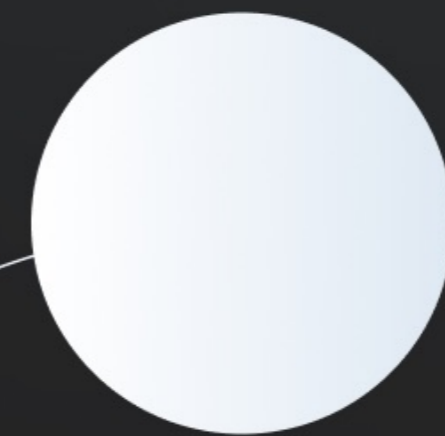


TheGlobalCTOSurvey. × STXNEXT

SURVEY RESULTS & INSIGHTS

The Global CTO Survey 2024/25 Report AI Edition



Navigating the AI frontier: Insights from tomorrow's leaders

Being a CTO in today's rapidly evolving world based on AI is both a challenge and an exciting opportunity. Every day, I witness how advancing technologies are changing the way we lead, build, and innovate. This year's CTO Survey provides a snapshot of what's on every technology leader's mind, from hiring struggles to the ethical dilemmas we face when implementing Artificial Intelligence.

For me, the role of the CTO isn't just about mastering technology; it's about leading teams through uncertainty, finding clarity in complexity, and making an impact on real-world projects. This report covers a wide range of our collective experiences, showing how we are navigating our unique paths, keeping up with trends, and facing the challenges ahead.

I am pleased to see that AI is taking center stage. Our task is to turn these technologies into tools that provide meaningful progress, not just fashionable buzzwords. I hope you find the insights in this survey as inspiring and thought-provoking as I did.

Łukasz Koczwar
CTO AT STX NEXT



The Global CTO Survey Report 2024/25

AI Edition

With more than 100 esteemed CTOs from across the globe contributing their time and invaluable insights, this edition promises to be enlightening and comprehensive. Building on the success of previous surveys, we delved into critical topics such as Artificial Intelligence, technological advancements, prevailing trends, security challenges, management strategies, and more.

Join us as we explore the realm of the modern CTO, offering invaluable insights into their roles and responsibilities in shaping the world of technology.



40+

Questions in the survey

From how CTOs got where they are today to technology, leadership, and challenges they face.



100+

Total respondents

Gathered from CTOs worldwide.



6 continents

Europe, North & South America, Africa, Asia, and Oceania

Huge thanks to all the CTOs who invested their time to answer our questions!

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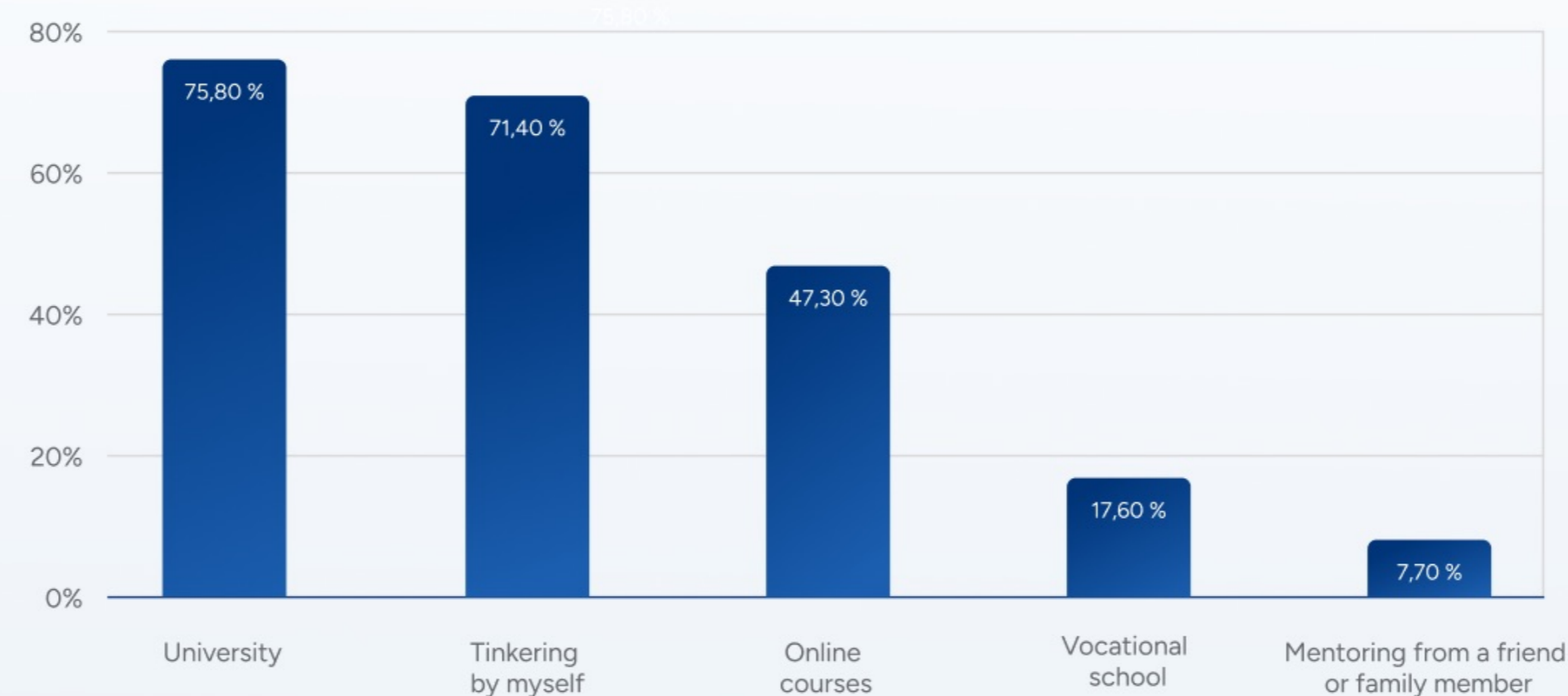
01 Career path

Exploring the CTO landscape:
Inspiring journeys

CTOs are gaining technical knowledge through diverse learning paths

The CTO Survey 2024/25 reveals the many paths taken by CTOs to acquire technical knowledge, highlighting the flexibility and evolution of skill development in the tech industry. Approximately **75%** of CTOs view **traditional university education** as their foundational stepping stone. However, the survey also reflects the importance of self-guided learning, with **71.4%** of respondents improving their skills via **self-directed experimentation**. Meanwhile, **47.3%** of CTOs engaged in **online courses**, signifying the growing popularity of digital education. Additionally, **17.6%** mentioned learning through **mentors, friends, or family**. These diverse educational pathways show that today's CTOs can build a versatile and rich skill set through multiple avenues.

Where did you acquire your technical skills?



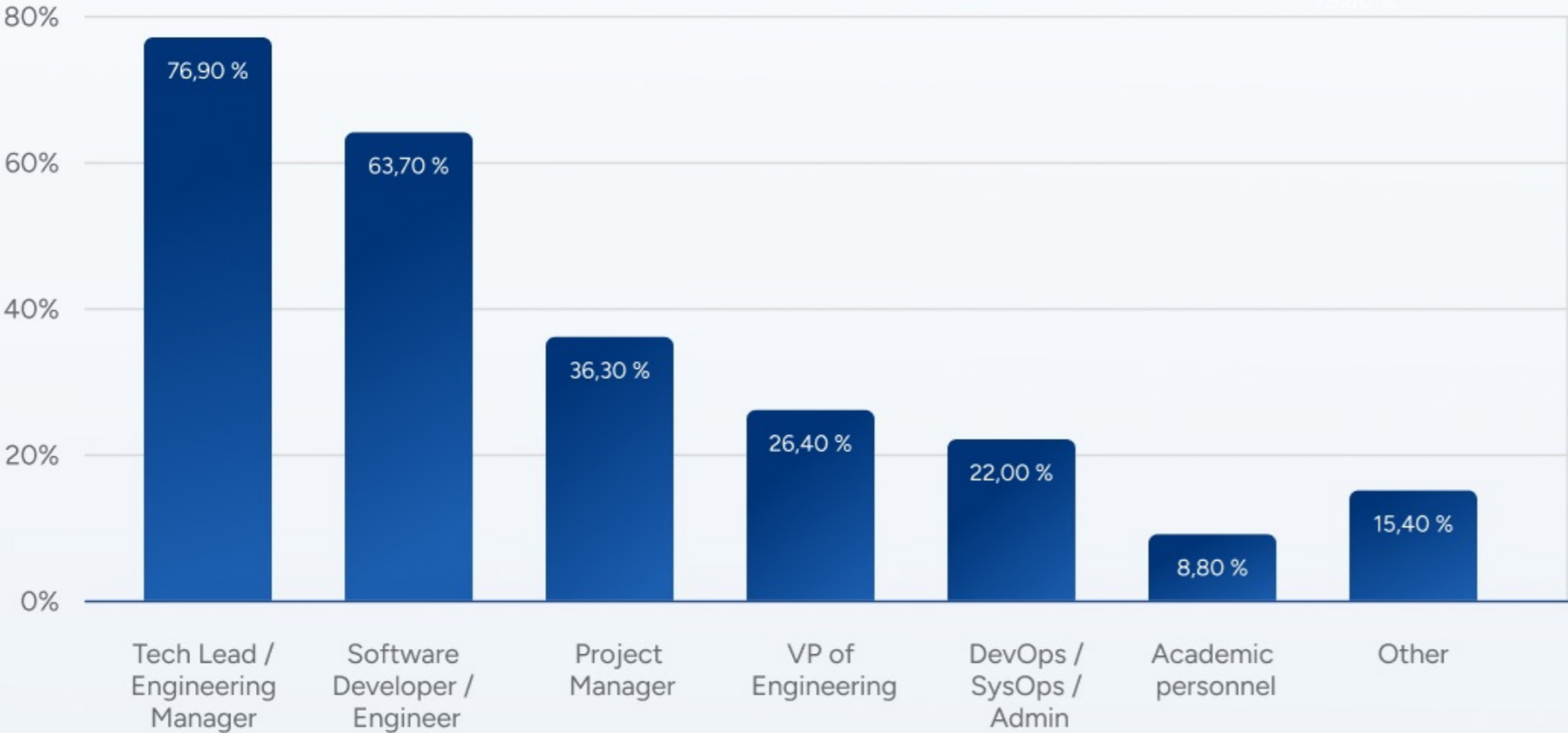
Diverse career paths and seniority define today's CTOs

The survey showcases a range of career trajectories leading to the CTO role, reflecting a blend of technical and leadership experience. A significant **77%** transitioned from technical leadership or engineering management positions, while **63.7%** advanced from software development roles, underscoring the importance of a technical foundation in CTO leadership.

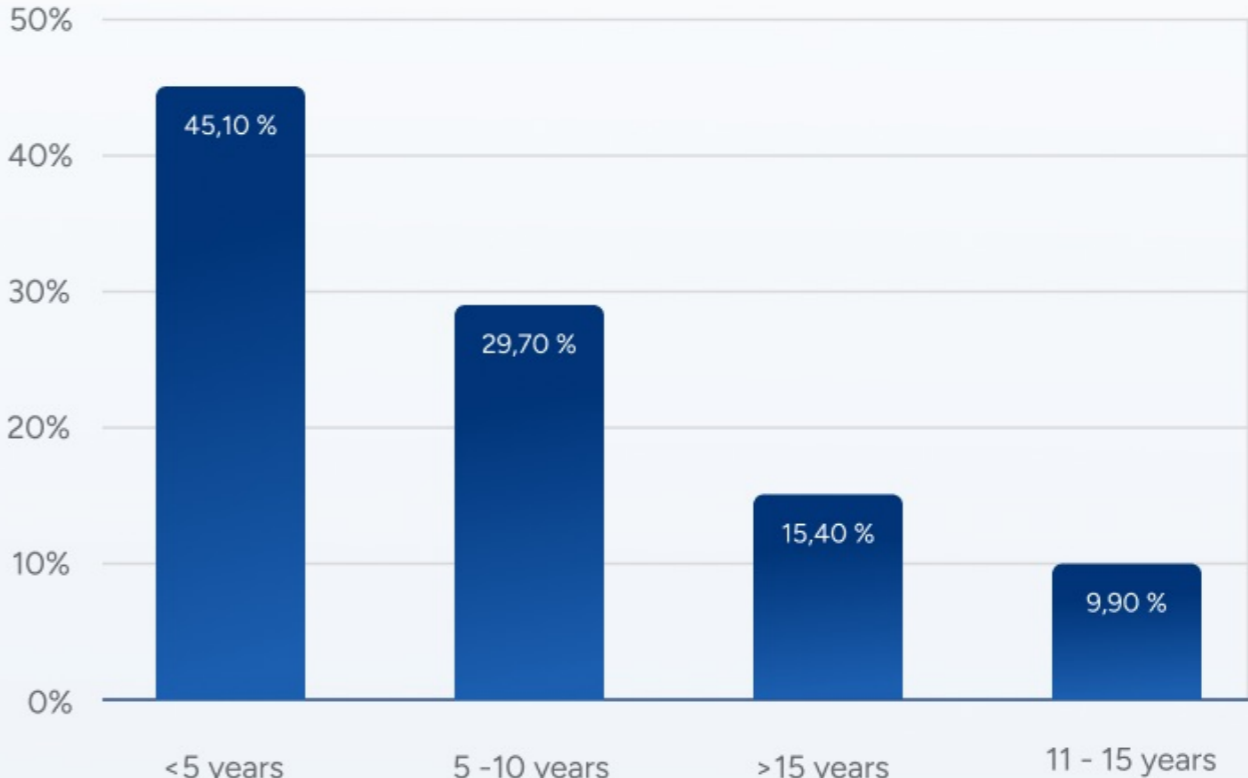
Other paths include project management (**36.3%**) and vice president of engineering roles (**26.4%**).

In terms of seniority, **45%** of CTOs have been in their role for **less than five years**, whereas **15.4%** have held the position for **more than fifteen years**, indicating a mix of fresh and experienced leaders shaping the future of technology.

What were your previous roles?



How many years have you spent in a CTO role?



Expert commentary

“What these survey results underscore is the increasingly wide range of different career paths followed by those now in the CTO role.

What's been noticeable in recent years is the growing % of those achieving CTO roles without having a strong technical or engineering background. This might be a reflection that other leadership roles have become more technical and therefore it's not such a transition as it might have been, but it could also confirm there's been a shift of emphasis for the development of technology leaders towards a more nuanced, soft skillset.

Competitive advantage for the modern CTO is no longer about being the smartest nor the most technical in the room — particularly when those technical skills are being increasingly automated — it's with those who



Andrew Weaver

CEO @ CTO ACADEMY

can develop a hybrid leadership skill set that includes strategy, communication and empathy.

When you analyse the key attributes of a successful technology leader, it's rarely about the tech.

02 Trends & technologies

Setting technology horizons:
Key trends for CTOs

Key technologies and methodologies shaping today's CTO strategies

Cloud Computing leads the way in modern technology infrastructure, with **83.5%** of CTOs considering it essential. **Agile (75.8%)** and **Continuous Integration/Continuous Delivery (71.4%)** methodologies emphasize flexible, efficient development, while the adoption of **DevOps (65.9%)** reflects the growing trend in integrating development and operations. CTOs are also prioritizing **microservices architecture (57.1%)** and **automated testing (53.8%)**.

AI-related technologies are gaining traction as well: **23.1%** of Machine Learning have adopted **Data** or **DataOps** to streamline machine learning and data operations, marking a shift toward more robust data management practices in AI development.

Which of the following have you implemented?



Expert commentary

“CTOs must maintain strategic oversight of software production now more than ever. As AI-written and AI-augmented code become integral to development, the complexity and pace of production increase exponentially. So CTOs and CIOs must regain ownership of software development and embrace new technology to remain in control: Only a fact based and data-driven view of the entire software production process can grant quality, efficiency, and alignment with business goals.

Marc Hildebrandt

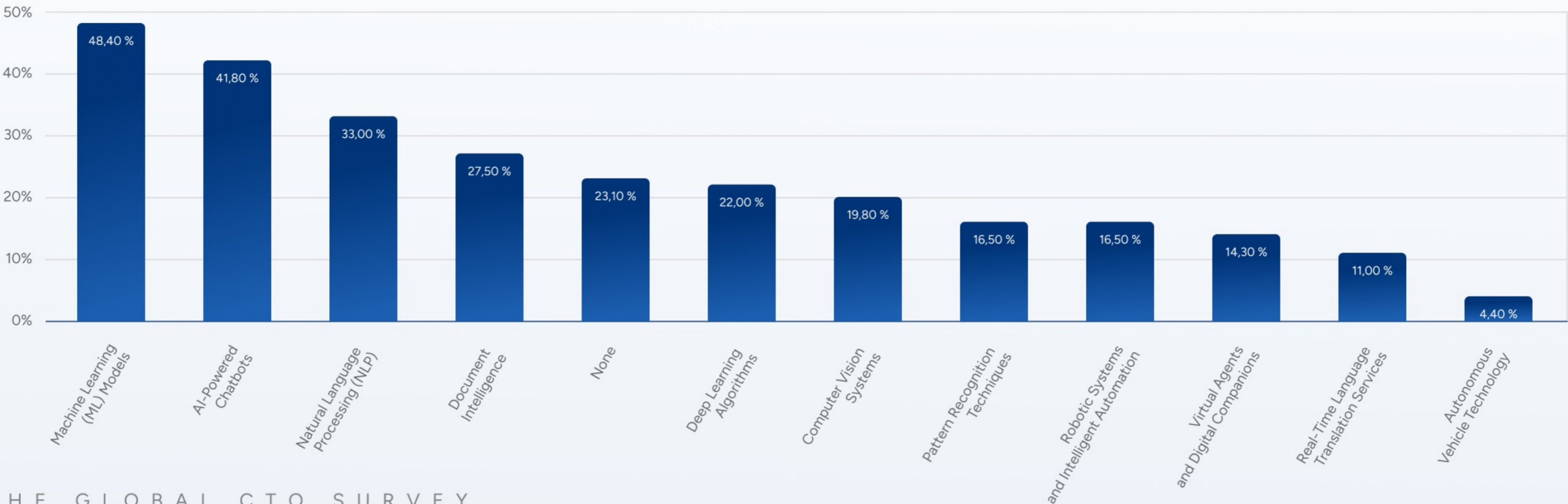
CEO AND FOUNDER OF GERMAN DEEP TECH GROUP



CTOs are prioritizing Machine Learning in AI strategies

Machine Learning has become a primary tool for CTOs, with **48.4%** of organizations implementing ML models to gain insights from data. **AI-based chatbots (41.8%)** and **Natural Language Processing (33%)** further highlight the focus on enhancing customer interactions and extracting insights from text. Advanced areas of Artificial Intelligence, such as **Computer Vision (19.8%)** and **Deep Learning (22%)**, indicate a continued pursuit of sophisticated applications, while growing interest in **Pattern Recognition and Robotics (16.5% each)** underscore the push toward automation. These choices reveal the key role of AI in CTOs' plans to drive innovation and gain competitive advantage.

Which AI technologies have you implemented?



ML and AI at the forefront of future technology trends

CTOs overwhelmingly identify **Machine Learning and advanced AI applications** as driving forces for the **next 2-4 years**, with **71.4%** anticipating an increased impact. This signals AI's essential role in shaping future innovation. **Large Language Models** rank at **63.7%**, highlighting expectations for automation and improved communication capabilities.

A focus on **Big Data Analytics (45.1%)** and **Cloud expansion (39.6%)** suggests a strategic shift toward scalable data-centric solutions. Together, these trends underscore a clear trajectory: CTOs are prioritizing Artificial Intelligence and Data technologies to build flexible, future-ready infrastructures, laying the ground for smarter, more connected digital ecosystems.

Which technologies and trends do you think will become much more prominent in the next 2-4 years?



Investment in Artificial Intelligence and talent varies by organization

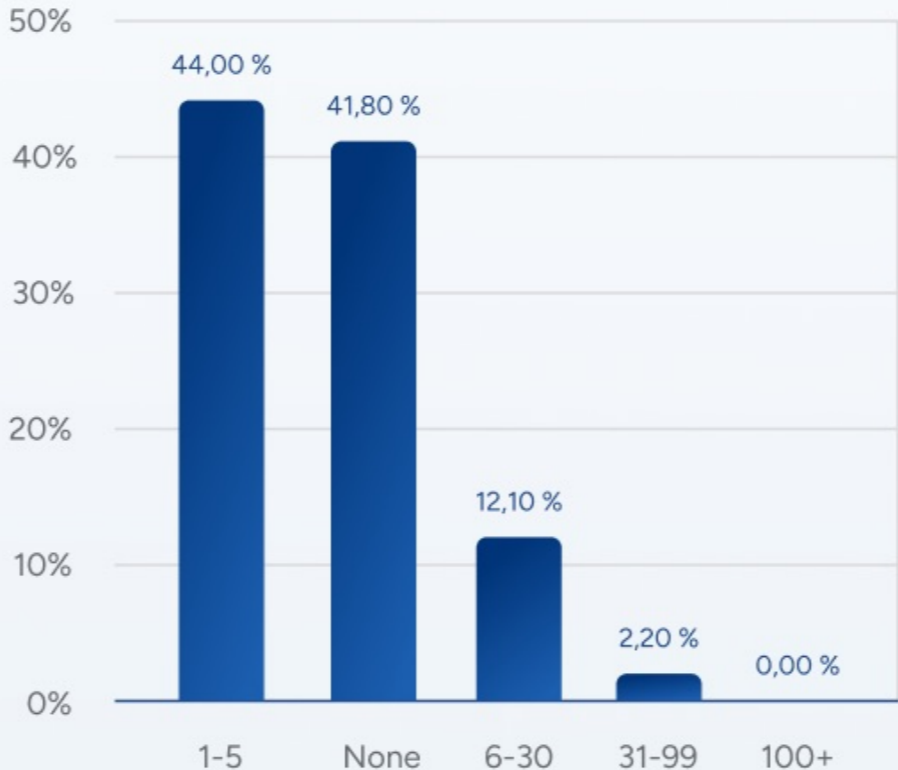
Organizations show varying levels of commitment to AI, with **44%** having small teams of **1-5 members** dedicated to AI/ML/Data Science, while **41.8%** have **no specialized staff at all**, indicating different stages of AI implementation. Talent acquisition remains a challenge for many companies: **59.3%** are not hiring, and 28.6% of those seeking talent face difficulty filling positions, reflecting the competitive labor market.

Budget allocation also varies, as **36.3%** of companies have **no specific budget for AI**. Among those that do, **19.8%** allocate less than 5% of their technology budget to AI, and only **6.6%** invest more than 30%, highlighting the different levels of financial commitment to AI development.

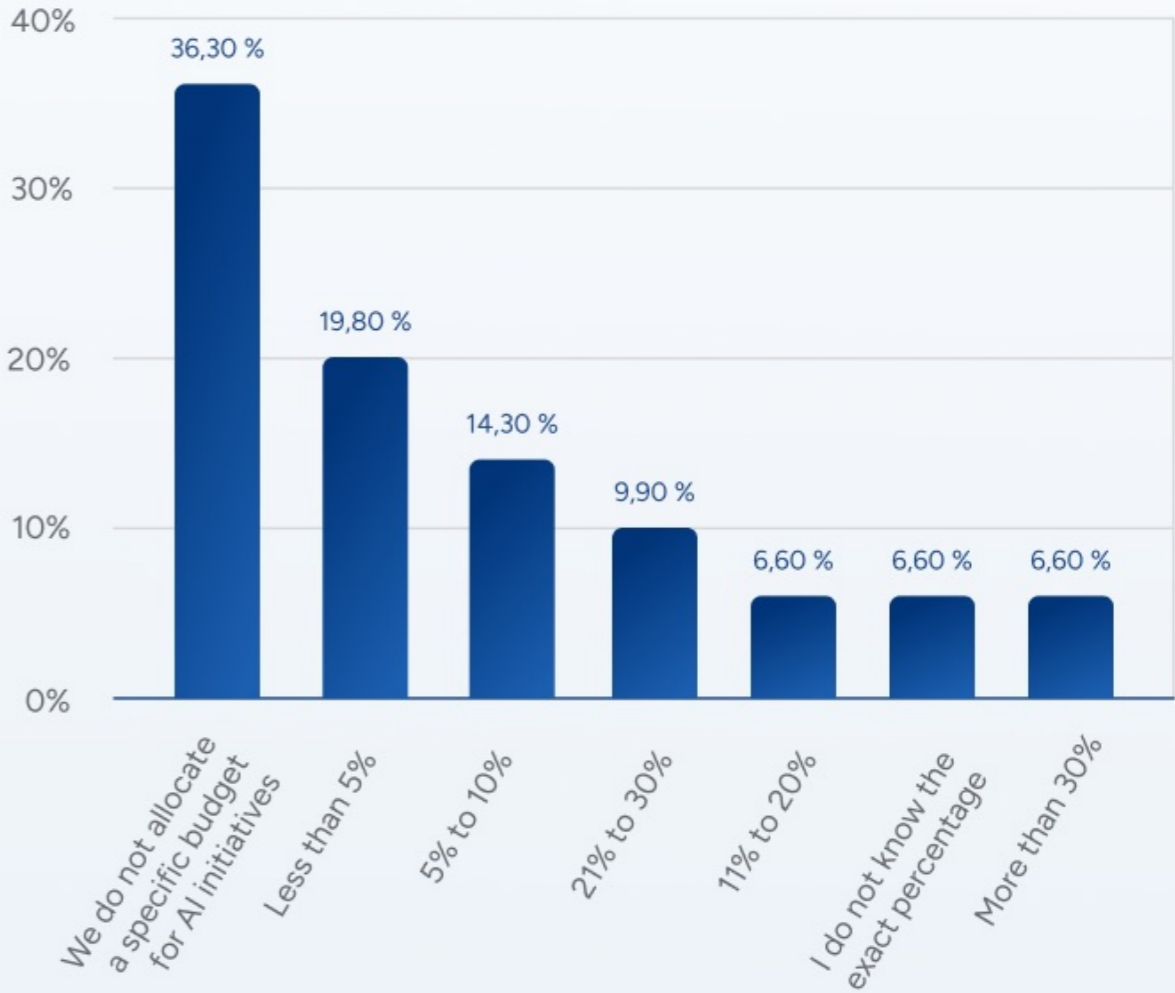
Do you face difficulties when hiring AI talents for your organization?



How many team members do you have in a dedicated AI / ML / Data Science role?



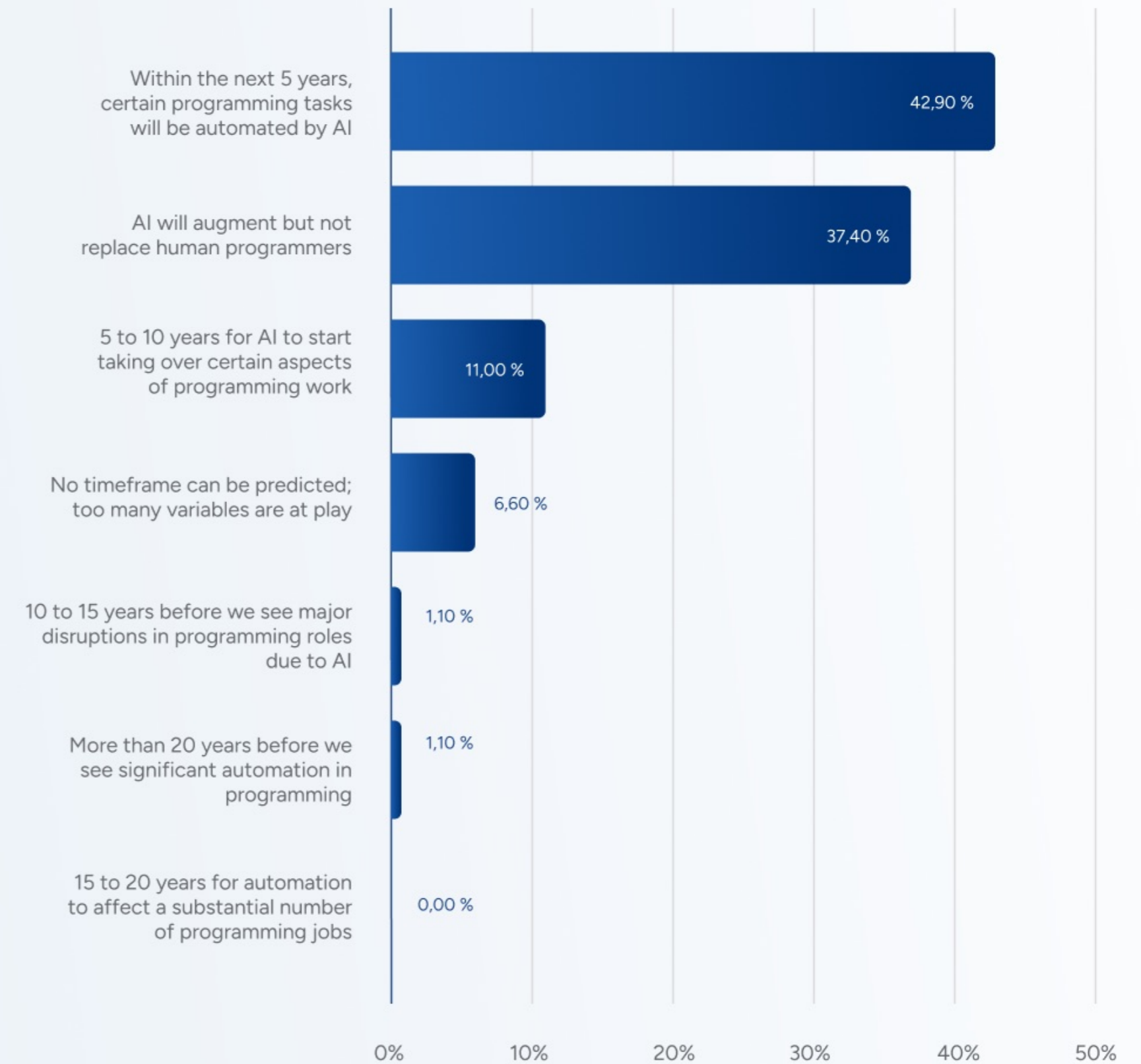
What percentage of your company's overall technology budget is allocated to AI initiatives and development?



The future of programming in an AI-driven world

As Artificial Intelligence evolves, industry leaders predict a radical shift in the programming landscape. **43%** foresee AI automating programming tasks within the **next 5 years**, signaling a transformational leap toward more efficient, machine-based development. A significant **37.4%**, however, believe that AI **will assist rather than replace human programmers** - suggesting a future where collaboration between human creativity and AI precision will drive innovation. While **11%** of respondents believe the impact of Artificial Intelligence will extend over the next 5 to 10 years, and **6.6%** remain uncertain due to the complexity of its evolution, the consensus is clear: AI will change programmers work, but the full scope of this transformation remains an exciting, unpredictable frontier.

Considering the pace at which AI is advancing, what is your estimated timeline for AI to begin significantly automating programming tasks, or potentially replacing programmer positions within your sector?



Expert commentary

“The main challenge for CTOs in the coming period will be reasonable approaches to the development of AI-based solutions. The basis will be a rational, benefit-driven approach to individual projects in this area, as well as a sensible consideration of budgets and operational efficiency, as well as external regulations. It seems that many companies will seriously consider implementing AI solutions in an on-premises or hybrid model, which in the long run can bring numerous benefits, even financially.”

Tomasz Mirowski

CTO AT 3SOFT



Ethical challenges of implementing AI

As AI becomes a more integral part of business operations, organizations are increasingly prioritizing ethical issues in their Artificial Intelligence systems. **38.5%** are focusing on **transparency**, while **36.3%** are adopting an **ethical framework** to guide their implementations, ensuring responsible use of AI. Continuous monitoring and compliance (**35.2%**) are key to mitigating risk and maintaining integrity. Ethics training programs (**29.7%**) and bias detection protocols (**27.5%**) reflect a proactive approach to combating bias. However, **22%** of organizations have not yet implemented **any specific measures**, revealing potential gaps in their ethical AI strategies.

Efforts like **stakeholder engagement (22%)**, **independent audits (21%)**, and **diverse team input (20%)** reflect a growing recognition of the importance of accountability and inclusivity in AI's future. As AI evolves, companies that integrate ethics at the core will lead the way in fostering trust and sustainable innovation.

How do you handle the ethical considerations involved in the deployment of AI systems, and what processes are in place to address potential biases or unfair treatment of specific demographics?



Overcoming budget constraints in implementing Artificial Intelligence

Budget constraints (22%) are the biggest obstacle to adopting AI, followed by **ethical and legal issues (16.5%)** and **talent shortages (15.4%)**. Further challenges include resistance to change (14.3%), technical complexity (9.9%) and uncertainty of return on investment (7.7%). While data management (5.5%) and security risks (3.3%) are additional obstacles, the key to overcoming these barriers is to turn constraints into opportunities. Focusing on AI projects with clear ROI, upskilling existing talent and adopting agile change management can help organizations overcome these challenges and pave the way for sustained AI success.

What do you perceive to be the primary obstacle hindering the wider adoption of AI technology?



Expert commentary

“The survey highlights AI’s growing dominance, with 71% of CTOs prioritizing Machine Learning in the next 2-4 years. As companies embark on their AI transformation journeys, it is crucial to define the nature and depth of this transformation. Will AI merely enhance peripheral processes, leaving the core business intact? Or will it profoundly reshape the core, making AI-driven development a key component of the company’s intellectual property? In some cases, the disruptive potential of AI may necessitate launching R&D initiatives or acquiring startups already advancing in this space. The strategic direction taken will determine not only the impact of AI but also the organization’s long-term competitive edge.

Bartek Roszak

HEAD OF AI AT STX NEXT



03 Security

How CTOs manage risk and safeguard data and IP

Expert commentary

This year's STX Next CTO Survey highlights key trends we observe with clients:

- The majority of CTOs outsourcing security reflects the need for specialized expertise amid growing threats.
- Many organizations reported no attacks in 2024, indicating effective border controls. It's worth exploring how attempted attacks are being mitigated.
- Streamlined processes and employee training are vital. Technology has advanced, but people remain the weakest link. Phishing simulations, like those we've conducted internally, are invaluable for uncovering vulnerabilities.

Looking ahead, AI will reshape security as criminals exploit AI tools for sophisticated attacks. Organizations must adopt AI-driven detection systems and prioritize continuous



Krzysztof Olejniczak

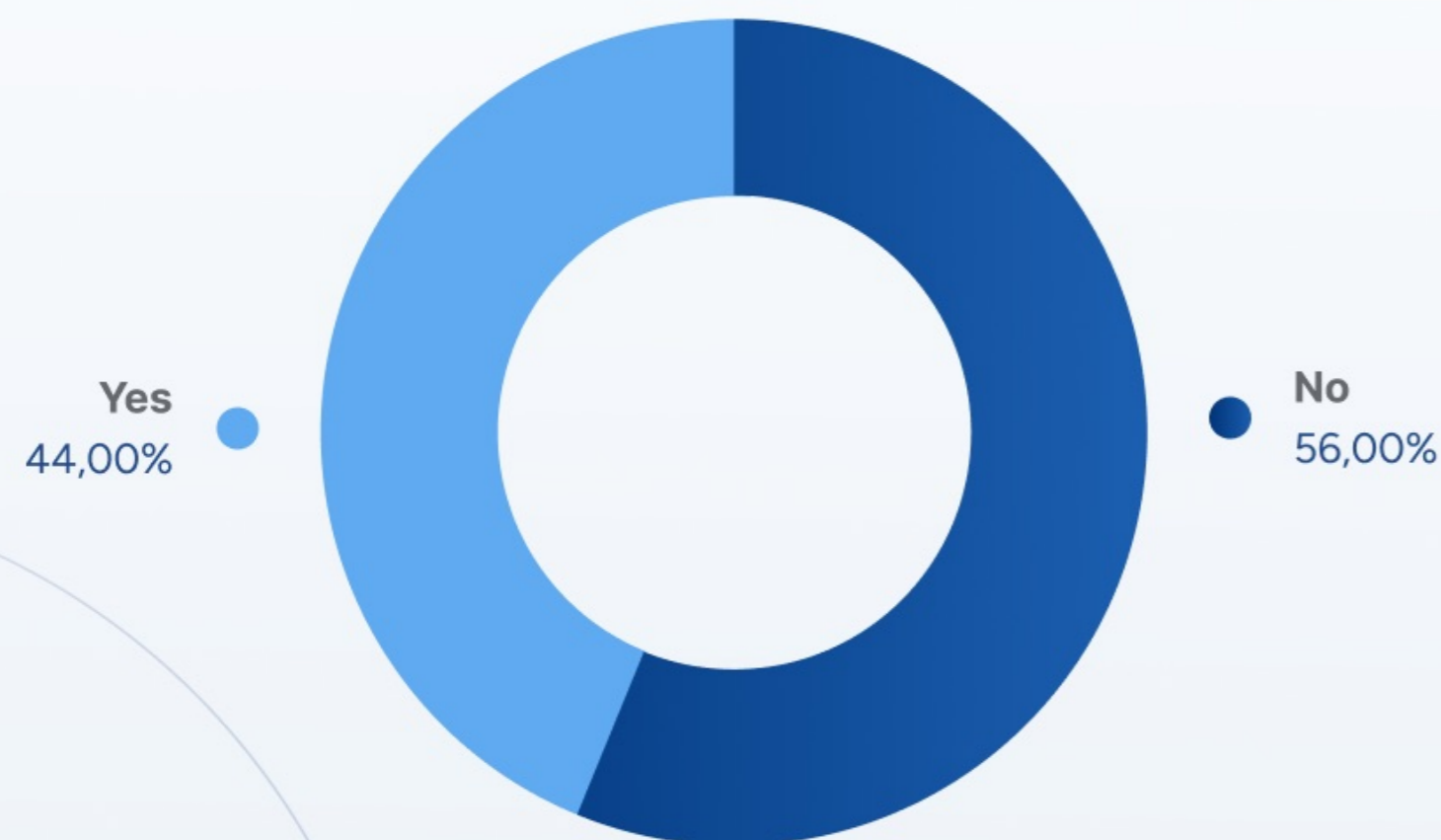
CISO AT STX NEXT

training to stay ahead of evolving threats. Technology is essential, but awareness and preparedness are equally critical.

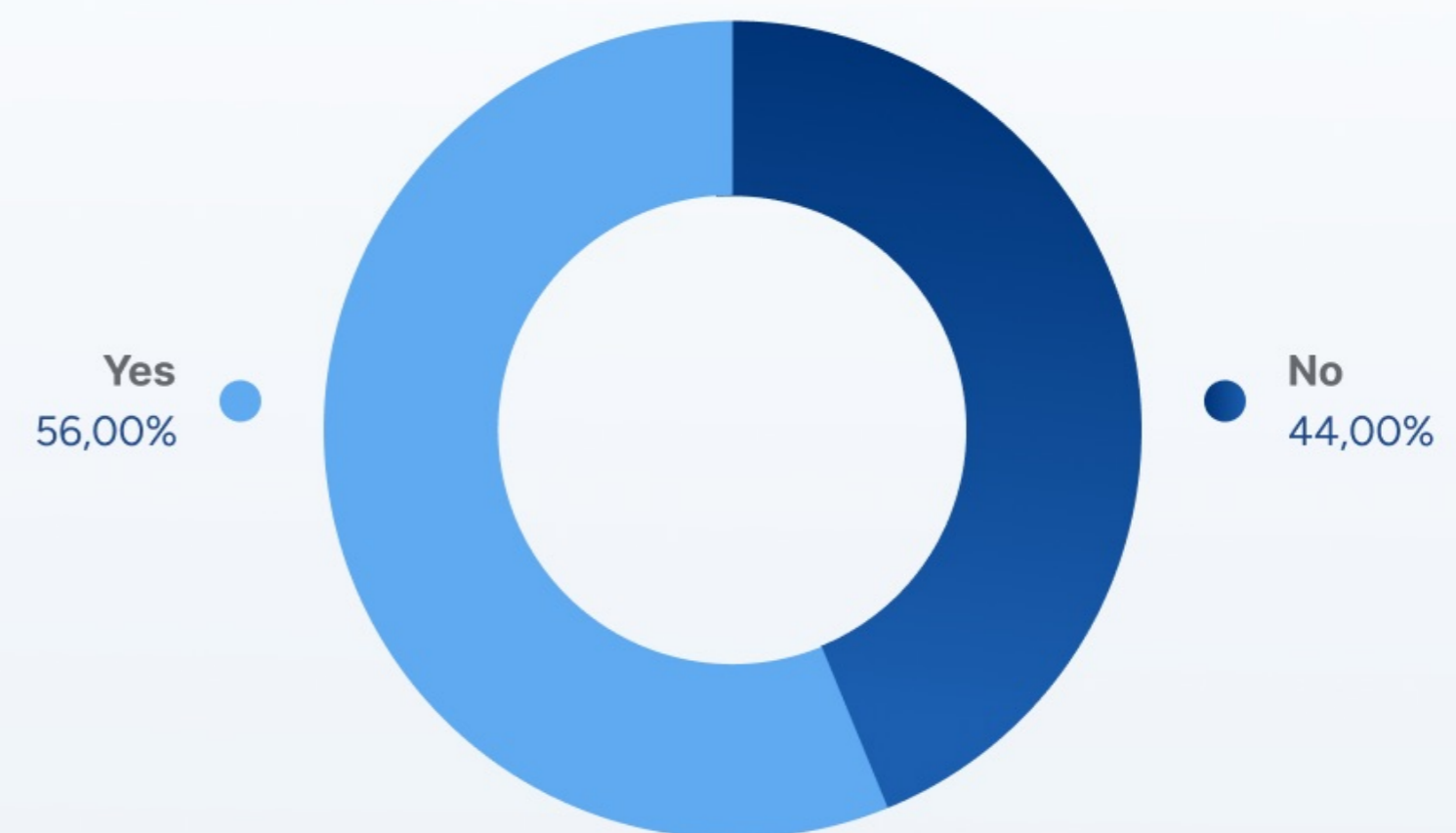
Balancing internal and external security resources

In terms of security, **44%** of organizations rely on dedicated internal teams, while **56%** turn to external vendors, indicating a clear trend toward outsourcing. This varied approach reflects the balance organizations are striving for between internal capabilities and external expertise to enhance cybersecurity. The growing reliance on external support underscores the growing need for specialized resources in a complex security environment.

Do you have a dedicated team or department providing security services in your organization?



Are you using the services of external specialized companies for security and cybersecurity?



Prevalence of cyberattacks among organizations

Over the past year, **12.5%** of organizations reported being victims of cyberattacks, highlighting the continuing threat posed by cyber criminals. On the other hand, **87.5%** remained free from attacks, which may reflect either effective security measures or sheer luck. These figures underscore the critical need for robust cybersecurity strategies to protect organizational assets and mitigate ever-present threats.

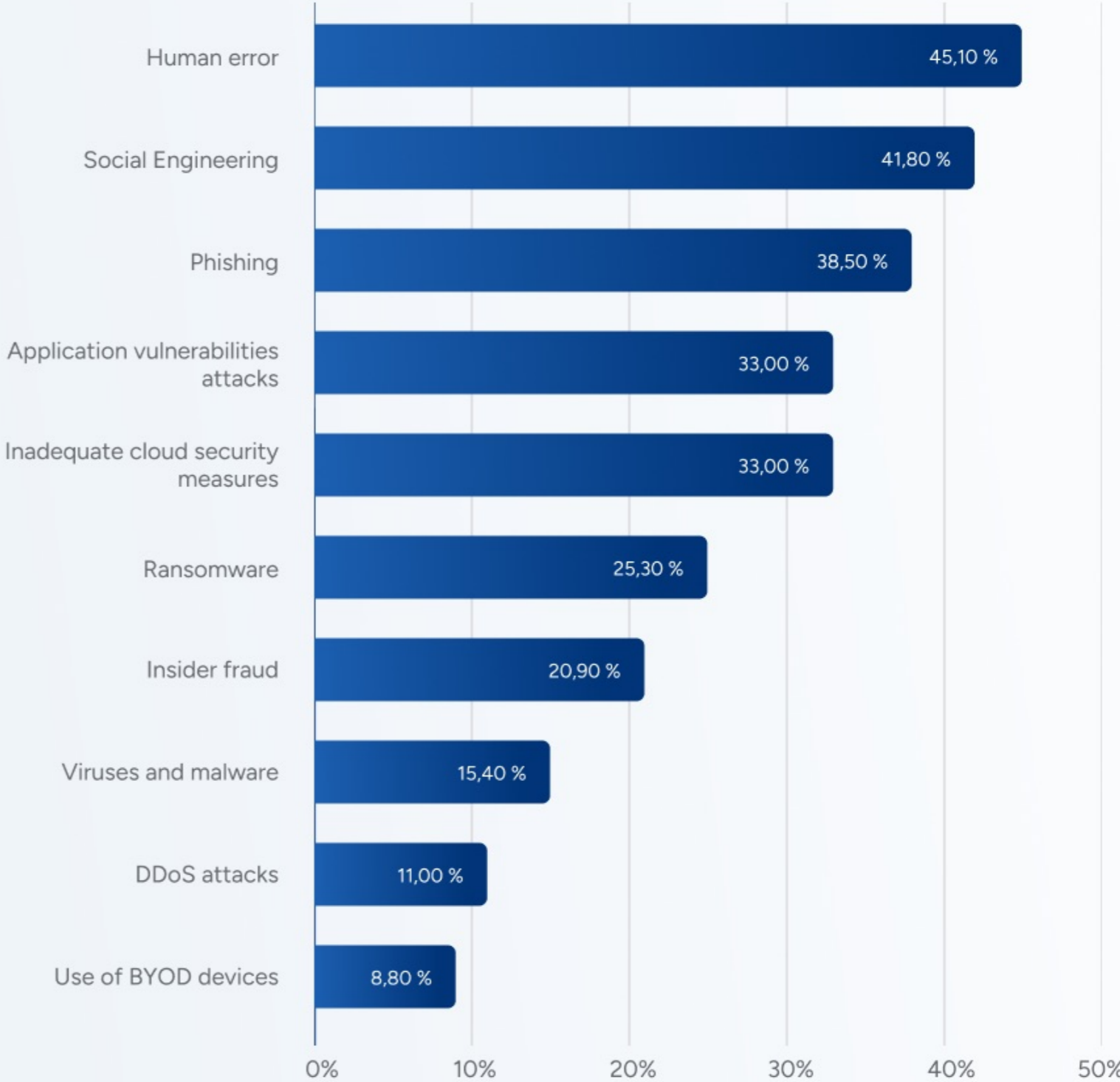
Did your organization fall victim to a cyberattack within the last 12 months?



Identifying major cybersecurity threats

Human error is regarded as the biggest threat to cybersecurity, with **45.1%** of organizations identifying it as a top concern, underscoring the importance of employee training and awareness. **Social engineering (41.8%)** and **phishing (38.5%)** follow closely behind, highlighting the ongoing risk of manipulation and fraud. Application vulnerabilities and weak Cloud security (**33%**) signal critical technical threats that require constant vigilance. Ransomware poses a threat to **25.3%**, while insider fraud (**20.9%**), viruses and malware (**15.4%**) and Distributed Denial-of-Service (DDoS) attacks (**11%**) further expand the threat landscape. The use of Bring Your Own Device (BYOD) (**8.8%**) also remains a significant concern, reflecting the wide array of cybersecurity challenges facing organizations.

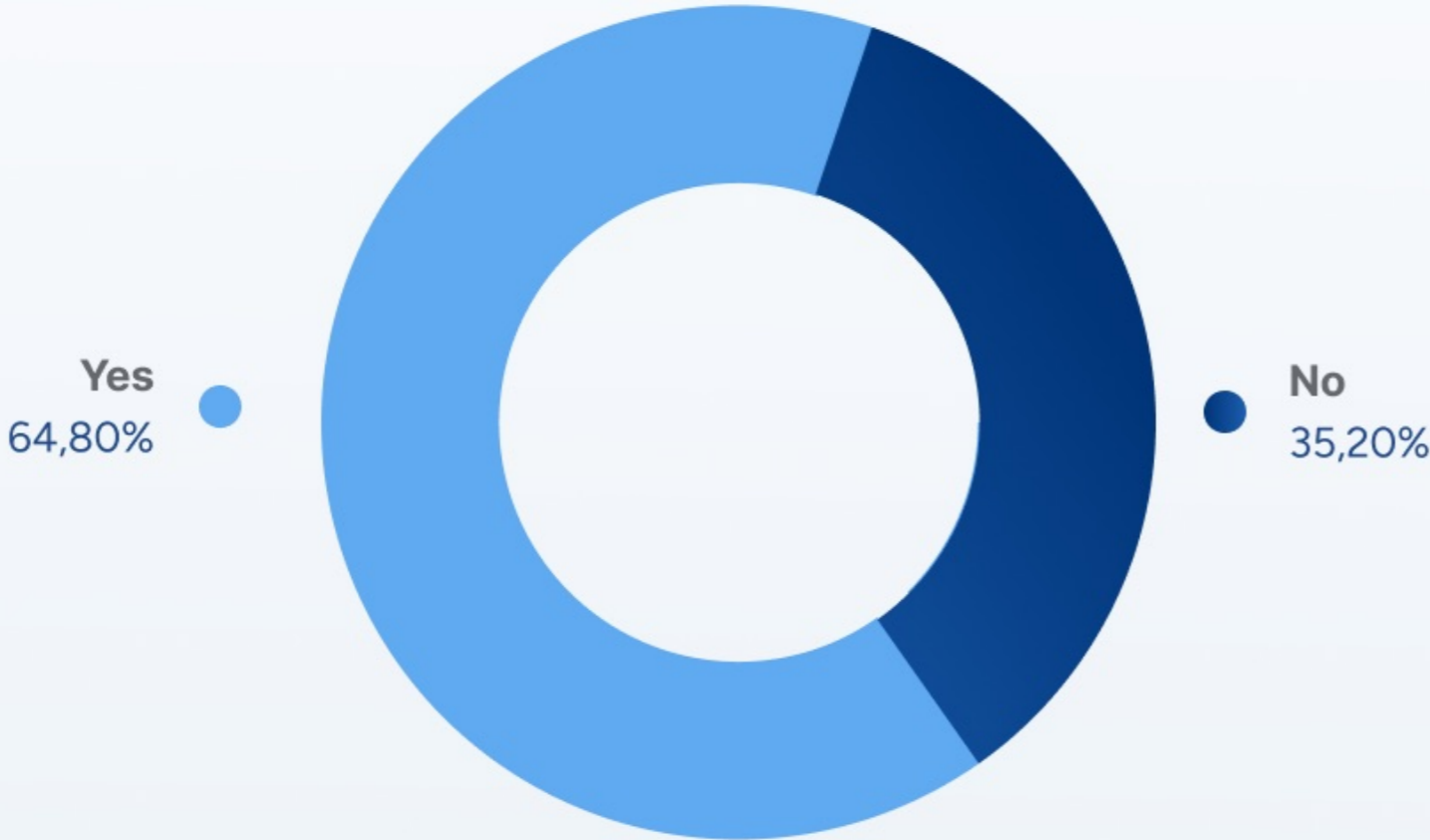
Which of the following do you consider the biggest cybersecurity threats?



Emphasizing cybersecurity training in the workplace

With **64.8%** of companies offering mandatory cybersecurity training, the vast majority understand the importance of equipping employees with the knowledge to defend against **human error** and **social engineering** tactics. This proactive approach helps close security gaps and enables teams to detect and respond to potential threats effectively. However, **35.2%** of organizations that do not prioritize such training risk their employees being ill-prepared for emerging cyberthreats. This underscores the importance of ongoing, up-to-date education in supporting a culture of safety, transforming employees into the first line of defense against evolving threats.

Does your company provide employees with mandatory cybersecurity training?



Expert commentary

“Distributed teams and infrastructures demand a shift to a zero-trust model, ensuring all access requests are authenticated and monitored to reduce risks. Integrating DevSecOps into development processes embeds security early, preventing vulnerabilities and saving time. Continuous security training is vital, as informed employees are the first line of defense. Compliance with evolving regulations not only avoids penalties but also strengthens customer trust, a key asset in today's data-driven world.

Remigiusz Szczepanik

CTO AT HOSTERSI



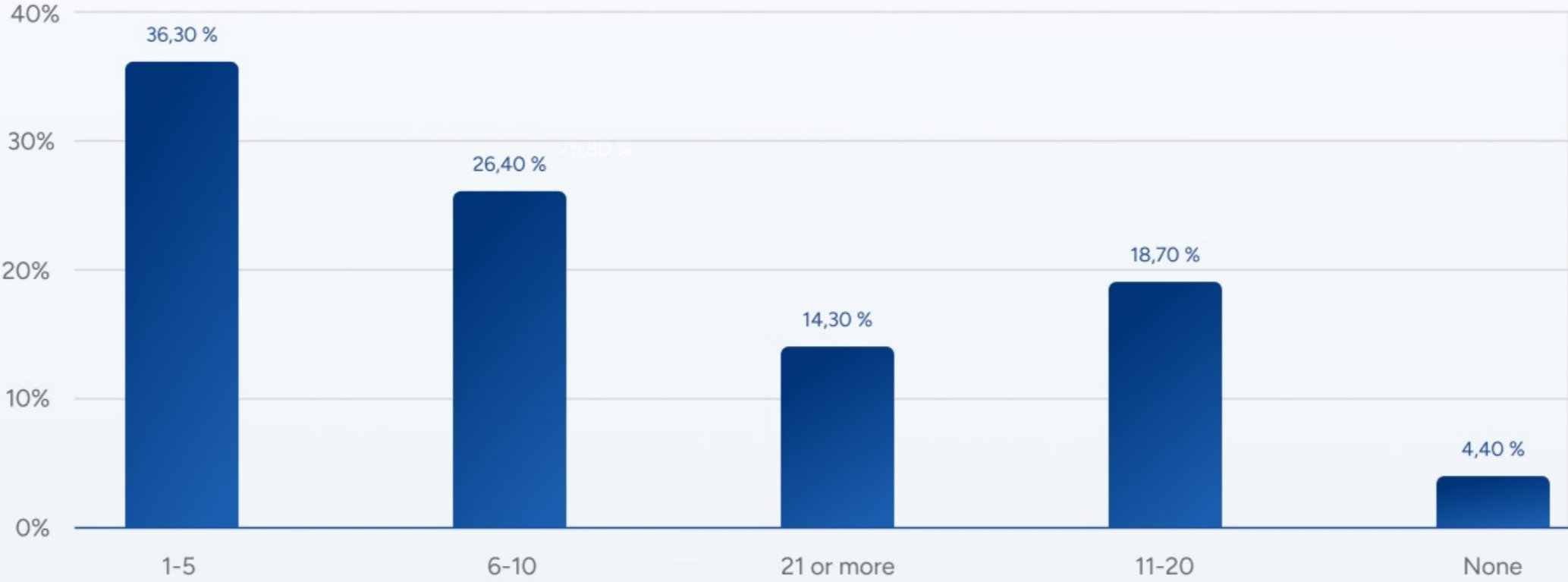
04 Management and leadership

The CTO's impact on team
performance and success

Mastering team dynamics: Key insights (Part 1/2)

In today's dynamic work environment, strong team leadership is essential. Most leaders manage smaller teams, with **36.3%** overseeing **1-5 direct reports** and **26.4%** managing **6-10**, emphasizing agile, compact structures. Performance appraisals, while often based on **periodic reviews (65.9%)**, are shifting toward outcome-focused metrics: nearly half prioritize **value delivered (48.4%)** and **key performance indicators (45.1%)** as impact measures.

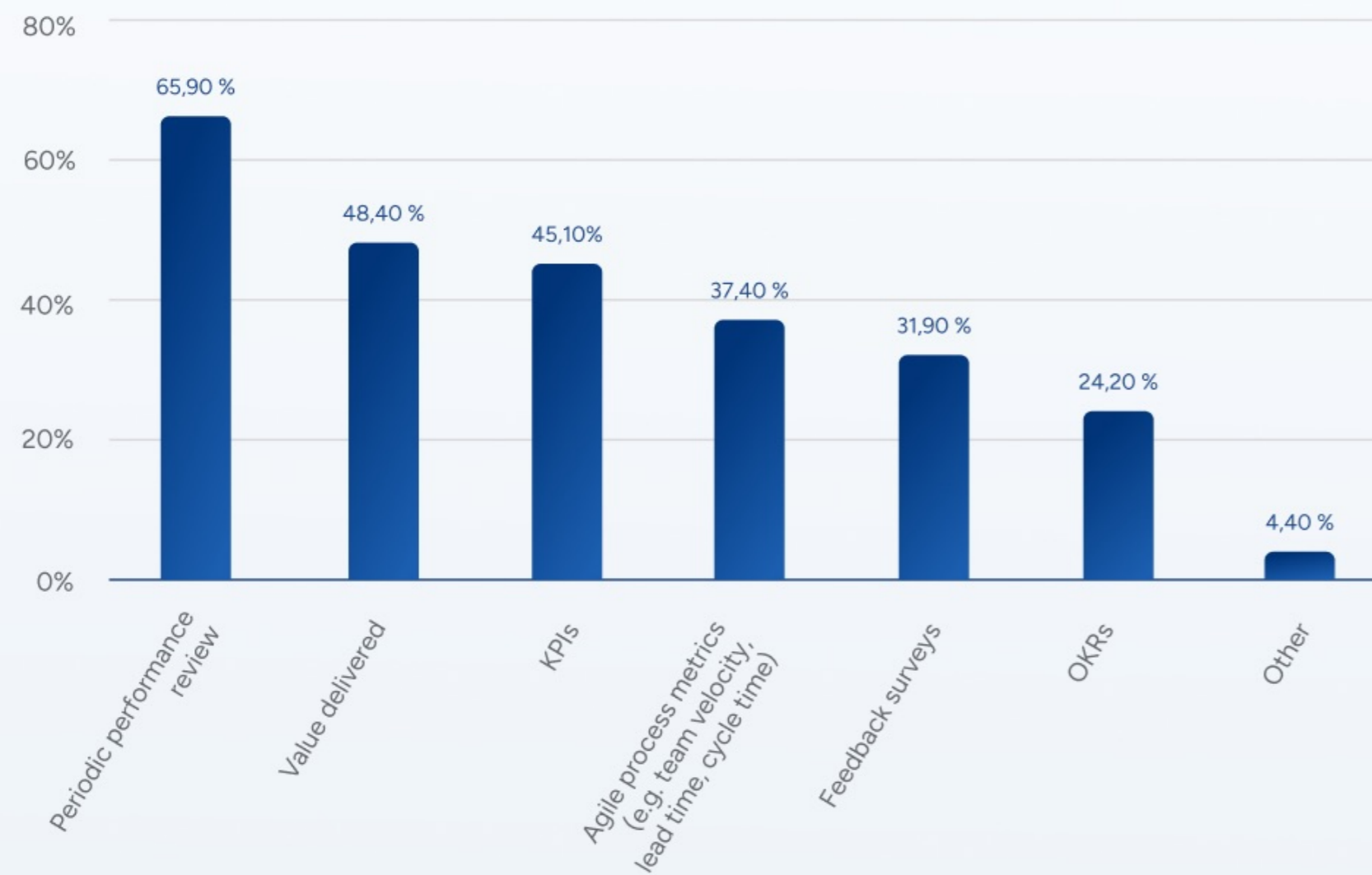
How many people report directly to you?



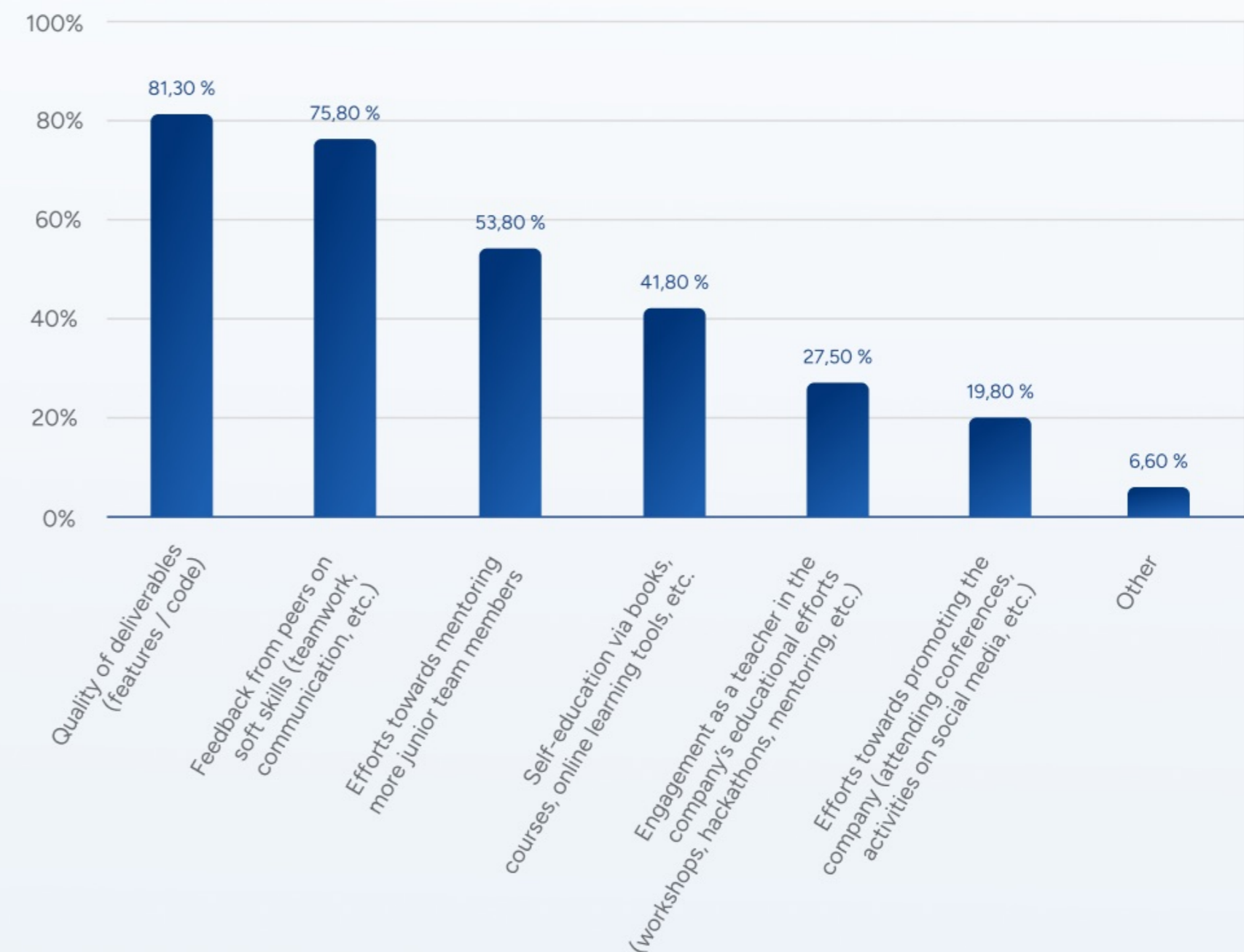
Mastering team dynamics: Key insights (Part 2/2)

Individual assessments focus on **quality of performance (81.3%)** and **soft skills (75.8%)**, emphasizing the importance of collaboration. Leaders also promote **mentoring (53.8%)** and **self-learning (41.8%)**, cultivating an environment of continuous development that strengthens both team performance and adaptability in a changing workplace.

How do you measure your teams' performance?



When you measure the performance of your team members, which of the following influence your assessment?



Balancing success metrics with employee motivation

Organizations view **employee satisfaction (50.5%)** and **customer engagement (49.5%)** as key indicators of success, alongside **value delivery (41.8%)** and **profitability (38.5%)**. Effective motivational strategies prioritize supportive, **transparent management (72.5%)**, **empowerment in decision-making (69.2%)** and **development opportunities (62.6%)**.

Regular team engagement (52.7%) and alignment of individual goals (33%) with company goals further enhance productivity and motivation, supporting an engaged and thriving workforce. This approach reveals a shift toward holistic success metrics, recognizing that the well-being of employees and customers fuels long-term organizational growth.

What metrics do you use to measure your organization's success?



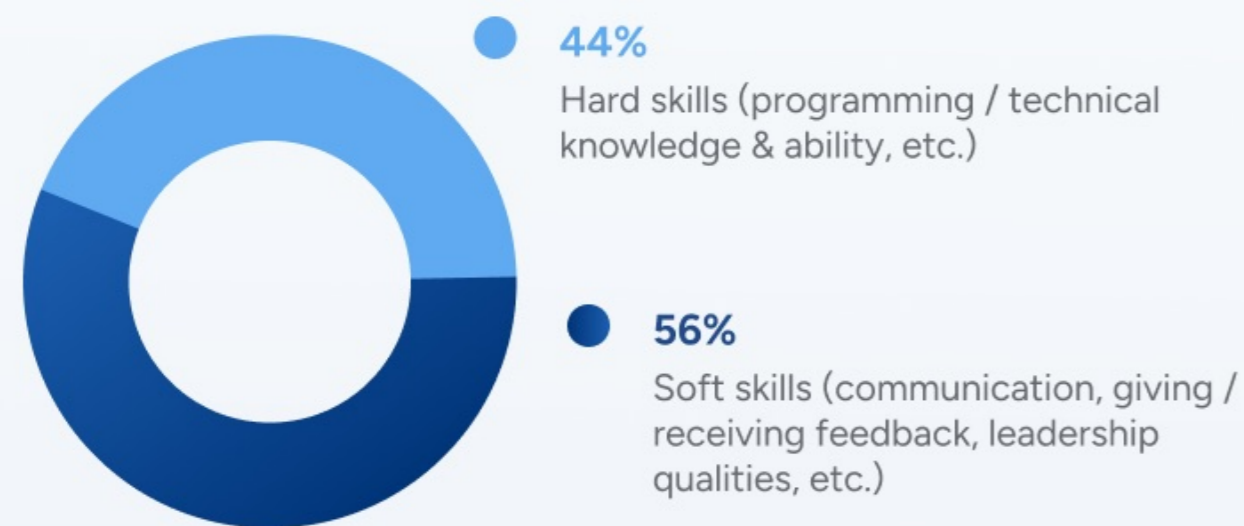
How do you keep your staff motivated?



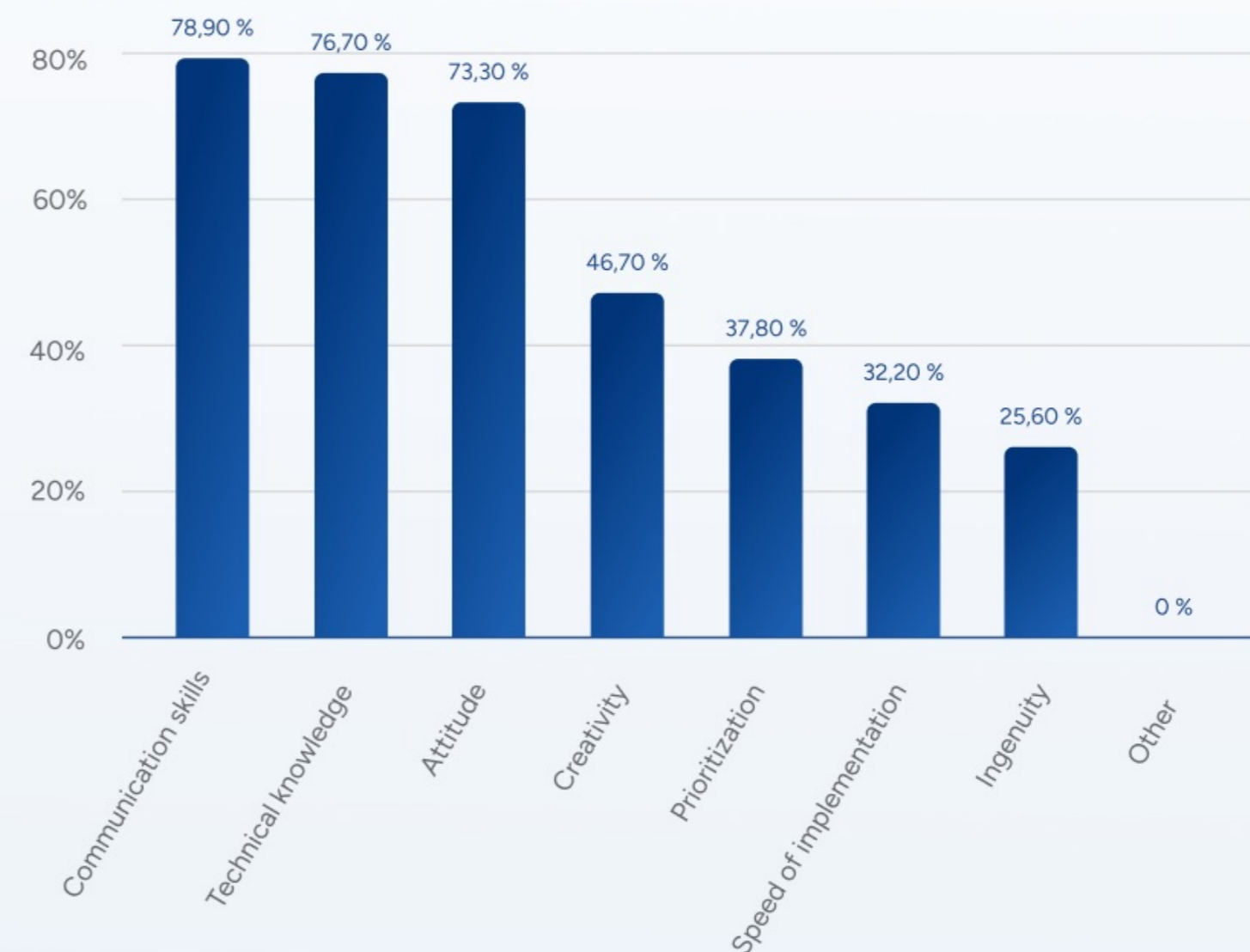
Key skills affecting team development

Soft skills, particularly **communication and leadership**, are prioritized by **56%** of organizations, highlighting their key role in team development. **Communication skills** are seen as essential by **78.9%**, with **technical knowledge** just behind (**76.7%**). **Attitude (73.3%)** and **creativity (46.7%)** are also valued, reflecting a balanced approach that combines interpersonal strengths with technical proficiency to foster versatile and resilient teams. This blend of skills suggests that organizations increasingly value adaptability and innovation as core drivers of team success and longevity.

When you're growing your team members, which skills are the most important?



What skills do you deem most important for your team members' growth?



Expert commentary

“CTOs mention employee satisfaction as the most important metric for their organization's success. This underscores the importance of developer experience for IT companies. It is paramount to provide developers with tools they like to use, and which enable them to use their time efficiently. This is reflected in the fast adoption of AI coding assistants by many software developers, as well as the surge in popularity of other enabling technologies like cloud development environments (CDEs) and internal developer platforms (IDPs).

Margot Mückstein

CEO & CO-FOUNDER OF CLOUDOMATION



Expert commentary

“Organizations are successful when they align employee satisfaction, customer engagement, and value delivery. Involving customers deeply in the journey and focusing on what truly matters to them ensures not just short-term profitability but long-term growth. When employees feel empowered and valued, and customers see their needs reflected in the outcomes, organizations thrive.

Eric Naiburg

COO, SCRUM.ORG



05 Hiring

How CTOs identify talent and the skills they prioritize

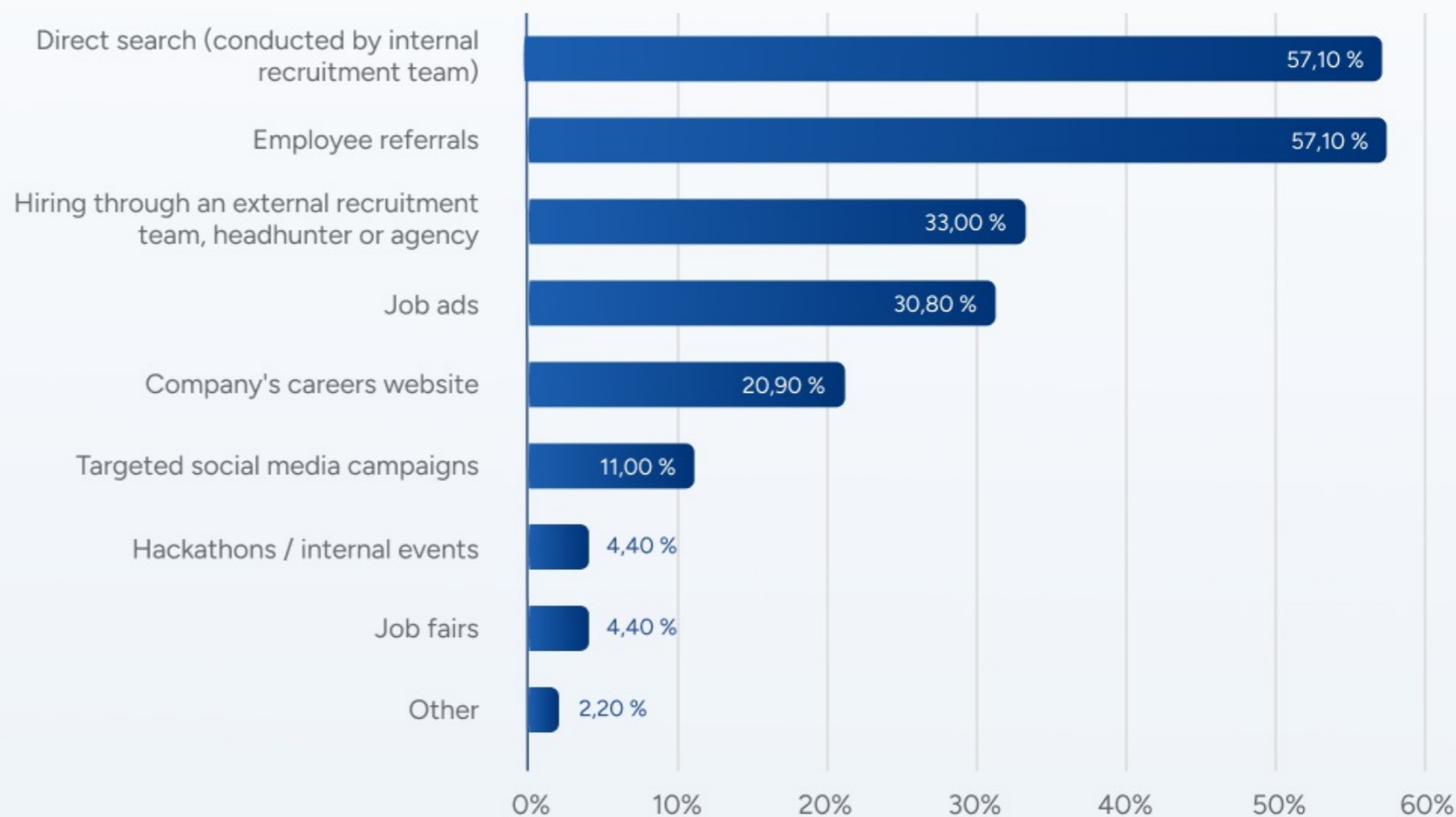
Top priorities for hiring criteria and recruitment strategies

Organizations place equal importance on **cultural fit** and **technical skills (79.1%)** as key recruitment criteria. Relevant **framework knowledge (44%)** and years of **experience (31.9%)** also play significant roles in hiring decisions. In terms of talent acquisition, direct searches and **employee referrals** account for **57.1%**, indicating a preference for internal networks over external channels such as **recruitment agencies (33%)** or **job ads (30.8%)**. By prioritizing trusted networks, organizations aim to find candidates who not only possess the right skills but also align well with the company culture.

What are your most important hiring criteria?



What's your most efficient method to hire talent?



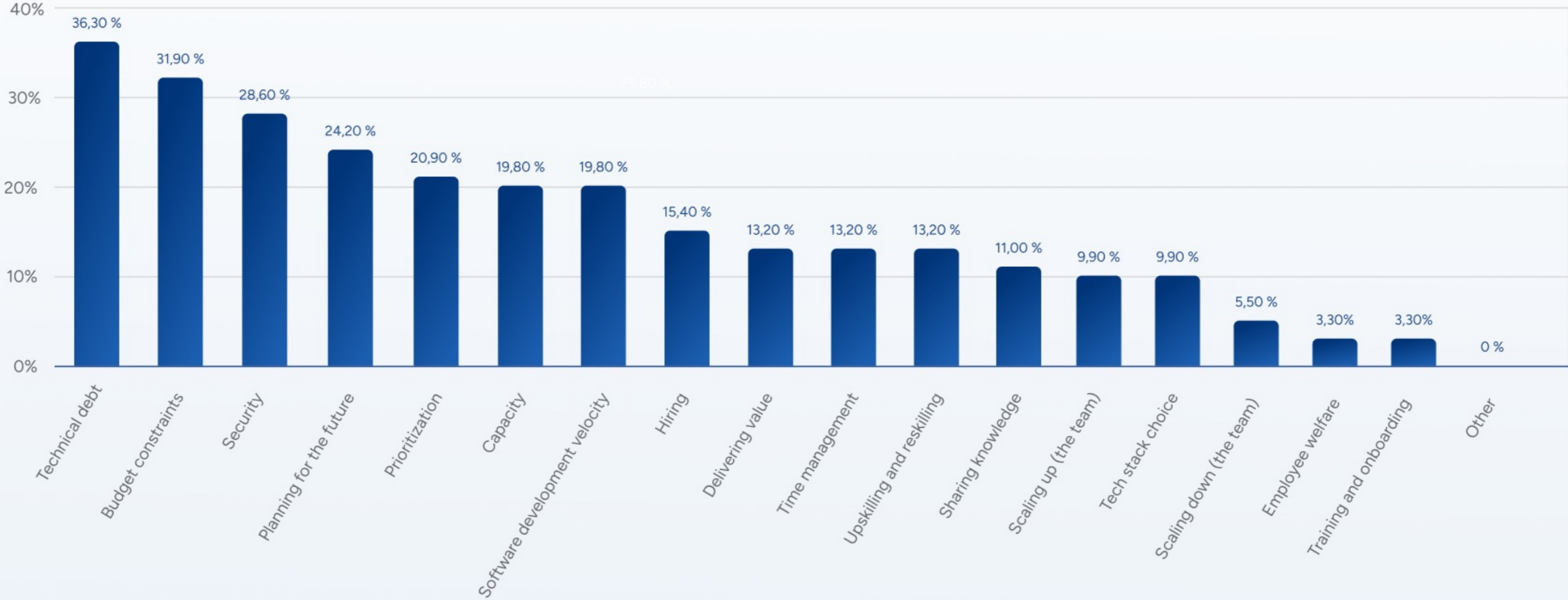
06 Challenges

What challenges are CTOs striving to overcome?

Overcoming barriers to growth in today's business landscape

Many companies face key challenges, with **technical debt (36.3%)** and **budget constraints (31.9%)** leading the list. **Security concerns** impact **28.6%**, while **24.2%** struggle with **long-term planning**. Additional obstacles include prioritization (20.9%), efficiency and speed of development (19.8%), as well as hiring (15.4%) and delivering value (13.2%). These challenges highlight the need for businesses to balance immediate problem-solving with laying the groundwork for sustainable, long-term growth.

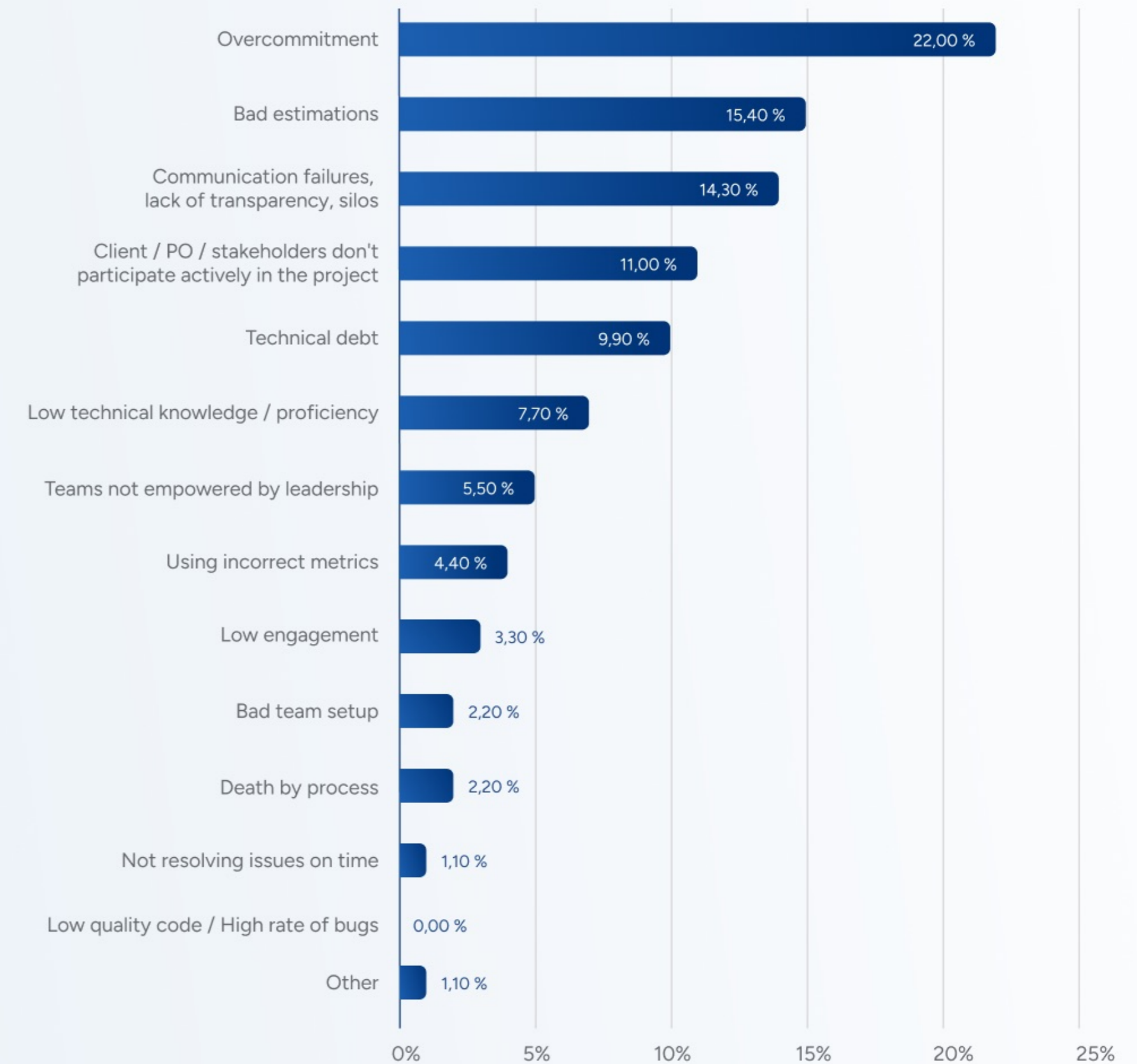
What are your biggest challenges right now?



Main causes of delivery problems in teams

Overcommitment tops the list of delivery challenges, affecting **22%** of teams, followed by **poor estimates** at **15.4%**, indicating issues with planning and forecasting. **Communication breakdowns** and **lack of transparency**, cited by **14.3%**, highlight the challenges of siloed work environments. Other factors, such as insufficient stakeholder engagement (11%), technical debt (9.9%) and low levels of technical expertise (7.7%), further hinder successful project implementation. These findings underscore the importance of realistic planning, effective communication and strong stakeholder engagement to overcome typical obstacles to project implementation.

What is the #1 cause of delivery problems for your team?



Expert commentary

Technical debt is seen as a challenge for a plurality of CTOs (36,3%), yet far fewer (9,9%) mention it as a cause for delivery problems in teams. This shows that technical debt is often seen as a problem in itself, even if it does not cause immediate delivery problems.

The CTOs answering the survey look like a fairly people-focused bunch. Employee satisfaction is mentioned as the most important success metric, culture fit is declared the most important factor when hiring, and only very few (15,4%) mention hiring as a challenge.

Margot Mückstein

CEO & CO-FOUNDER OF CLOUDOMATION



Expert commentary

Efficiency in software production is a requisite because speed-to-market dictates competitive advantage. Every delay and every misstep in prioritization compounds into lost opportunities. Companies that fail to optimize their software production processes are effectively handicapping their ability to innovate, scale, and compete. I see more and more CTOs and CIOs viewing efficiency as a core deliverable of the organization — one that demands the same level of rigor as any customer-facing product. Software development must embrace data-driven continuous improvement to thrive.

Dr. Johannes Bohnet

CEO AND FOUNDER OF SEERENE



07 Self- development

A look at CTOs' growth and areas
of improvement

Educating technology professionals: A snapshot of diversity and specialization

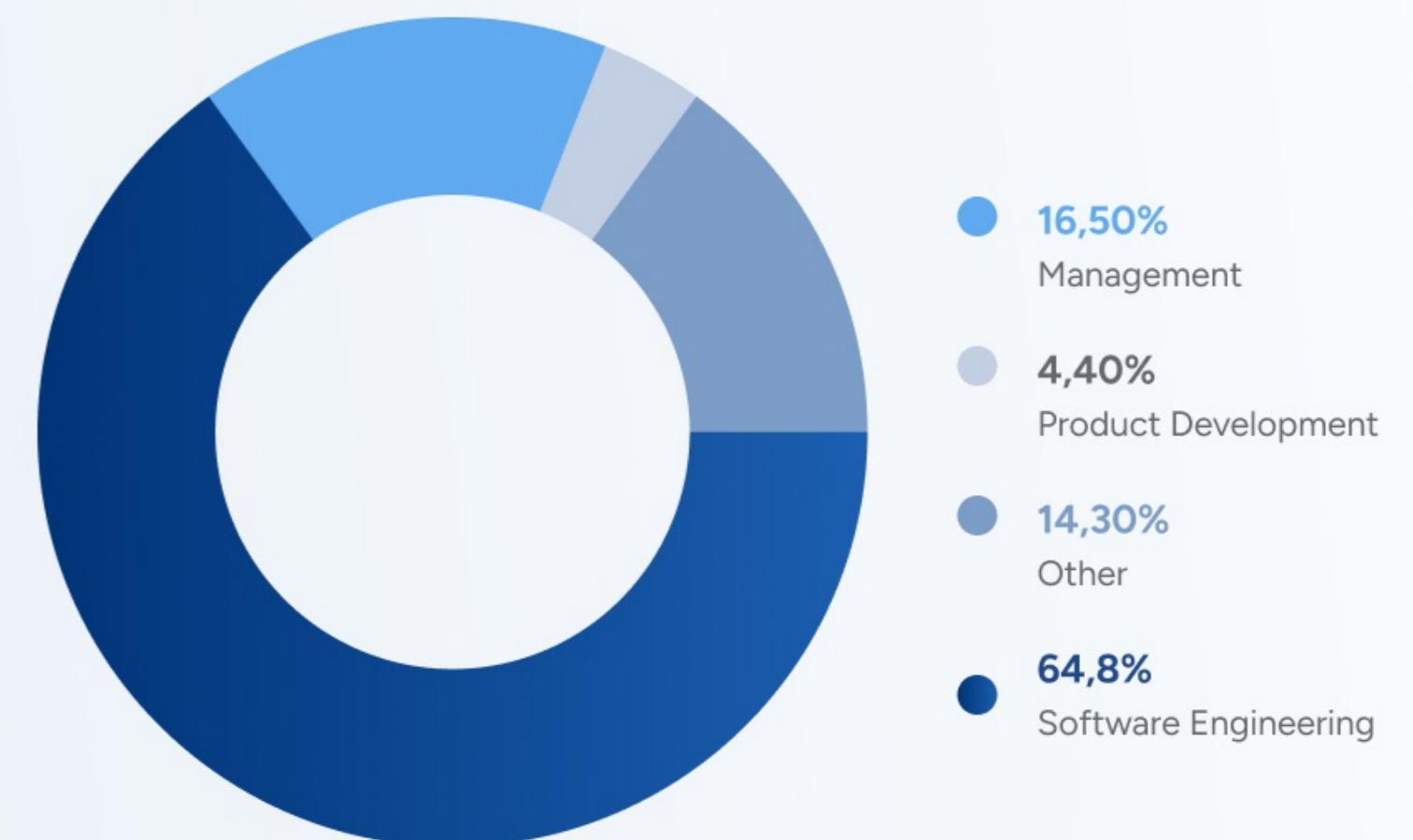
The tech workforce is shaped by a diverse range of educational backgrounds. Most professionals hold a **Master of Science (34.1%)** or **Bachelor of Science (28.6%)**, demonstrating a solid technical foundation. A smaller percentage have pursued a **Master of Arts (12.1%)** or **Bachelor of Arts (7.7%)** degrees, with a notable **6.6%** achieving a **PhD** degree. Additionally, 11% of professionals come from other educational backgrounds, highlighting the varied paths individuals take into the tech industry.

The majority (**64.8%**) are trained in **software engineering**, indicating a technical focus, while **16.5%** have **management experience**. Other professionals are qualified in product development (4%) or various other fields (14.3%). This mix of technical and management training reflects the multifaceted nature of the technology industry and its evolving demands.

What is your current level of education?



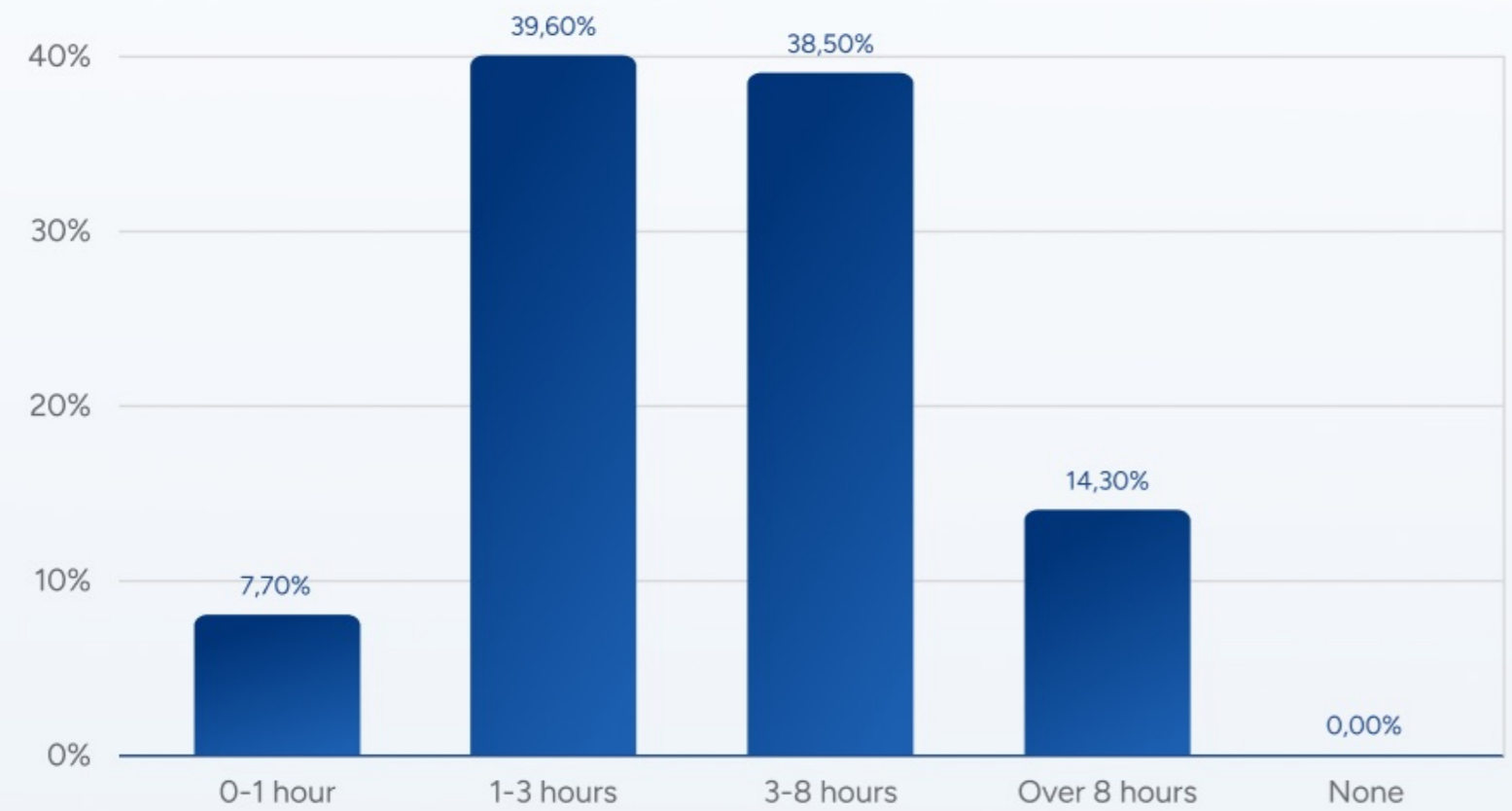
What field is your qualification in?



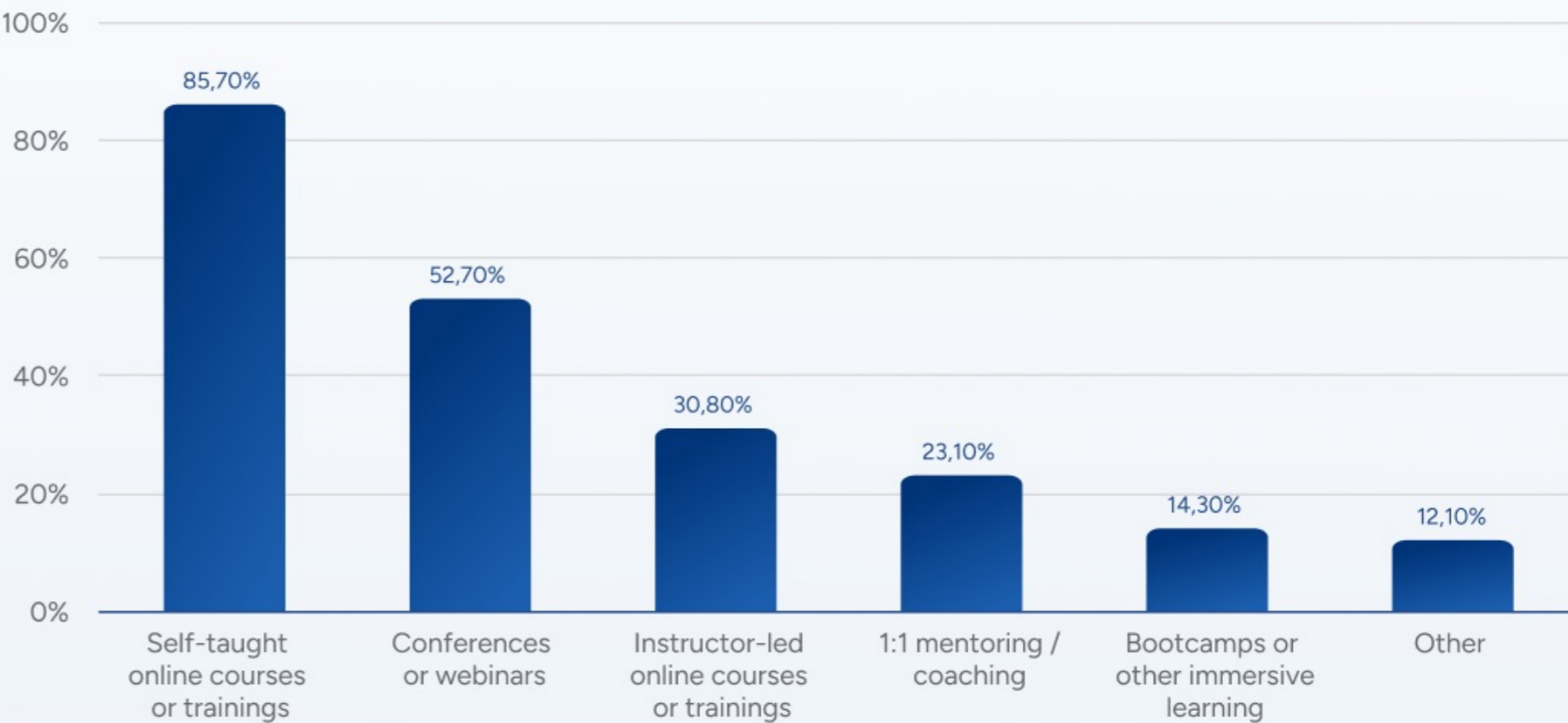
Lifelong learning trends among professionals

Professionals are dedicating varying amounts of time to learning each week, with **39.6%** investing **1-3 hours** and **38.5%** dedicating **3-8 hours**. A committed **14.3%** devote over **8 hours weekly** to education. Self-taught online courses are the most popular learning method, embraced by **85.7%**, while conferences and webinars engage **52.7%**. Instructor-led courses (**30.8%**), 1:1 mentoring (**23.1%**), and immersive bootcamps (**14.3%**) offer additional avenues for skill development. This data highlights a strong preference for flexible, self-directed learning opportunities among professionals.

How much time do you spend on learning weekly?



How are you learning?



Focus areas for professional development and improvement

Professionals want to improve their ability to **define long-term visions** and **general technical skills**, each of which is a priority for **31.9%**. Equal emphasis is placed on **developing professional relationships**, **managing people** and **upskilling teams**, with **22%** seeking improvement in these areas. Other main development points include fostering a team culture (**17.6%**), effective communication with stakeholders (**16.5%**) and technology decision-making (**15.4%**). A comprehensive approach to personal and team development is reflected, encompassing both technical skills and interpersonal competencies.

Which of the following areas would you like to improve the most in?



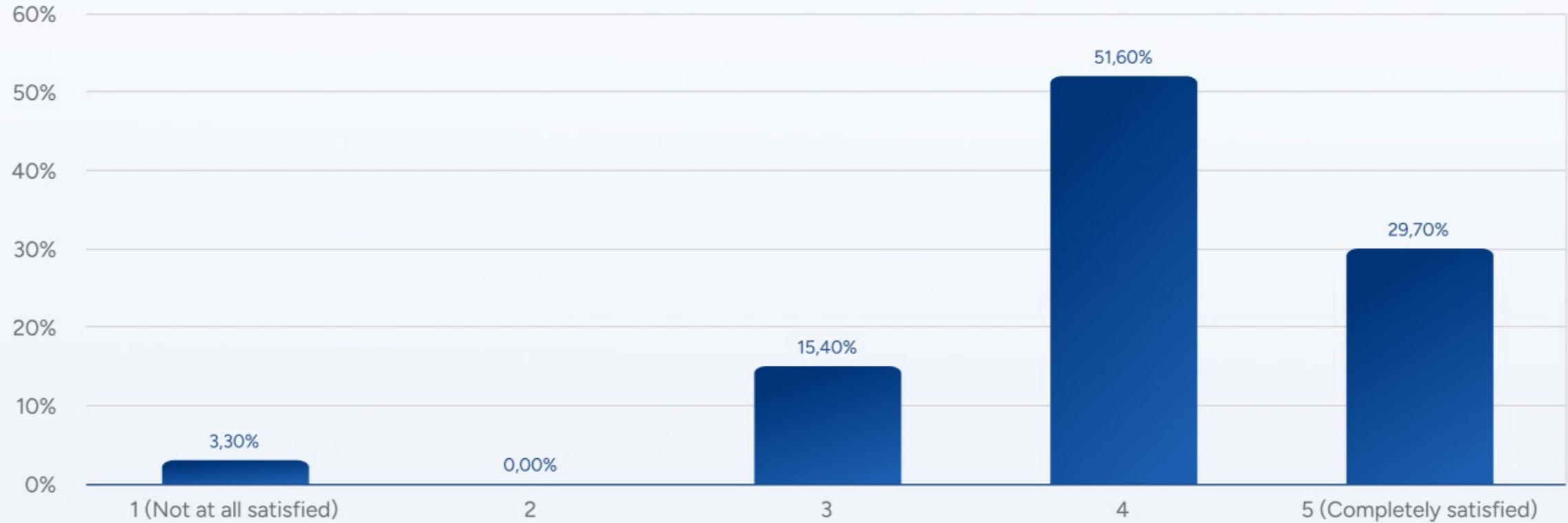
08 Satisfaction

How satisfied are CTOs with their jobs, teams, and salary?

Overall job satisfaction among specialists

Job satisfaction among specialists is generally high, with an average rating of **4.0**. The majority (**51.6%**) say they are fairly satisfied, while **29.7%** are fully satisfied, giving a rating of 5. These results indicate a largely positive perception of the workplace experience, with only a small minority (**3.3%**) expressing low levels of satisfaction.

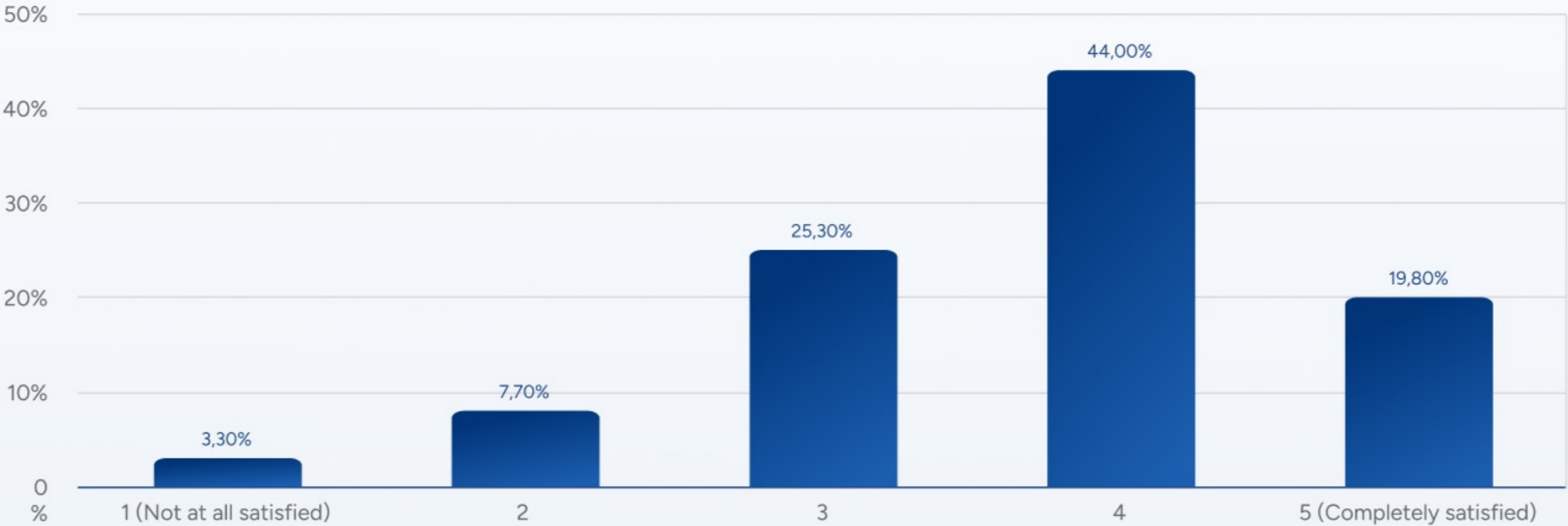
How satisfied are you with your job overall? (1-5)



CTO salary satisfaction: Navigating compensation perceptions

Overall satisfaction with salary is moderate, with an average rating of **3.7**. **44%** of respondents rate their satisfaction at 4, reflecting overall satisfaction, while **19.8%** are fully satisfied with a rating of 5. However, **3.3%** and **7.7%** of respondents express dissatisfaction, indicating areas where compensation strategies could be improved.

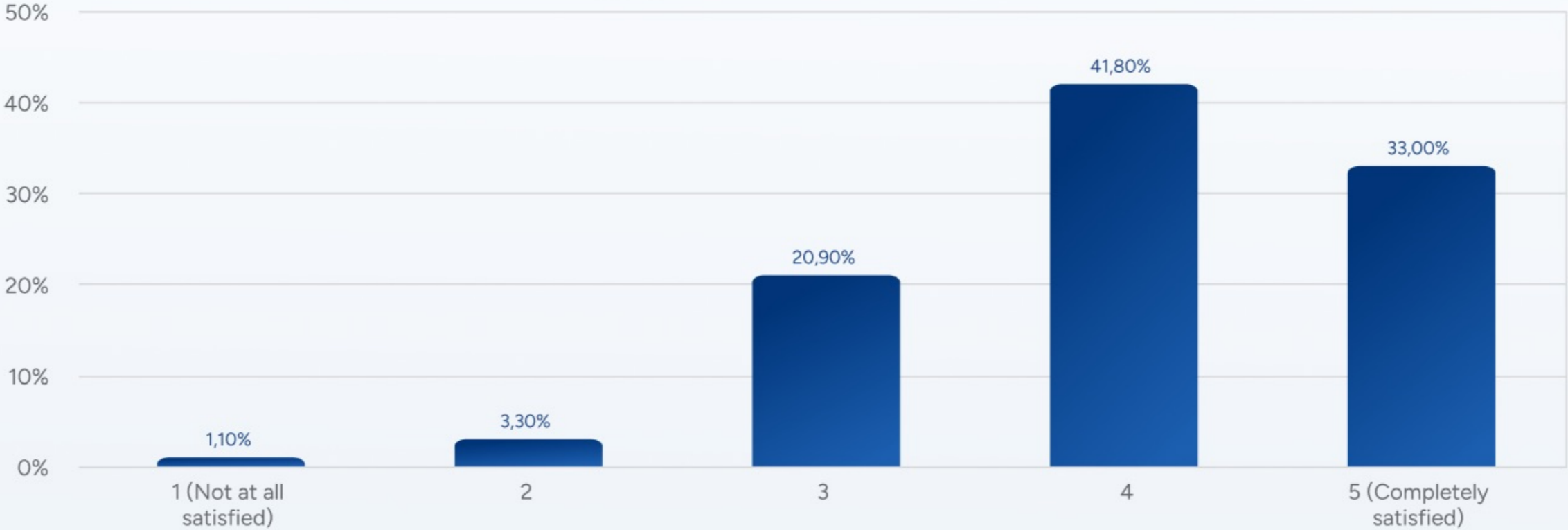
How satisfied are you with your salary? (1-5)



High level of satisfaction with team among CTOs

CTOs show a high level of satisfaction with their teams, with an impressive average score of **4.0**. As many as **41.8%** give their teams a score of 4, while **33%** express complete satisfaction with a perfect score of 5. This indicates that most CTOs are very satisfied with the dynamics and performance of their teams, with only a small minority (**1%**) reporting a lower level of satisfaction.

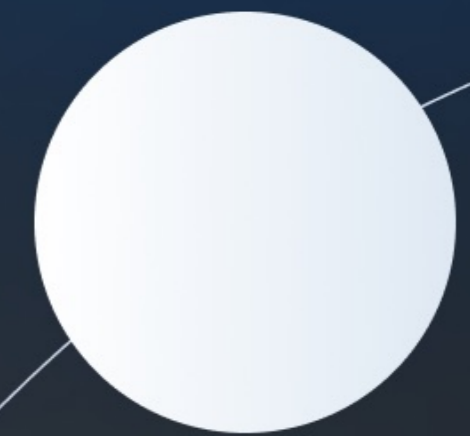
How satisfied are you with your team? (1-5)



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Demographics and firmographics

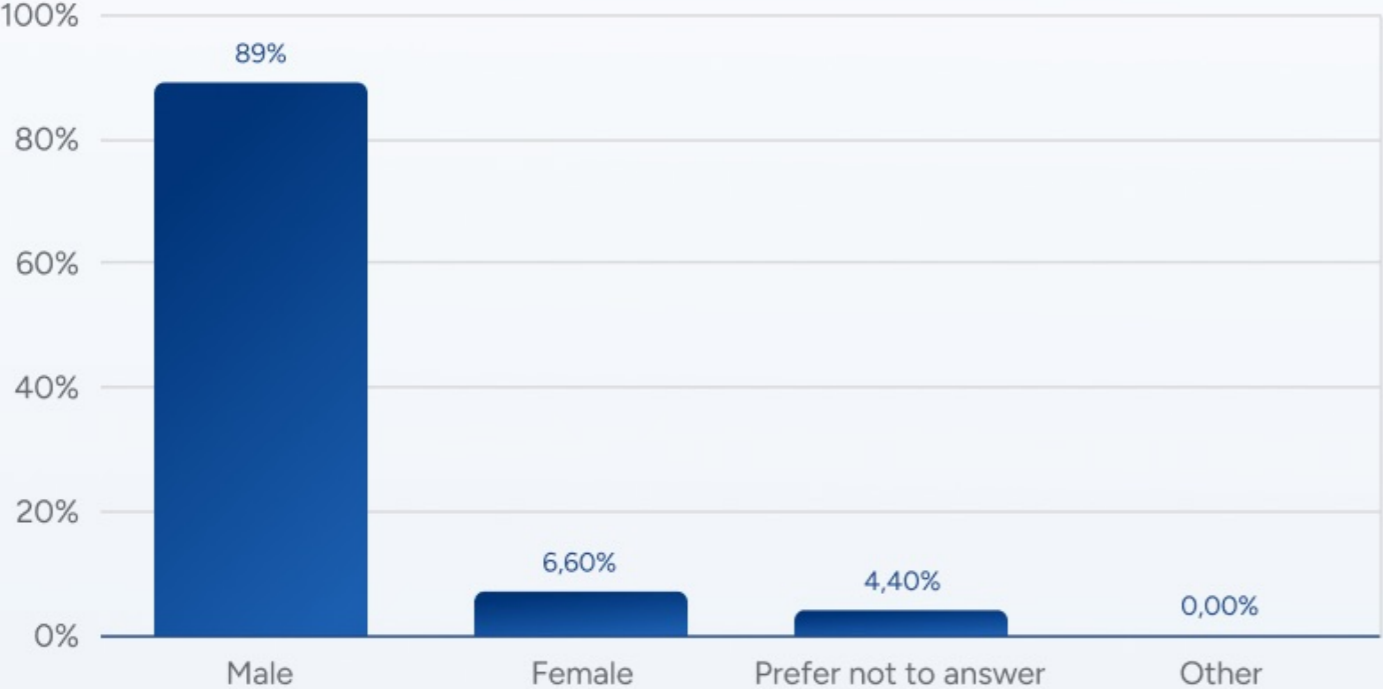
Who contributed to making this survey possible?



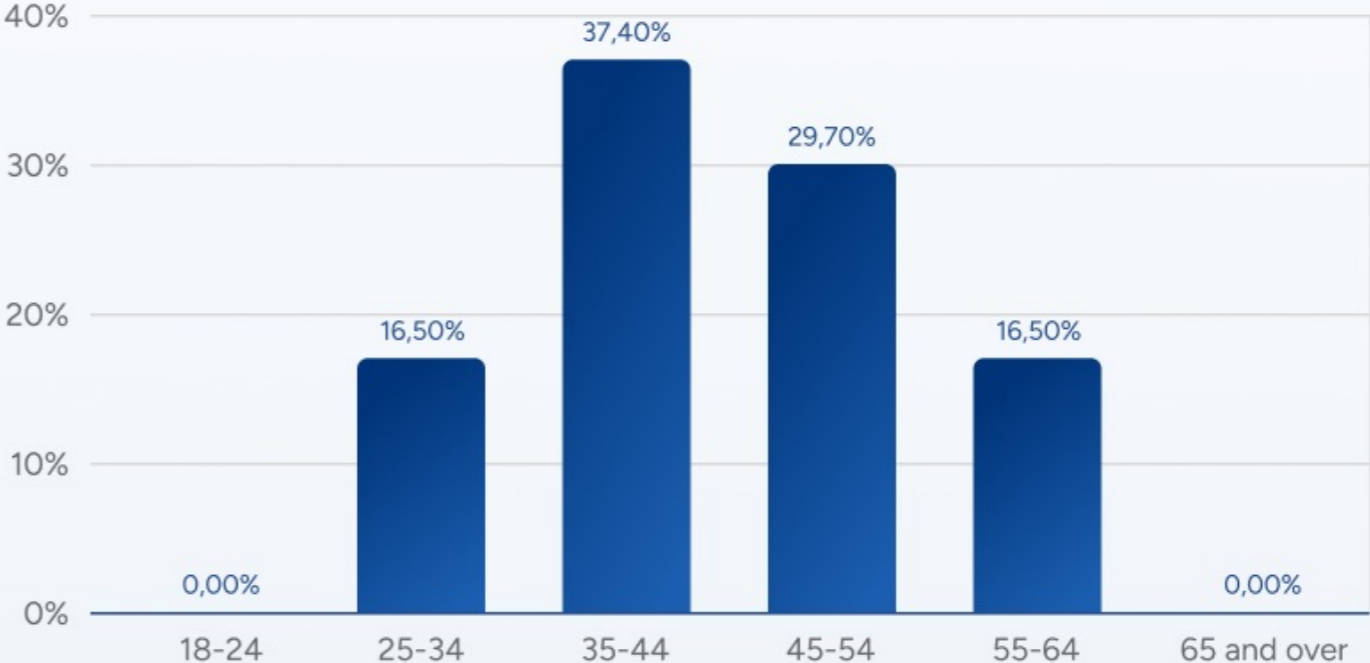
Gender and age dynamics in CTO leadership positions

The CTO leadership landscape remains largely male-dominated, with **89%** of roles held by men, highlighting a significant gender gap. Female representation stands at only **6.6%**, underscoring the need for more diversity initiatives in the technology sector. Regarding age, most CTOs are **between 35 and 54 years old**, with **37.4%** aged 35-44 and **29.7%** aged 45-54, reflecting a preference for middle-aged professionals with extensive industry experience. The underrepresentation of CTOs under 35 and over 65 suggests gaps among both emerging and senior leaders, pointing to opportunities for targeted mentoring and retention programs.

Gender



Age

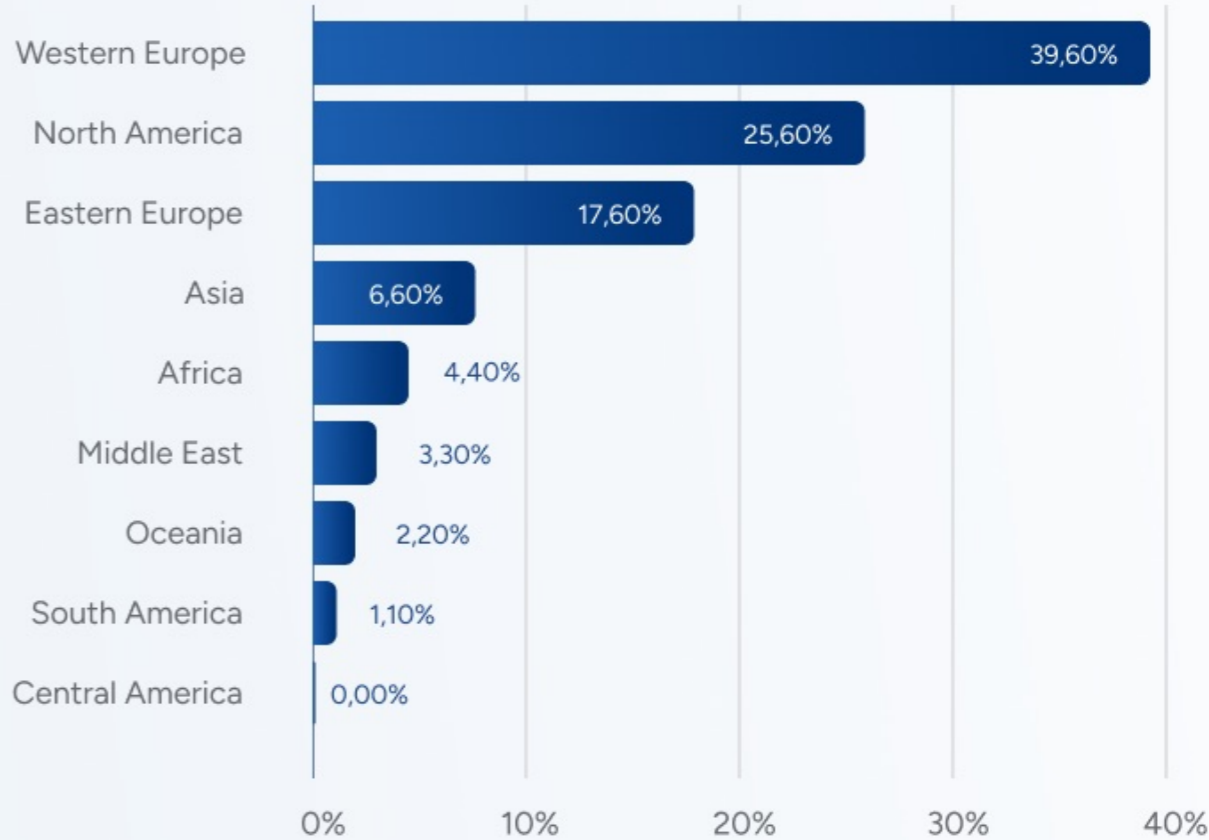


Geographic and industry distribution of CTO roles

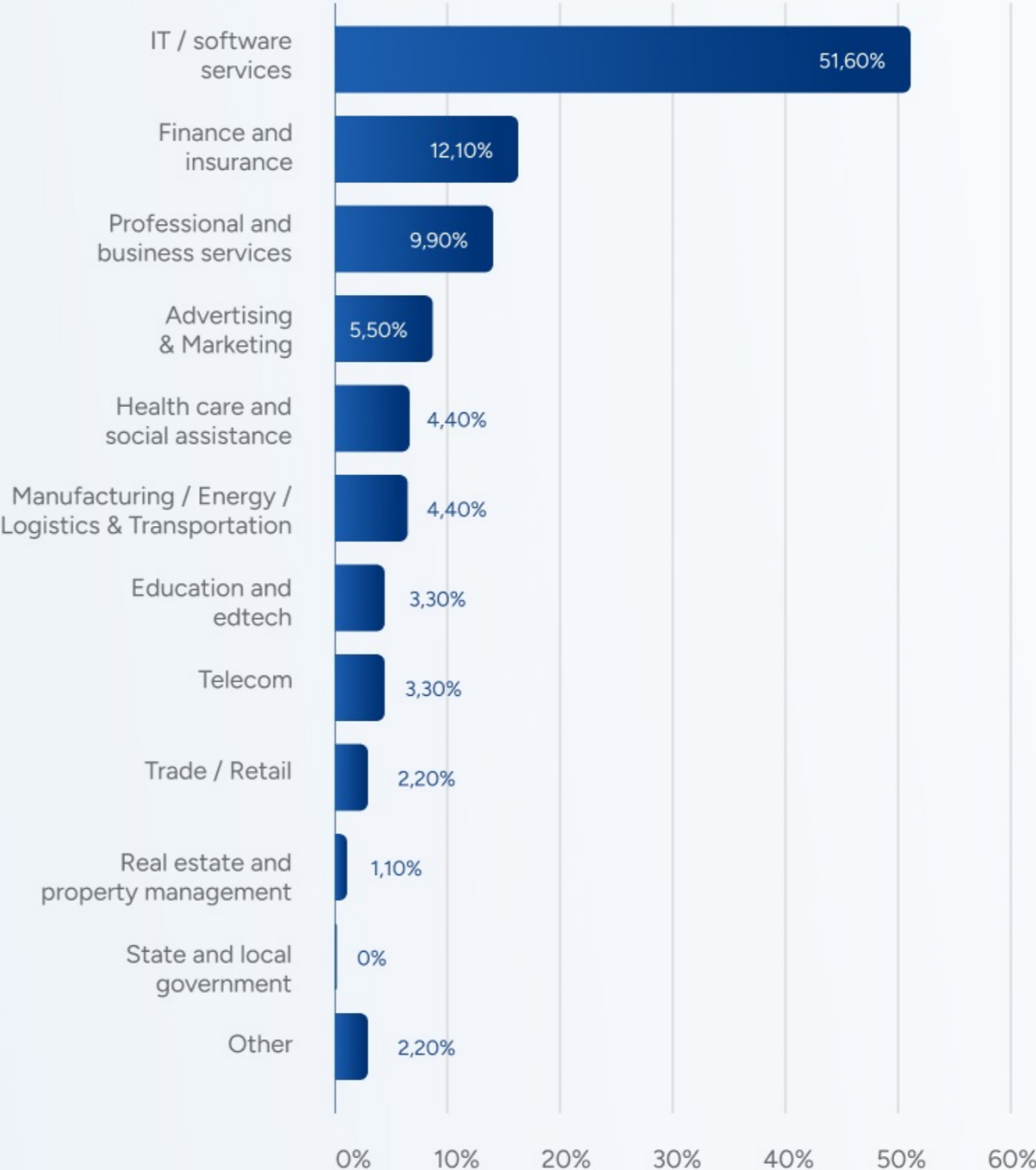
CTOs that contributed to the survey are mainly located in **Western Europe (39.6%)** and **North America (25.3%)**, reflecting the strong presence of technology in these regions. **Eastern Europe** ranks with **17.6%**, indicating growth in technology leadership in this area. Meanwhile, **Asia and Africa** have limited representation, at **6.6%** and **4%**, respectively.

In terms of industry, **IT and software services** dominate, accounting for **51.6%** of CTO positions, highlighting their key role in technological innovation. Other sectors such as **finance (12.1%)** and **professional services (9.9%)** also contribute, while industries like education, telecommunications, and manufacturing remain underrepresented, creating opportunities for expansion and innovation.

Geographic region



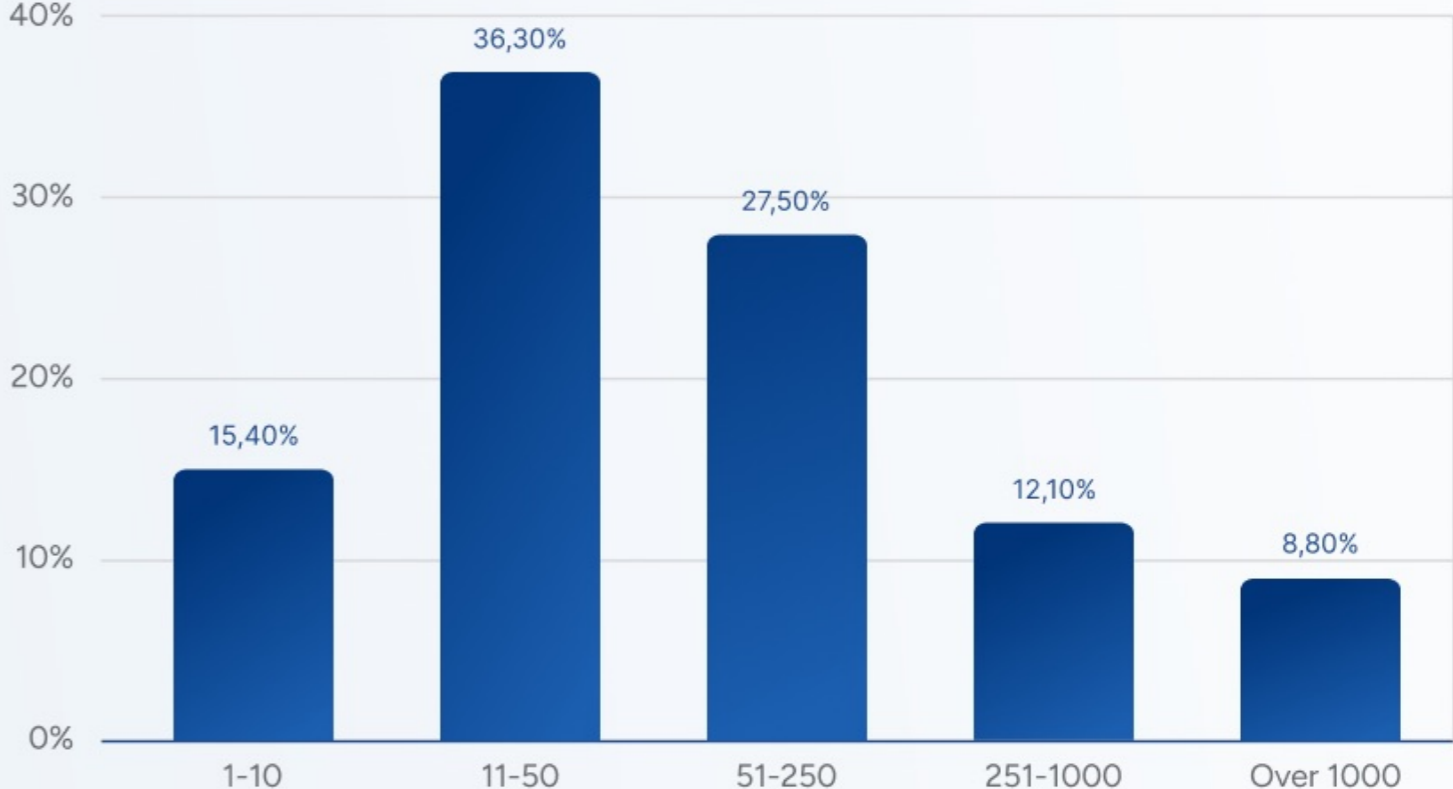
Industry



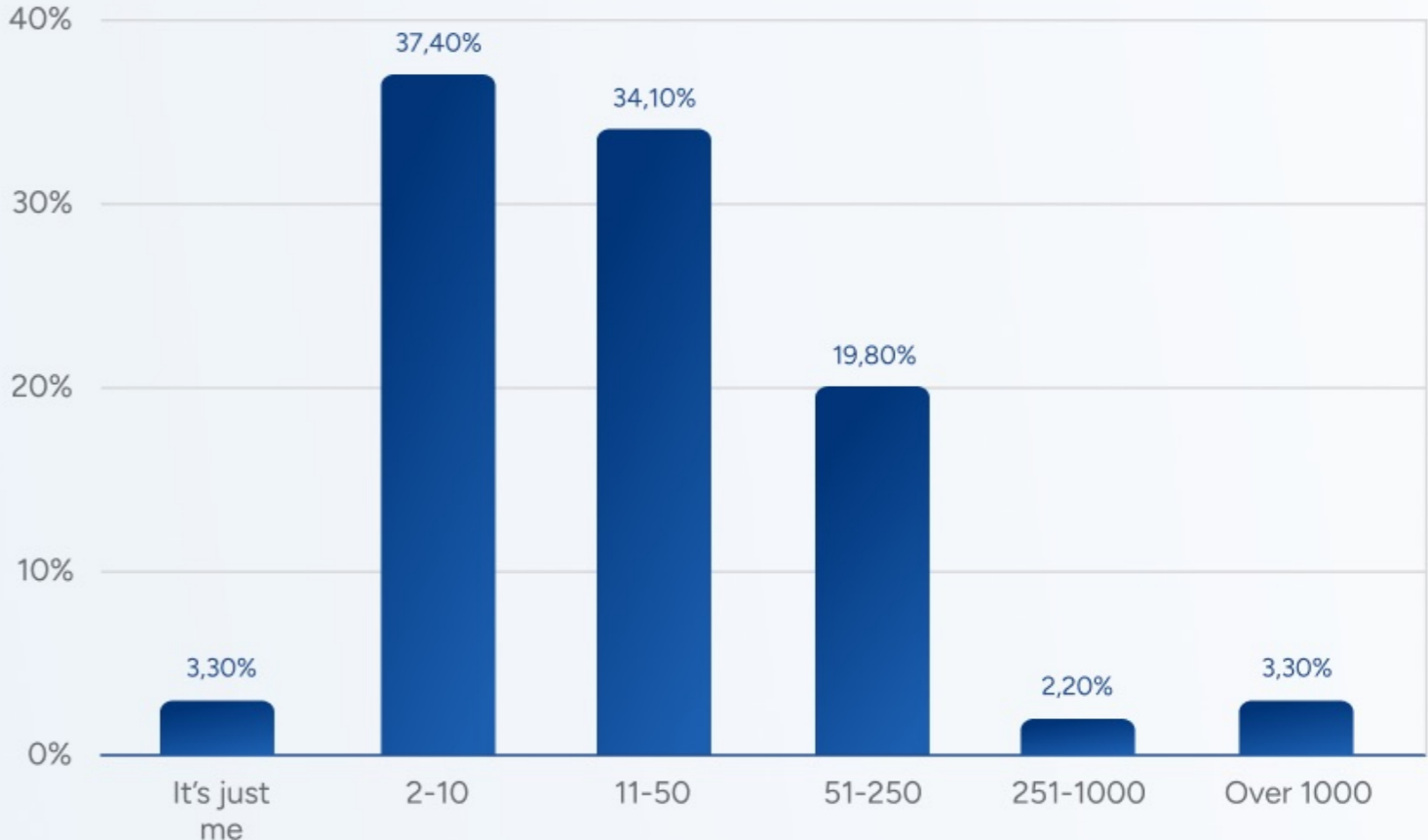
Profiles of IT organizations and employees

The majority of organizations taking part in the survey are **small and medium-sized**, with **36.3%** employing 11-50 people and **27.5%** with 51-250 employees, reflecting a shift toward more agile and scalable business models. The IT workforce reflects this distribution, with **37.4%** of companies employing 2-10 IT professionals and **34.1%** employing 11-50 IT staff. A significant **19.8%** maintain larger IT teams of 51 to 250 people, underscoring the importance of robust technical support. These trends indicate that many organizations are prioritizing lean operations while ensuring adequate IT resources to drive digital transformation.

What is the total estimated number of employees working at your organization?



What is the total estimated number of IT staff working at your organization?



10

Credits & acknowledgments

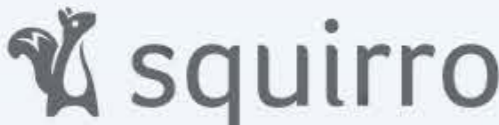
The partners who helped make the survey a reality

A huge thank you to all our partners

The **Global CTO Survey 2024/25** was made possible through the valuable support of our partners. We extend our sincere appreciation to everyone who contributed their insights through expert commentary, assisted in promoting and publicizing the survey, and provided promotions to our respondents.



Scrum.org



About STX Next

Founded in 2005 by Maciej Dziergwa, STX Next is an international digital engineering consultancy focused on delivering Data & AI solutions, integrated into modern Cloud infrastructure with exceptional UX & Design.

The business services a global customer base through a flexible, multi-location nearshoring model from two delivery centers in Poland and Mexico with a deep, educated, cost-effective talent pool. With nearly 20 years of expertise and a talented team of 500 professionals, STX has successfully delivered over 1,000 projects.

1000+

Successful software projects

500+

Professionals on board

20+

Years of experience

Our customers love to work with us

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Empowering CTOs for visionary leadership in the AI era

As we close this year's Global CTO Survey 2024/25: AI Edition, one thing is clear: the role of the CTO has never been more critical—or more dynamic. The insights gathered in this report underline not only the immense potential of AI but also the responsibility we share in shaping its impact.

At STX Next, we've always believed that technology is only as powerful as the people driving it. This survey reflects the collective intelligence, resilience, and creativity of tech leaders worldwide. Together, we're not just solving technical challenges; we're pushing the boundaries of what's possible, transforming industries, and paving the way for a better future.

I hope this report serves as a valuable resource for you—whether you're deep in the trenches of AI implementation or strategizing for the road ahead. Let it remind us all that while the tools and technologies may change, the essence of leadership remains constant: vision, adaptability, and a commitment to progress.

Thank you for being a part of this journey. Here's to creating the future, together.



Ronald Binkofski
CEO OF STX NEXT

**See you
at the next edition!**

TheGlobalCTOSurvey • × **STX**NEXT

