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76% Of Enterprises Prioritize AI & Machine Learning In 2021 IT Budgets

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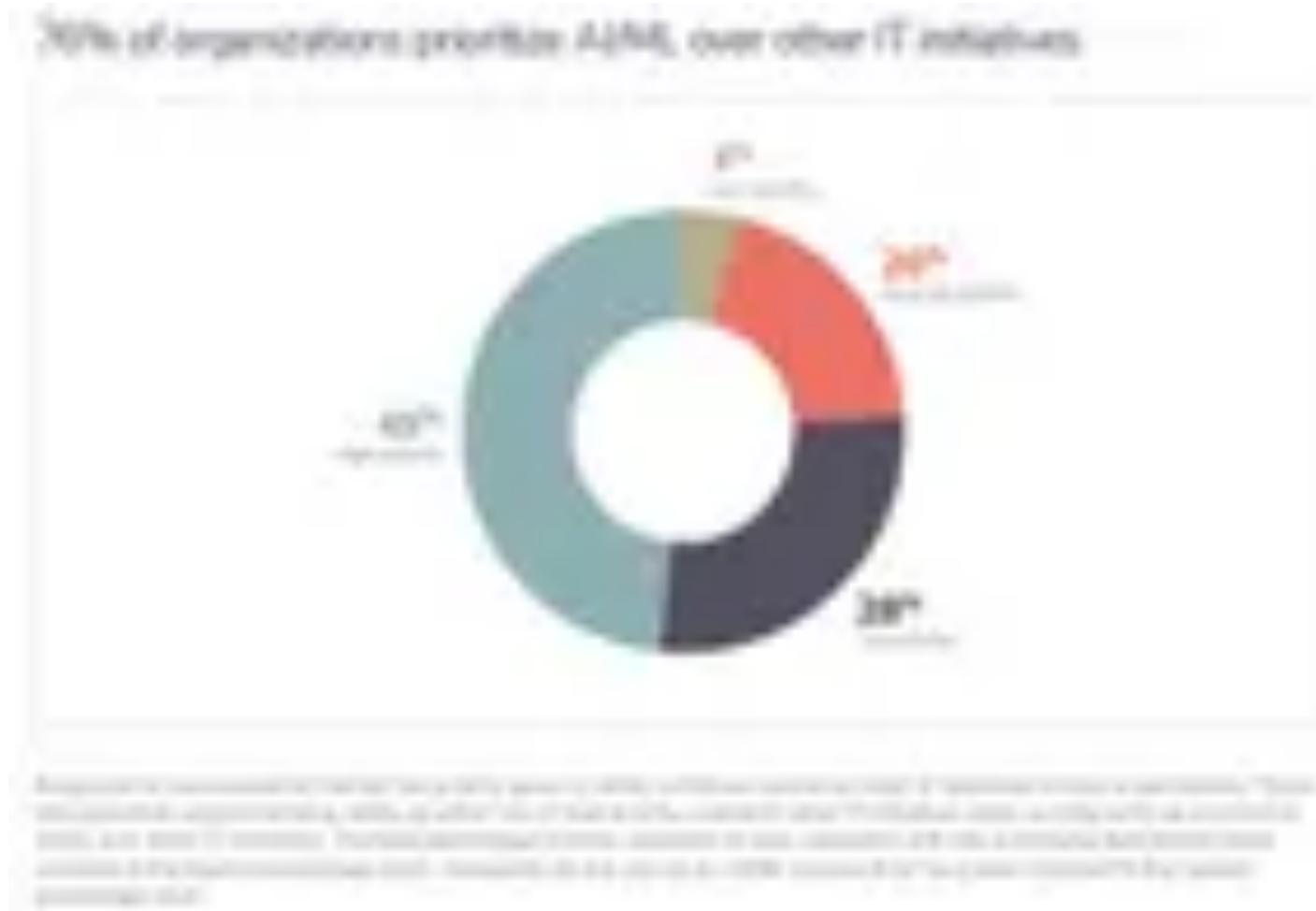
- 43% of enterprises say their AI and Machine Learning (ML) initiatives matter *“more than we thought,”* with one in four saying AI and ML should have been their top priority sooner.
- 50% of enterprises plan to spend more on AI and ML this year, with 20% saying they will be significantly increasing their budgets.
- 56% of all enterprises rank governance, security and auditability issues as their highest-priority concerns today.

- In just over a third of enterprises surveyed (38%), data scientists spend more than 50% of their time on model deployment.

Enterprises accelerated their adoption of AI and machine learning in 2020, concentrating on those initiatives that deliver revenue growth and cost reduction. Consistent with many other surveys of enterprises' AI and machine learning accelerating projects last year, Algorithmia's third annual survey, [2021 Enterprise Trends in Machine Learning](#) finds enterprises expanding into a wider range of applications starting with process automation and customer experience. Based on interviews with 403 business leaders and practitioners who have insights into their company's machine learning efforts, the study represents a random sampling of industries across a spectrum of machine learning maturity levels. Algorithmia chose to limit the survey to only those from enterprises with \$100M or more in revenue. Please see page 34 of the study for additional details regarding the methodology.

Key insights from the research include the following:

- **76% of enterprises prioritize AI and machine learning (ML) over other IT initiatives in 2021.** Six in ten (64%) say AI and ML initiatives' priorities have increased relative to other IT priorities in the last twelve months. Algorithmia's survey from last summer found that enterprises began doubling down on AI & ML spending last year. The pandemic created a new sense of urgency regarding getting AI and ML projects completed, a key point made by CIOs across the financial services and tech sectors last year during interviews for comparable research studies.



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- **83% of enterprises have increased their budgets for AI and machine learning year-over-year from 2019 to 2020.** 20% of enterprises increased their budget by over 50% between 2019 and 2020. According to MMC Ventures' *The State of AI Divergence Study*, one in ten enterprises now uses ten or more AI applications with chatbots, process optimization and fraud analysis leading all categories. A recent Salesforce Research report, *Enterprise Technology Trends*,

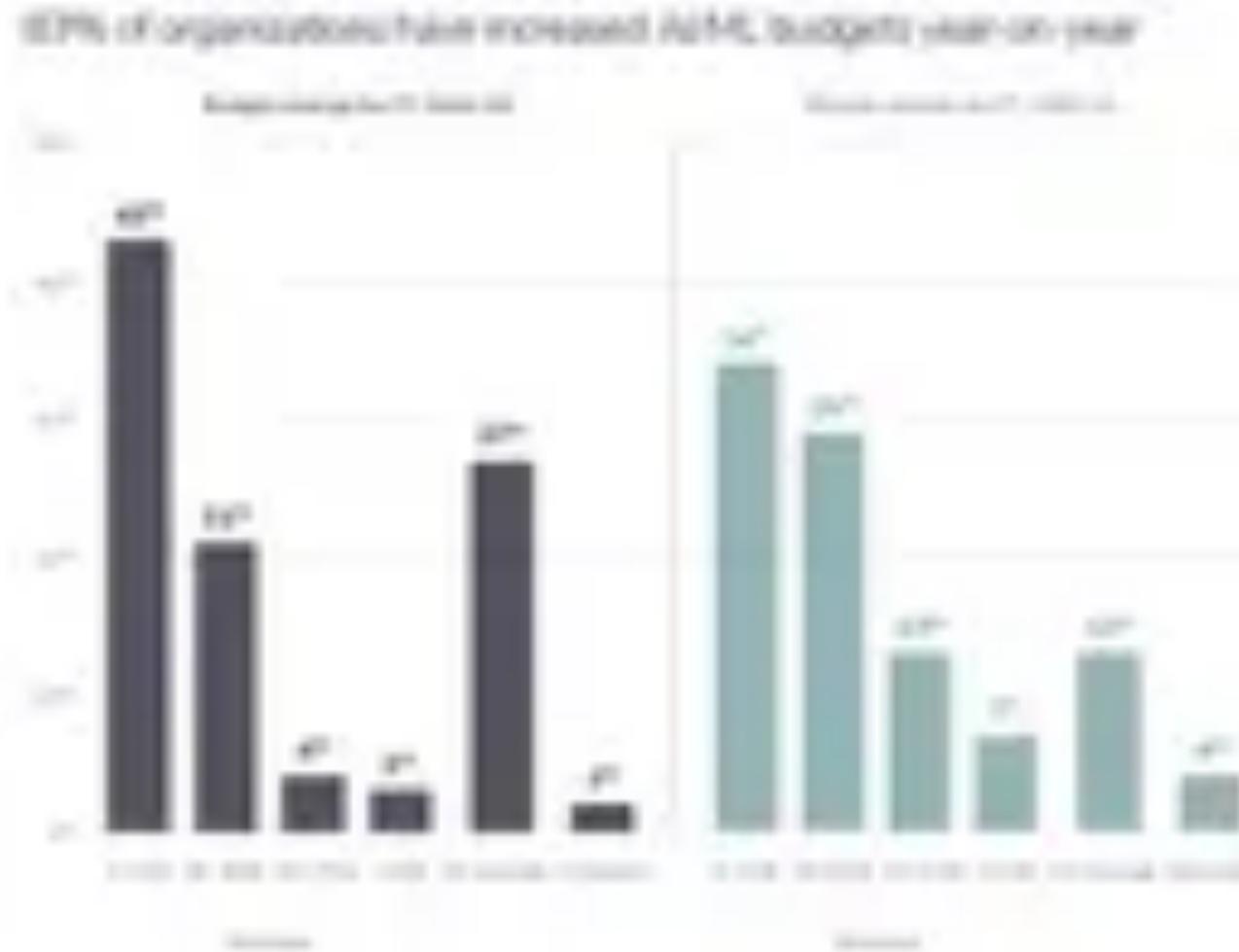
found that 83% of IT leaders say AI & ML is transforming customer engagement and 69% say it is transforming their business. The following compares year-over-year AI and ML budget changes between FY 2018 – 2019 and FY 2019 – 20.

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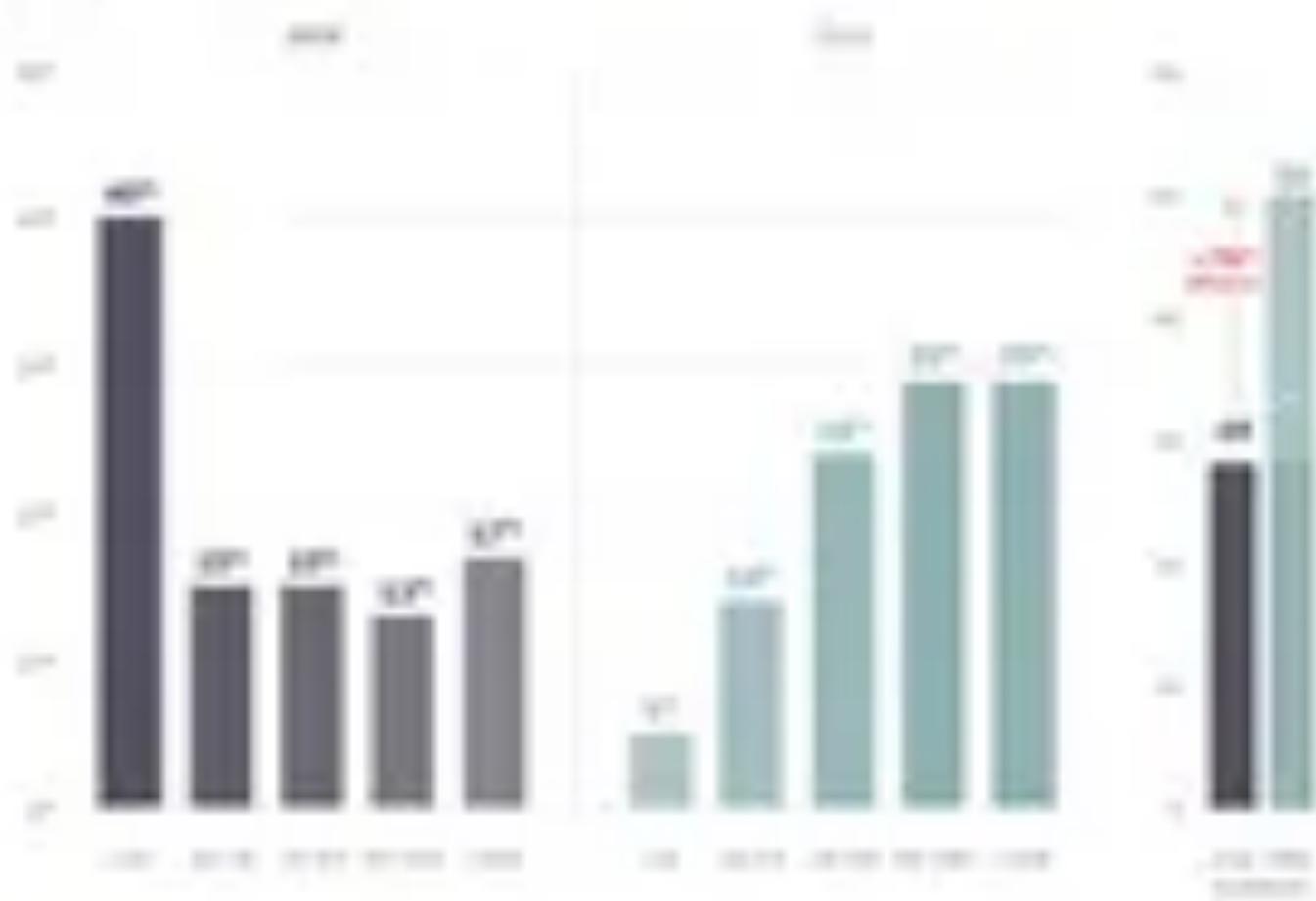
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- **The number of data scientists jumped 76% between 2020 and 2021, resulting in 29% of enterprises interviewed having over 100 data scientists working on initiatives today.** Burning Glass Technologies found that demand for AI and Machine Learning skills is growing at a 71% compound annual growth rate through 2025, with 197,810 open positions today. AI and ML projects focused on driving top-line revenue growth while reducing operating systems create the most compelling business cases driving AI and ML adoption. The spike in hiring reflects the success of business cases that drive new revenue and reduce operating costs.

The average number of data scientists employed has increased 20% year-over-year.



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- **Improving customer experiences to drive greater revenue growth and automating processes to reduce costs are the two most popular use cases or application areas for AI and ML in enterprises today.** It's noteworthy that seven of the top 20 use cases are customer-centric, nearly half of

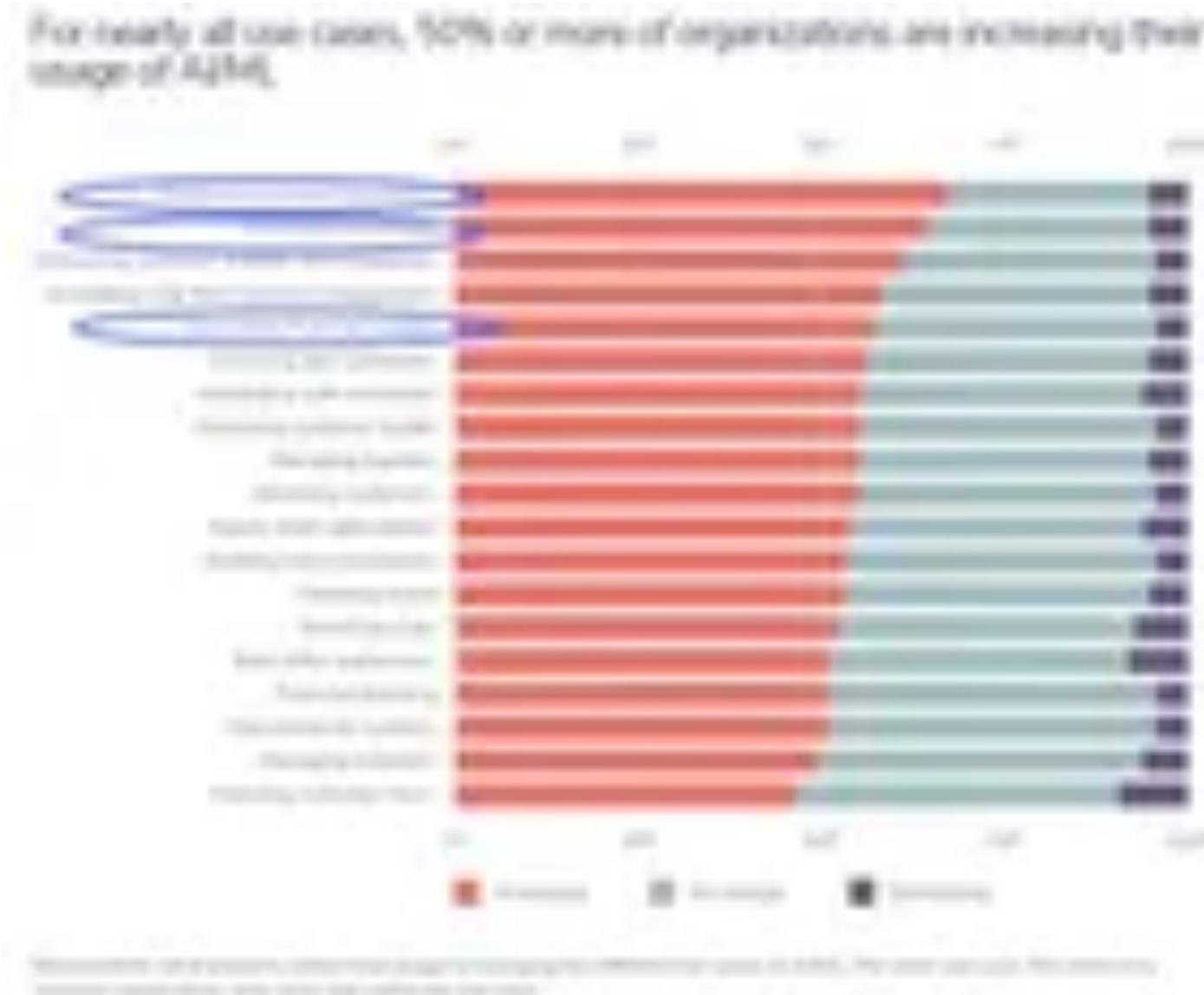
all use cases tracked in Algorithmia's survey. 46% of enterprises are using AI & ML to combat fraud, which will most likely grow given the growth and severity of breaches, including the SolarWinds cyberattack. Capgemini's recent study of AI adoption in cybersecurity found network, data and endpoint security are the three leading use cases of AI in cybersecurity today, with each predicted to get more funding in 2021, according to CISOs interviewed for the report.

Customer experience and process automation represent the top AI/ML use cases.



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- **AI and ML business cases that provide greater customer revenue growth, reduced costs and greater financial visibility have the highest priority of being funded inside any enterprise today.** The combination of improving customer experiences, automating processes (to reduce costs) and generating financial insights (for greater financial visibility) is the ideal combination for getting a proof of concept started for an AI or ML project. The proliferation of AI and ML use cases shown in the graphic below is attributable to how each contributes to enterprises achieving a tangible, positive ROI by combining them to solve specific business problems.



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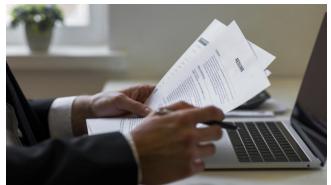
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