few years that will be of benefit to treasurers – it is developing rapidly."

Getting under the hood

Venkat says it is important that treasurers looking to engage with AI from a standing start try to first understand the nature of the technology, if not its technical intricacies, and become aware of the challenges associated with its adoption and integration.

He explains that AI in treasury uses ML, natural language processing (NLP), and predictive analytics to improve, for example, cash forecasting, risk management, and task automation. By analysing extensive data sets, AI can predict future cash needs, identify market threats, and reduce errors through automation, enabling treasurers to focus more on strategic activities.

He adds: "AI can automate tasks such as financial report generation and account reconciliation while enhancing decision-making with insights into investment opportunities, liquidity management, and risk assessment. Furthermore, integrating AI with existing systems enables more sophisticated analysis of real-time data and streamlines workflows, all of which helps to boost overall efficiency."

Aziz Parvez, Head of Corporate Treasury Sales, Asia Pacific, Global Payments Solutions, Bank of America, echoes his colleague and further emphasises the tangible cost benefits and process efficiencies that AI can deliver through automation.

He notes that AI-driven payment solutions, for instance, can optimise payment timing and frequency, reducing transaction costs and leveraging early payment discounts. AI also aids in managing liquidity more effectively by predicting cash needs and optimising cash reserves, leading to improved financial management and reduced costs. Additionally, and equally importantly, says Aziz, AI can significantly enhance fraud prevention in this area by ensuring secure payments and minimising risk of financial loss.

AI is no substitute for human judgment

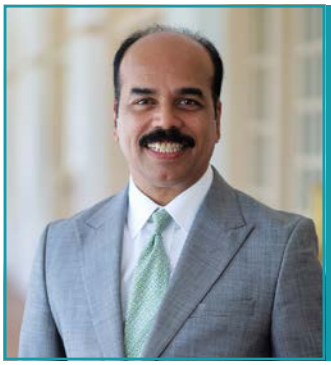
Venkat stresses, however, that impressive as AI's capabilities are, the technology by no means obviates the need for human oversight. He continues: "AI can manage routine tasks, but humans are crucial for strategic decisions and supervision. While AI offers data-based recommendations, interpreting these recommendations, making final decisions, and handling exceptions require human judgment.

"Complex negotiations, strategic planning and regulatory compliance often demand a nuanced understanding that AI alone cannot provide. There will always be unique or exceptional cases, or events that demand human intervention to ensure analysis and actions taken to address them align with organisational goals and comply with regulations."

So far, it has been treasuries in larger organisations and tech-driven industries that have been the most proactive in leveraging AI, thanks largely to their access to resources and expertise. However, Venkat notes that adoption is accelerating.

"AI technologies are becoming increasingly accessible, user-friendly, and affordable, prompting smaller firms to adopt AI solutions as well. The trend is moving towards wider AI adoption as its benefits become clearer and the technology becomes more embedded in standard treasury practices and develops a proven track record of success."

At the global level, Aziz says it is generally the regions with robust technological infrastructure, such as North America and Western Europe, that are leading in AI adoption. Emerging markets in Asia, particularly China and India, are also advancing in AI adoption due to rapid technological



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progress and substantial investments in innovation. Elsewhere, thanks to strong governmental support for technology and innovation, firms in smaller countries such as Singapore and Israel are also notably moving forward in the use of AI in treasury functions.

From a sector perspective, as it stands, it is industries such as retail, healthcare, particularly the tech-driven e-commerce players, and banking, that are benefiting most significantly from early adoption of AI. Companies in these sectors are especially keen to leverage AI's impressive ability to efficiently manage the very large datasets and transaction volume that they typically generate.

Delivering on promises

BofA, in common with other major banks, has a host of clients that have been quick to adopt and integrate AI. Venkat cites a large retailer that has employed AI to enhance cash forecasting and fraud detection. By integrating its treasury systems with AI, the retailer improved its cash flow predictions and significantly reduced fraudulent transactions, contributing to greater financial stability.

Another BofA client, a tech firm, has successfully used AI to manage FX risks more effectively. Through accurate predictions of currency fluctuations, the company has been able to make informed hedging decisions and minimise potential financial losses. Elsewhere, Venkat points to an MNC that has utilised AI to automate its payment processes, resulting in optimised liquidity management and cost reductions through improved payment scheduling and dynamic discounting. And in the financial services sector, he highlights the case of a business that has leveraged AI to refine investment strategies. Predictive analytics have helped it to identify high-value opportunities, thereby enhancing portfolio performance.

When it comes to barriers to AI adoptions by organisations, Aziz and Venkat are clear that these can extend well beyond just having access to budgetary resources and relevant expertise. Aziz points out that it is often simply fear of the unknown that can also hinder progress, and that companies may hesitate to take the plunge due to concerns about the maturity and suitability of AI solutions for their specific needs.

Regulations, ethics and data privacy

Venkat, meanwhile, points to regulatory uncertainty and data privacy concerns as other significant hurdles. He explains: "Companies are cautious about how evolving regulations might impact their AI implementations and whether they can maintain compliance. The lack of standardised regulations and the uncertainty surrounding potential future legal requirements can, understandably, create apprehension.

"Ensuring that AI systems comply with existing data privacy laws, such as GDPR, and adapting to new regulations in this space are also a key concern. Transparency in AI systems is crucial for building trust, and treasurers do need to ensure that AI technologies they employ meet regulatory requirements and address data-privacy concerns effectively."

More broadly, Aziz notes that firms engaging with AI must also contend with ethical considerations and accountability for actions taken as a result of its use. "The absence of comprehensive guidelines can make it challenging to ensure AI systems are used responsibly and fairly. Clear standards are needed to address biases and errors in AI systems and to assign accountability for AI-driven decisions."

Venkat adds: "To navigate the evolving regulatory landscape, companies need to stay informed about changes and adjust their AI strategies accordingly. Future regulations may demand greater transparency in AI decision-making processes and stricter data handling protocols. Governments might also introduce guidelines to promote ethical AI use to help build trust in systems based on the technology."

Firm tech foundations are vital

Despite the barriers and challenges to AI adoption, businesses are increasingly recognising the powerful role AI can play across their operations. For those treasurers considering AI adoption and integration, Venkat says detailed mapping of existing processes to help identify areas where AI can provide tangible benefits is an essential first step.

He advises: "Make sure to engage stakeholders early to ensure buy-in and address any concerns. It's also vital to invest in building AI expertise within your team, cultivate a culture of continuous learning and adaptability. All relevant team members should receive proper training and support to adapt to new AI tools. Effective change management is critical to address potential resistance and ensure a smooth transition."

Venkat adds: "Further down the road, it is vital to ensure the selection of AI tools that align with existing systems

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and business objectives. Develop a comprehensive implementation strategy with clear objectives and adopt a phased approach to integration, starting with pilot projects to assess performance, and refine strategies before full-scale implementation to mitigate risks and ensure alignment with business goals."

Meanwhile, Aziz stresses the importance of addressing security and compliance from the outset by implementing robust data governance practices and having in mind that regular updating of AI systems will be essential to help address emerging threats as well as technological advances and evolving regulations and industry standards.

Aziz adds that strong data management practices are equally vital for successful AI adoption. "AI is fundamentally about data, so the quality, accuracy, timeliness, and transparency of data directly impact AI performance. Focusing on robust data management, along with an AI strategy tailored to your organisation's unique needs, will equip you with the flexibility needed to leverage AI effectively as it evolves and help the business maintain a competitive edge."

Post-integration, it is critical to monitor the AI solution's performance closely versus expectations. The tracking of operational efficiency metrics such as reductions in processing times, error rates, and overall cost savings, can help here. Improvements in cash forecasting accuracy and reductions in manual intervention are also key indicators of success.

More specifically, Venkat highlights the importance of evaluating financial metrics post-integration, including the impact of the AI solution on working capital management, transaction costs, and overall financial performance. He says: "Assess the return on investment [ROI] by considering both tangible financial gains and intangible benefits, such as improved decision-making and enhanced risk management. Additionally, monitor compliance and risk management outcomes to ensure that AI tools being employed meet regulatory standards and are managing financial risks effectively."

In addition, Aziz points to user satisfaction and feedback from the wider treasury team as also being valuable for gauging the effectiveness of AI tools. "High user adoption rates and positive feedback can indicate AI implementation is meeting their needs and enhancing workflows. The need for such metrics further underlines the importance of regularly reviewing AI performance against predefined goals to help measure success and identify areas for improvement," he says.

The shape of the future

Both Aziz and Venkat are certain that more powerful and effective AI technology and tools for treasury will emerge over the coming years. They foresee, for example, advances in predictive analytics that will further improve cash flow forecasting and prediction of market conditions.

AI integration with blockchain technology could deliver far more secure and transparent financial transactions and record-keeping while improvements in AI algorithms will significantly enhance the accuracy and reliability of financial forecasts and risk assessments.

Venkat adds: "AI's evolution will include advancements in automating complex decision-making processes leading to greater operational efficiency and accuracy. The development of Explainable AI [XAI] will improve transparency, enabling users to better understand and trust AI-driven decisions. Increasing numbers of powerful AI-driven risk management tools will provide precise predictions and mitigation strategies, enabling treasurers to manage financial risks more proactively and effectively."

The rapid developments taking place in AI technology can be bewildering for treasurers, but Venkat assures them there are myriad ways in which they can stay updated on the implications for their treasury operations and their company more broadly.

He advises they engage with industry publications, attend relevant conferences, and participate in webinars focused on AI and financial technology. "These resources offer valuable insights into the latest developments and best practices. Make best use of resources and intelligence available from your partner banks and forge links with technology vendors and consultants that specialise in AI to receive tailored advice and stay informed about emerging trends," he concludes.

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