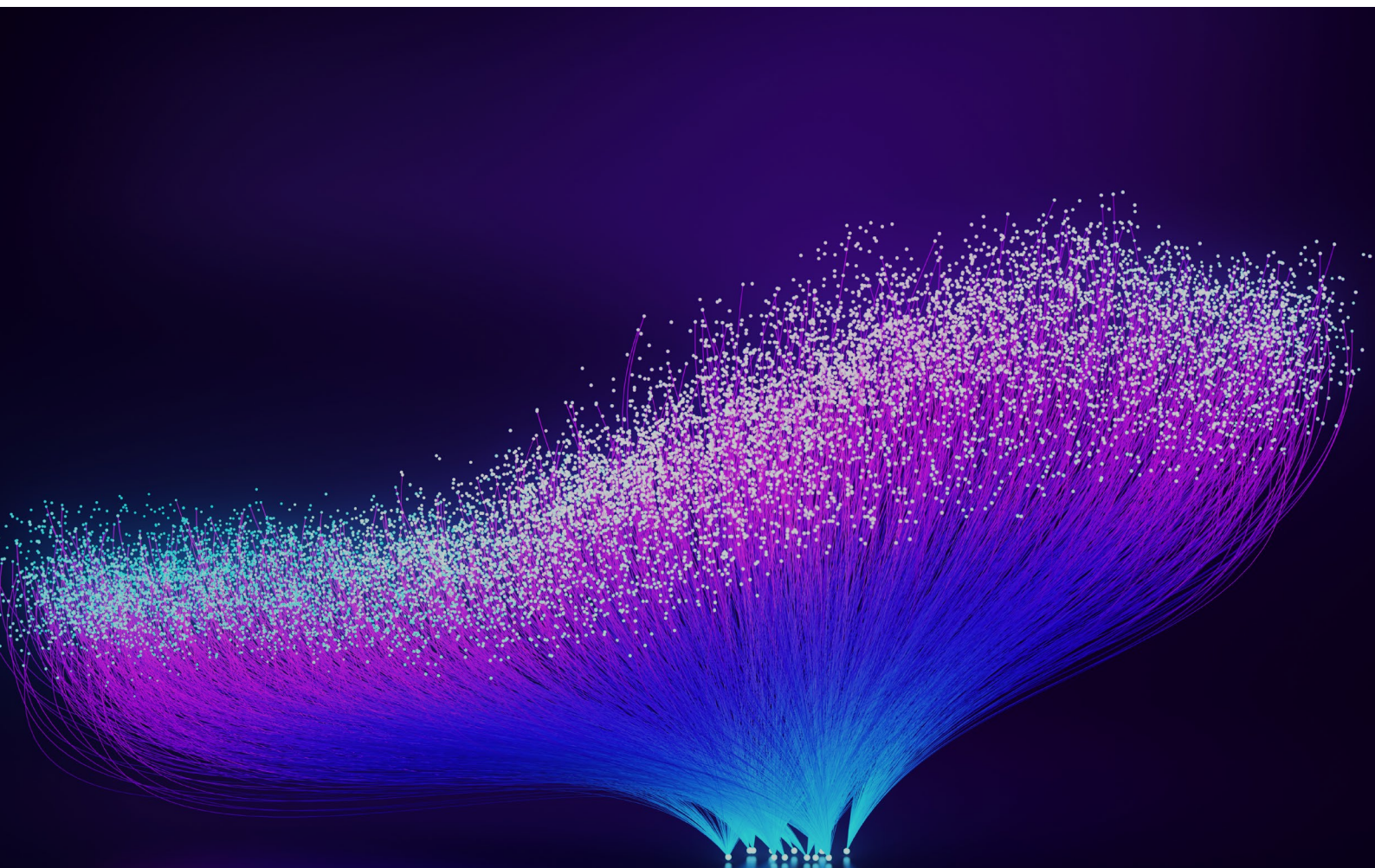


GAPCO

10 IMPERATIVES FOR DATA & AI IN 2025



With data firmly established among financial institutions' most valuable and powerful assets, the accelerating adoption of technologies such as generative AI and now agentic AI is now placing ever greater emphasis on data quality and the democratisation of that data. At the same time, more robust and mature tech stacks and operating models are offering business users easier access to data and insights at scale – pushing the boundaries of data's transformative powers for firms.

As firms look to add value and gain competitive advantage through the smart design and application of enhanced datasets and modern data architectures, we are pleased to share our 10 data and AI imperatives for 2025.

1. CDO REPORTING LINES ARE CHANGING, WITH BUDGETS FLOWING TO BUSINESS LINES

In 2024 the number of CDOs reporting to their CEO has reduced from 23 to 20%¹

While Gen AI has cemented data and analytics as a key priority for organisations, chief data officers (CDOs) find themselves facing a conundrum. On one hand, the value of data is now unquestionable, and the role of the CDO accordingly more well understood and respected. On the other, GenAI tools make data more accessible and democratised.

At the same time, budget constraints have led to restructuring for a lot of organisations, meaning data science and analytics roles are being shifted to other parts of businesses, for instance under a CTO or CIO. To ensure their continued seat at the table, CDOs will have to be strategic, not only being the beacon for all things AI but also owning data assets and data governance to keep relevant within their organisations.

1. <https://www.linkedin.com/pulse/whats-top-mind-chief-data-officers-going-2024-phil-le-brun-vowxe/>

2. IT'S ALL ABOUT THE OPERATING MODEL

The Global ML Ops market is projected to grow from USD 1,064.4 million in 2023 to USD 13,321.8 million by 2030²

Machine learning and AI have moved beyond the sandbox into production environments, and evolved from side of desk projects to strategic tools, and are today fundamental to how modern organisations operate. As a result, financial services firms are reviewing their operating models to deliver analytics at scale.

These new op models are far more platform-oriented, with hybrid delivery across CDO, Tech and Business resources. The tech stack has equally matured to support this growing demand for real-time processing of Big Data. Data and tech leaders in financial services should push for the cloud while maintaining the delicate balance between legacy tech and cutting-edge techniques like AI Ops, ML Ops, and GenAI.

3. ENHANCED DATA EXPERIENCES THROUGH DATA PRODUCTS

The global financial analytics market was valued at USD 8.78 billion in 2023 and is projected to reach USD 23.04 billion by 2032³

Businesses are shifting away from conducting data projects in silos, recognising that their data provides greater value when treated as a product for practical implementation. To approach data as a product successfully, firms must engage stakeholders cross-functionally and incorporate a product management lens in the earliest stages of their architecture and business processes.

Prioritizing how users will actually consume the data is critical, as it enables data products to be useable, accessible and relevant. Users often have no use for the raw data itself, and instead require data-driven insights and alerts embedded directly within a process. If executed properly, such a data product approach can enhance user data experience and maximise the utility of data-on-hand to enable businesses to reap substantial value from their data.

2. <https://www.fortunebusinessinsights.com/mlops-market-108986#>

3. <https://www.fortunebusinessinsights.com/financial-analytics-market-107948>

4. A FOCUS ON TOTAL COST OF OWNERSHIP (TCO)

Every year, poor data quality costs organisations an average \$12.9 million⁴

As financial services institutions embrace advances in technology and look to maximise the value of data at hand, there is an increased emphasis on getting the numbers right on the total cost of ownership (TCO). Tech stacks are often disparate, organisations operate in silos, and legacy financial reporting structures present challenges in TCO implementation.

Bespoke TCO calculations that account for direct and indirect data ownership expenses throughout the lifecycle of managing, storing, and using data are of critical importance if executives are to fully understand, control, and optimize their data footprint.

5. GENAI TO MOVE FROM PROOF OF CONCEPT TO PRODUCTION

About 70% of businesses' GenAI projects are trapped in the experiment phase⁵

Financial services institutions have been quick to launch pilots and PoCs to test GenAI capabilities. However, GenAI presents decision-makers with a double-edged sword. While the benefits are compelling, the risks may be insufficiently understood – and hallucinations, murky explainability, biases, and misinformation all come at a high cost.

Scaling up from exploration and research to productionization can be done in a responsible manner, however. Precautions must be in place and stakeholders must be heavily involved for robust management across the AI lifecycle. With that in mind,

senior executives are pushing to move on from the exploratory phase and safely deploy solutions at scale to realise their value and accelerate their operations.

There has been plenty of discussion around the benefits of building AI capability in an agnostic way – that is, avoiding vendor lock in to ensure firms have sufficient flexibility to adapt to market changes and benefit from ongoing AI innovation. The launch of DeepSeek's R1 open source model underlines the importance of this agnostic perspective.

4. <https://www.gartner.com/smarterwithgartner/how-to-improve-your-data-quality>

5. <https://www.wsj.com/articles/companies-had-fun-experimenting-with-ai-now-they-have-to-show-the-returns-2a683592>

6. ETHICS AND RESPONSIBLE AI

56% of firms in Europe believe data governance and privacy are their greatest risks when it comes to responsible AI⁶

Firms' traditional data management frameworks are accordingly evolving to prioritise ethical data management, specifically with regards to ownership of sensitive data and use of AI. Frameworks principally focus on structured data – a side effect of responsible AI's prevailing orientation around risk and regulatory compliance (and a reflection of the industry's wider blind-spot around unstructured data management).

Additionally, firms are looking to incorporate metrics that monitor AI bias and fairness into their current operating model.

It can be expected that regulatory requirements will only become more onerous, as exemplified by the EU AI Act, as AI becomes ever more central both in individuals' daily lives and to business operations, with firms being held financially responsible.

Firms with an ethical approach to data management and AI frameworks stand a better chance of shielding themselves from potential risks – and retain customers' trust over the safety of their data.

7. DATA RISK

Global spending on information security and risk management will amount to 210 billion U.S. dollars in 2024. By 2028, information security and risk management spending is forecast to reach 314 billion U.S. dollars⁷

Managing data risk poses a significant challenge for financial services institutions, given the vast amounts of sensitive information that is constantly processed and stored. The nature of this data – which includes personal identifiable information (PII), transaction details, credit histories, and investment profiles – means firms are prime vectors for cyberattacks, data breaches, and internal fraud.

Governmental and regulatory organisations have started to hone in on data risk by implementing stricter data protection laws, imposing heavier penalties for non-compliance, and demanding increased data observability, traceability, and governance. Firms will need to observe stringent compliance to avoid hefty fines and potentially tarnishing their reputation.

6. https://aiindex.stanford.edu/wp-content/uploads/2024/04/HAI_AI-Index-Report-2024_Chapter3.pdf

7. <https://www.gartner.com/en/documents/5315863>

8. ALL ABOUT THE CUSTOMER

55% of customers feel their customer service experience has worsened, and 48% have attempted to switch providers due to their frustration⁸

Firms that have been successfully using advanced technology to provide seamless and personalized customer experiences have been bolstering brand loyalty and setting the bar for exceptional customer service experiences, leaving other businesses in the dust. The everyday adoption of GenAI tools such as ChatGPT has further exacerbated the gap in what consumers have come to expect in their interactions with business' customer-facing technologies versus the common reality.

Many first-generation AI technologies deployed, like chatbots and interactive voice response technologies, are outdated and have the glaring absence of a human touch; they can constrain

clients to one-size-fits-all options and interfaces often still have frustrating manual entry components.

Although intelligent point solutions have previously checked the box for accomplishing the task at hand, some firms will need to realign the technologies they use in the customer experience to bridge the current AI expectation gap. Customers will be drawn to brands that provide a pleasant, efficient, and personal experience, and early adopters will have a leg up in differentiating themselves from the rest of the pack to build brand loyalty.

9. SUSTAINABILITY QUESTIONS CONTINUE TO UNDERSCORE THE AI CONVERSATION

The computing power required for AI is doubling every 100 days and is projected to increase by more than a million times over the next five years⁹

Data centres are experiencing challenges in meeting the energy demand arising from the accelerating sophistication of AI models, and the energy required to build and productionise models is climbing as well. According to WEF, training a generative model like GPT-3 uses nearly an estimated 1,3000 MWh of electricity, equivalent to the power consumption of 130 homes, and GPT-4 uses approximately 50 times that.

New arrival DeepSeek claims its R1 model uses 10 to 40

times less energy and around an eighth of the computer chips required by established US AI technology. This has recentred the conversation around the potential to minimise the future environmental impact of AI. As measurement frameworks expand their robustness to account for meticulous energy logging and technology continues to advance, innovations will prioritise ways to reduce energy usage and improve the sustainability of these technologies.

8. <https://www.forbes.com/sites/rogerdooley/2024/06/06/companies-failing-at-customer-experience-new-study-shows/>

9. <https://spj.science.org/doi/10.34133/icomputing.0006#sec-2>

10. AGENTIC AI

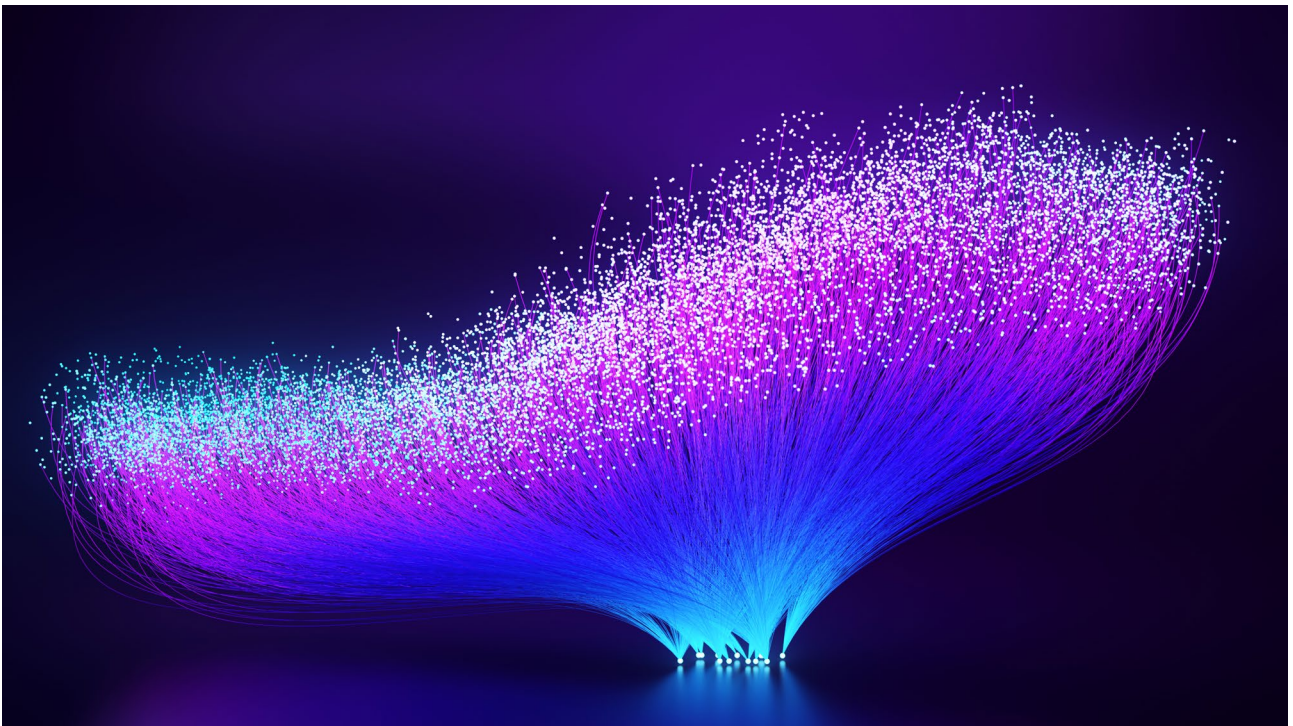
By 2028, 33% of enterprise software applications will include agentic AI¹⁰

In the world of AI, agentic is the new black. Agentic AI builds upon principles of Gen AI – learning patterns from training data, adapting and refining outputs – but agentic bots are equipped with more sophisticated capabilities that allow for autonomous execution, dynamic problem-solving, adaptability to changing environments, and operating in complex workflows.

This presents a groundbreaking advancement in the AI space: the tooling in itself offers a solution to many risks associated with AI by allowing validation and controls to become part of the solution, enabling compliance by design. Agentic AI is ripe for implementation in financial services as it can adhere to

rigid guidelines while offering value in areas such as intelligent project management, autonomous fraud detection, risk management, regulatory compliance, and personalised client engagement.

Although in its infancy, agentic capabilities will shift how firms approach AI and alleviate many of the reservations that have held firms back from deploying AI at scale. Decision-makers in 2025 should gear up to identify high ROI opportunities to pilot agentic solutions for rapid realisation of its transformative potential.



10. <https://www.gartner.com/en/articles/intelligent-agent-in-ai>

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Capco, a Wipro company, is a global management and technology consultancy specializing in driving transformation in the energy and financial services industries. Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its award-winning Be Yourself At Work culture and diverse talent.

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