



# KPMG UAE tech report 2023

Tech trailblazers: navigating  
the next digital frontier



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# Foreword

**Despite the headwinds of global economic uncertainty, digital transformation leaders who are committed to their innovation priorities continue to realize value at pace.**

By aligning investment in technology with their strategic ambitions, these businesses are upholding momentum. When it comes to digital transformation, a hesitant mindset could prove costly, and not just because competitors will continue to invest: new technologies can provide businesses with effective solutions to deal with challenging market conditions.

KPMG's latest research suggests that many businesses choose to remain resilient and adaptable. Our respondents are resolute and keen to embrace innovative new technologies. Some leading organizations are already generating profit from their investments in emerging technologies — and are coping well with priorities such as the environmental, social and governance (ESG) agenda.

To gauge industry sentiment, we surveyed 2,100 technology professionals globally, including 70 in the UAE. The UAE respondents worked in industries including energy, financial services, government, industrial manufacturing, life sciences, retail, the public sector, tech, and education. The companies they were a part of all reported USD 100 million or above in annual revenue. The sizes of the companies varied, with a small proportion having less than 100 employees, while others had more than 10,000.

The UAE's advances in technology represent a remarkable journey of transformation. Due to its visionary leadership and investments in education, fintech revolution, and sustainability efforts, the UAE has positioned itself as a global powerhouse in the digital age.

Looking ahead, the country has set ambitious goals for its technological future. The UAE envisions becoming a global hub for innovation, with a focus on AI, advanced healthcare, and space exploration. The nation's pursuit of the fourth industrial revolution and its commitment to nurturing local talent will be crucial in realizing these aspirations.

The UAE's pioneering step in appointing the world's first Minister of State for Artificial Intelligence, His Excellency Omar bin Sultan Al Olama, years ahead of global trends, exemplifies the nation's keen interest in AI early on. Since then, the UAE has launched numerous AI initiatives under His Excellency's leadership, including the AI Ethics Guidelines and the National AI Strategy 2031. These endeavors focus on ensuring responsible AI use, investing in AI research and development, and fostering AI talent. In healthcare, AI-powered diagnostic tools and predictive analytics are helping medical professionals deliver more accurate diagnoses and treatment plans. In transportation, AI is optimizing traffic flow, enhancing public safety, and paving the way for autonomous vehicles. In education, AI-powered personalized learning platforms are revolutionizing the way students acquire knowledge.

The UAE has also emerged amongst the leading countries in the field of technology by establishing a strong digital economy and harnessing digital transformation. One of the most significant initiatives is the UAE Digital Economy Strategy, launched in April 2022, which aims to double the contribution of the digital economy to gross domestic product (GDP) from 9.7% to 19.4% in the next 10 years.

Furthermore, the UAE has embraced cryptocurrency and digital assets as part of its financial landscape. The regulatory framework established by the UAE government provides clarity and stability for cryptocurrency-related businesses, paving the way for innovations in fintech and digital payments.

As the nation continues to push the boundaries of what is possible, it serves as an example for the world, demonstrating how a strategic vision, determination, and a commitment to innovation can lead to profound and positive change.



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## Section 2:

# Ahead of the curve

“In the UAE, technology is an enabler of limitless opportunities. It empowers us to reshape industries, fuel economic diversification, and foster a knowledge-based society. Through cutting-edge innovation, we unlock doors to sustainable development - creating jobs, nurturing entrepreneurship, and enhancing global competitiveness. In this digital age, the tech function is a catalyst that empowers communities and drives economic growth.”

**Emilio Pera**  
CEO, Senior Partner  
KPMG Lower Gulf



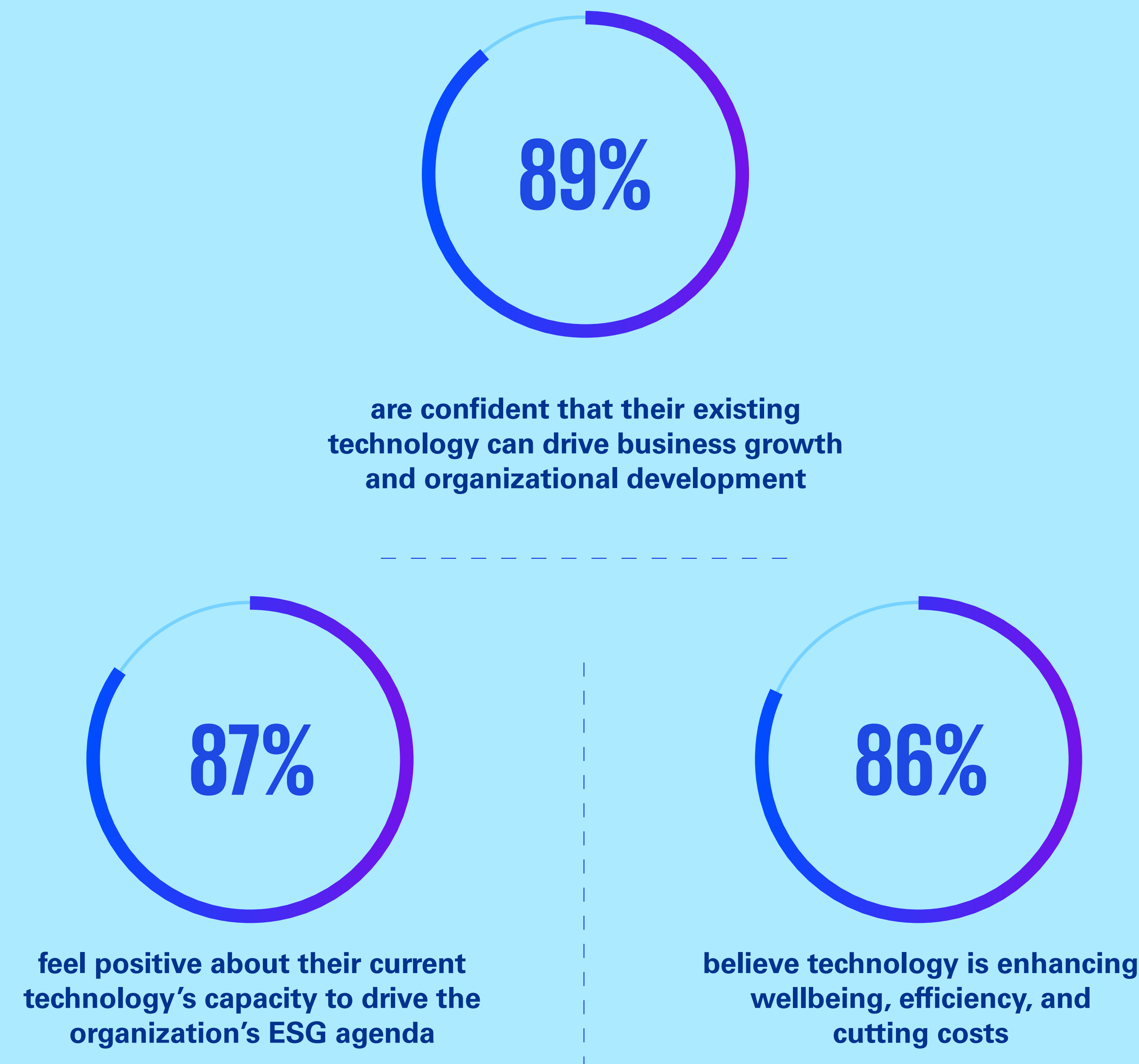


# Pioneering digital success

In the dynamic landscape of business technology, the UAE emerges as a proactive leader, demonstrating considerable enthusiasm for adopting innovative technologies. An impressive 89% of tech leaders in the UAE are confident that their existing technology is sufficiently advanced to drive business growth and organizational development. This high level of optimism outperforms global peers by 16%. 86% also believe their organization's technology is enhancing employee satisfaction and wellbeing while improving efficiency and cutting costs.

The survey results show that the UAE is committed to using technology as a catalyst for achieving ambitious business goals, overcoming challenges, and advancing Environmental, Social, and Governance (ESG) priorities. 87% of tech leaders feel positive about their current technology's capacity to drive the organization's ESG agenda, surpassing the global figure by 15%.

With a focus on the potential of AI and machine learning, a strong cybersecurity posture, and a relentless drive for innovation, tech leaders in the UAE are strategically positioning their organizations for significant success in an era defined by rapid digital transformation.



## How confident are you that your organization will be able to achieve the following business and organizational ambitions using your existing technology?

Leaders responding with 'Confident'



Key: ■ UAE ■ Global

## Section 3:

# AI and machine learning

“AI, including generative AI, is a defining technology of our time, and we are optimistic about what it can do for people, industry, and society. We’re committed to making the promise of AI a reality — free up time for more creative and fulfilling work — while ensuring the technology is used responsibly.”

Tariq Halawani  
Executive Director, Enterprise Solutions at Microsoft





# A new paradigm



**Will AI and machine learning mark a new paradigm for businesses' short-term success?**

It is the recognition of AI's tangible value that truly sets the UAE apart. Remarkably, 43% of tech leaders attribute their belief in AI's potential to its demonstrated return on investment (ROI). This ROI-driven approach is supported by two-thirds of respondents who attribute significant increases in profitability to AI initiatives.

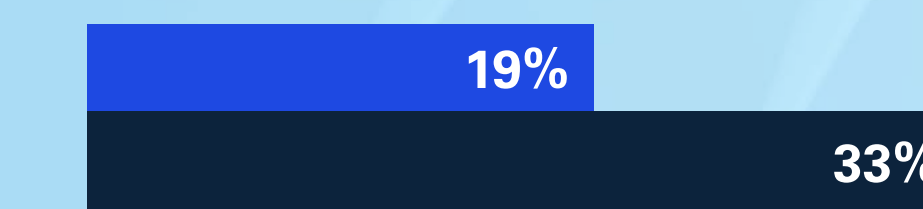
The UAE's embracing of AI not only strengthens operational efficiency but also fuels extraordinary financial gains. 65% of respondents believe their technology adoption strategy integrates leading market trends to drive their business's short-term goals. While organizations value both employee and customer perception of AI, 32% of tech leaders are focusing on customer feedback in prioritizing their technology investments.

## Why is your business prioritizing AI or machine learning to support its short-term ambitions (over the next 0-3 years)?

Proven return-on-investment



In-house trials/analysis



Guidance from third parties



Leaders in our market have already adopted



Customer feedback



Employee feedback



Preference of senior leadership team



Cost effectiveness



Key: ■ UAE ■ Global



# A host of transformative technologies

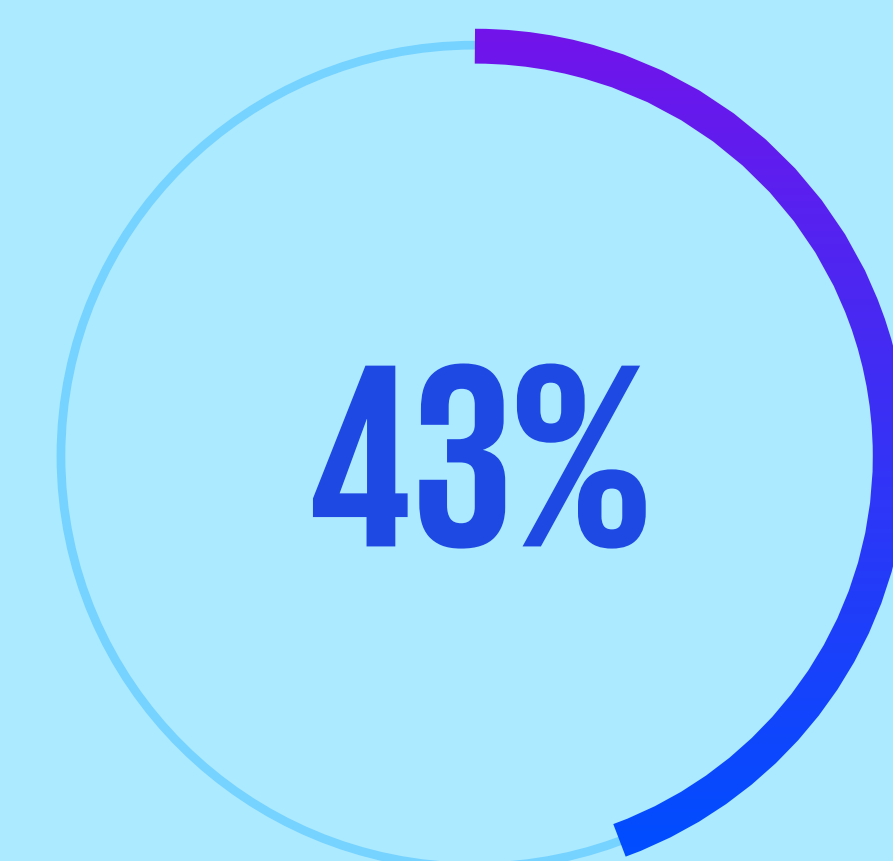


**53%**

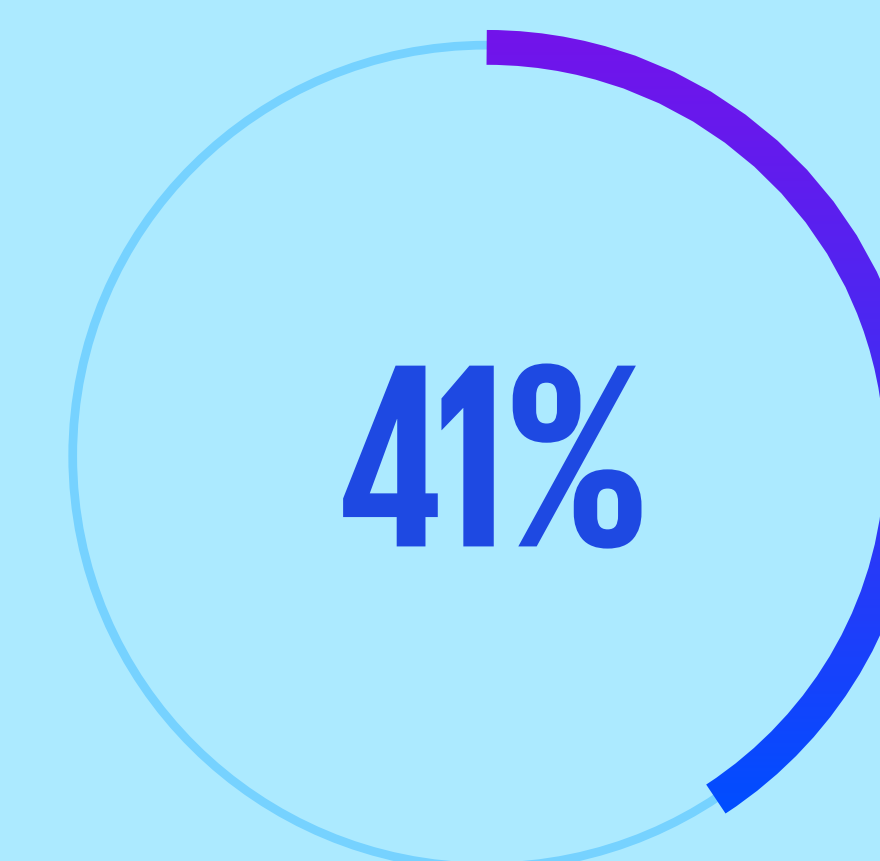
identify AI as crucial for achieving their short-term ambitions

The UAE's strategic focus on AI and machine learning demonstrates its commitment to transformative technologies. More than half (53%) of surveyed tech leaders in the UAE identified AI as crucial for achieving their short-term ambitions.

Apart from AI, the technologies that respondents believe are most useful to helping them realize their short term goals are edge computing (43%) and quantum computing (41%). The Metaverse trails behind, coming among last at 29%. This is perhaps surprising considering the splash it made almost a year ago, clearly signaling that this industry moves at a lightning pace, and obsolescence is a real threat for any innovative new technology.



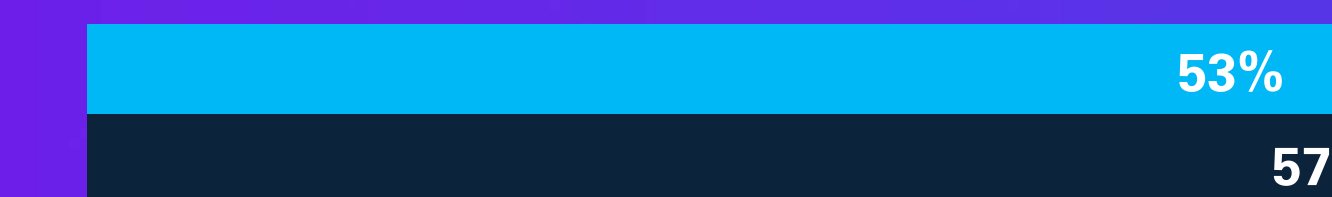
recognize edge computing as highly valuable



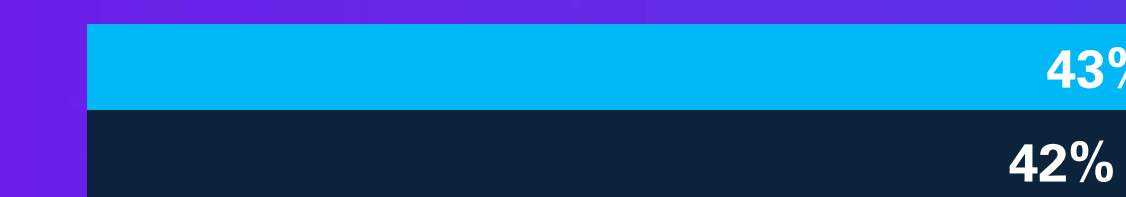
believe quantum computing also plays a significant role

Of the following technologies, which do you think will be most important in helping your business achieve its short-term ambitions (over the next 0-3 years)?

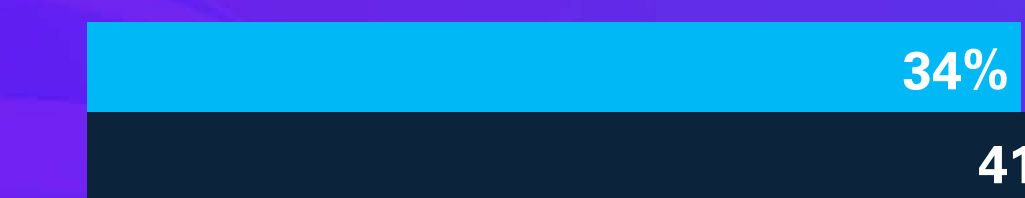
AI/machine learning (including generative AI)



Edge computing (including Internet of things)



Robotics/automation



VR/AR (including the Metaverse)



Quantum computing



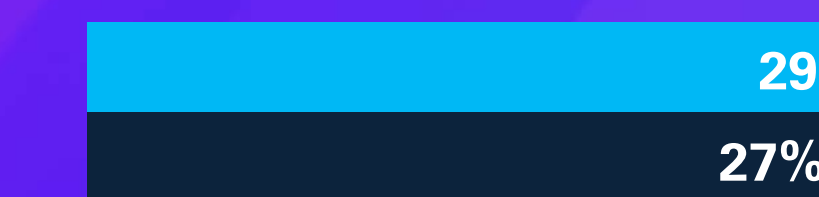
Web3 (including tokenization)



XaaS technologies (including public cloud or multi-cloud)



5G



Key: █ UAE █ Global



Section 4:

# Embracing XaaS



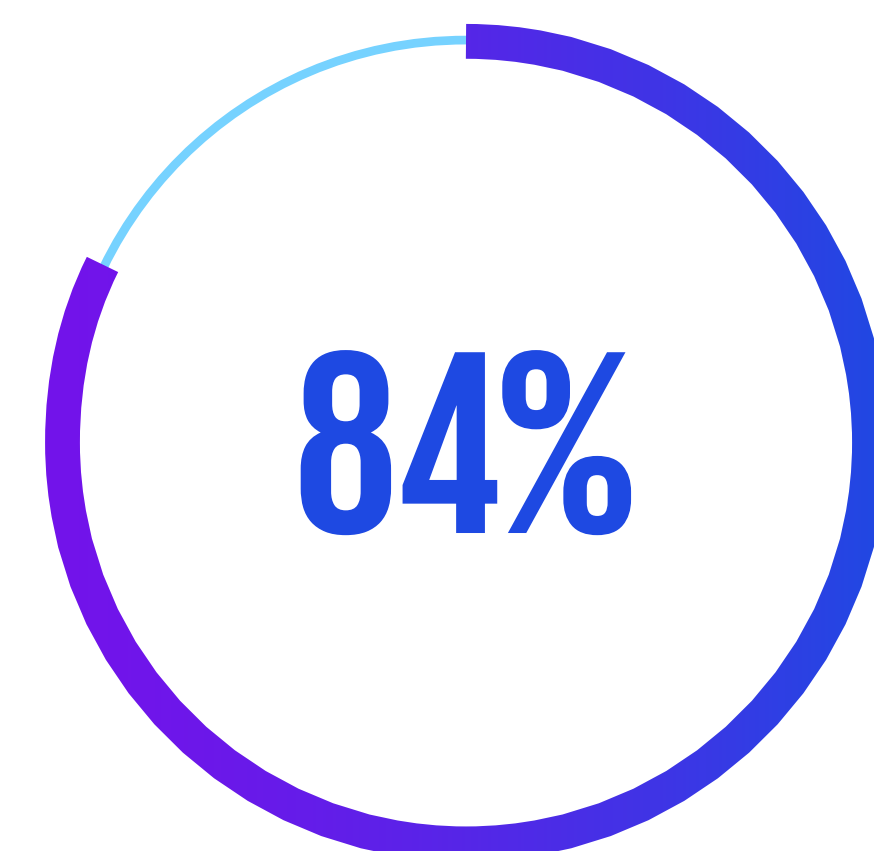


# Versatility at speed

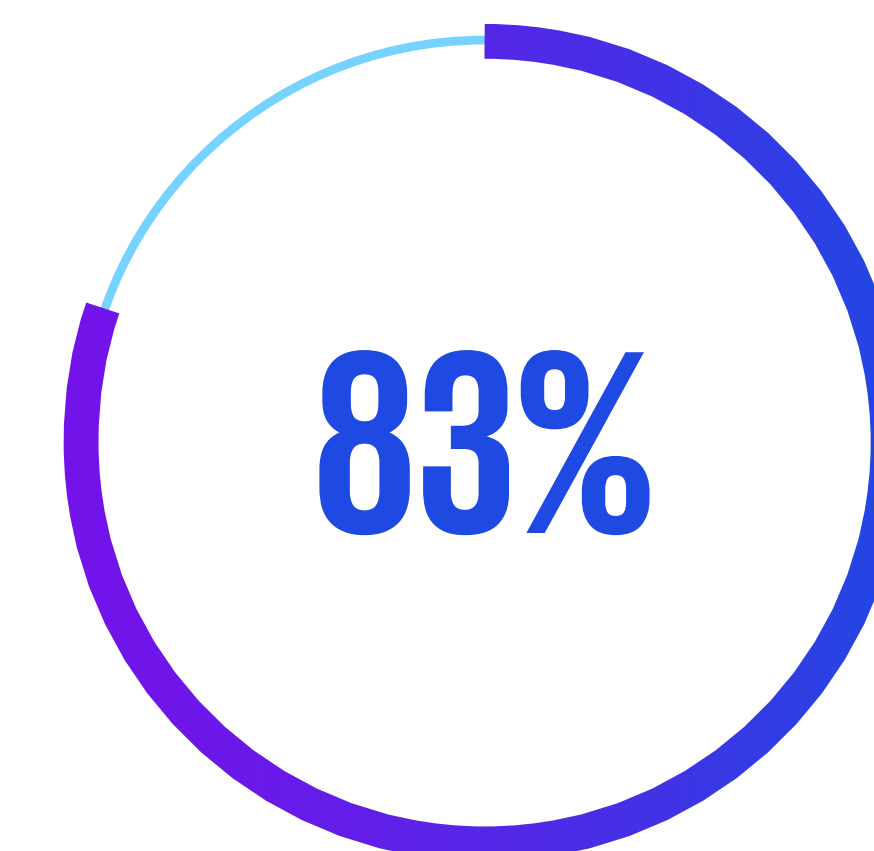
The UAE has taken a significant step forward in terms of innovation, with 84% of UAE tech leaders confidently agreeing that the risks of XaaS technologies are well justified by the opportunities they create. This puts the country 21% ahead of their global counterparts.

“XaaS,” short for “Everything as a Service,” is a cloud computing paradigm where various resources and services are provided over the internet as on-demand, subscription-based offerings. The “X” in XaaS stands for either “Everything” or “Anything”, depending on the context, and signifies the versatility of this model. It encompasses services like Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and more. XaaS offerings span various domains, from computing and storage to security, communication, and artificial intelligence. It has revolutionized how businesses approach IT, enabling them to adapt quickly to changing requirements, reduce capital expenditures, and benefit from regular updates and improvements.

This strong support for XaaS technologies aligns with the forward-thinking attitude of businesses in the UAE. Notably, 39% of tech leaders prioritize XaaS technologies, which include public cloud and multi-cloud solutions, to support their goals. Three quarters (74%) also expressed that they are less likely to financially invest in technologies that are in the midst of high levels of speculation, while 83% agree that employee resistance influences their investment decisions.



**confidently agree that the risks of XaaS technologies are well justified by the opportunities they create**



**also acknowledge that employee resistance influences their investment decisions with new technologies**

## To what extent do you agree or disagree with the following statements?

Leaders responding with 'Agree'

Managing risk at early stages (security and control by design) significantly increases the success rates of transformation programs



Improving cybersecurity and privacy helps us provide a loyalty-winning customer experience



The risks of XaaS technologies are worth it for the opportunities they create



High levels of hype and speculation around a certain technology (e.g. NFTs, metaverse) are likely to discourage us from investing financially



Leaders in my organization are confident in the resilience of applications built by low/no code platforms



Our progress with automation is delayed because of concerns around how AI systems make decisions



Long-term contracts with vendors limit our ability to invest in new technologies



Employee resistance influences our investment decisions with new technologies



Key: ■ UAE ■ Global

## Section 5:

# Information security

“In today’s dynamic business landscape, AI adoption presents a fundamental shift in how we measure business success. However, to truly tap into the potential and power of AI, it’s imperative that organizations have the foundational data strategy in place. This provides the building blocks to securely build apps and large language models with their enterprise data and drive unique impact—all within a secure and governed data platform.”

**Mohamed Zouari**  
General Manager, Snowflake  
Middle East, Turkey, Africa



# A catalyst for transformation

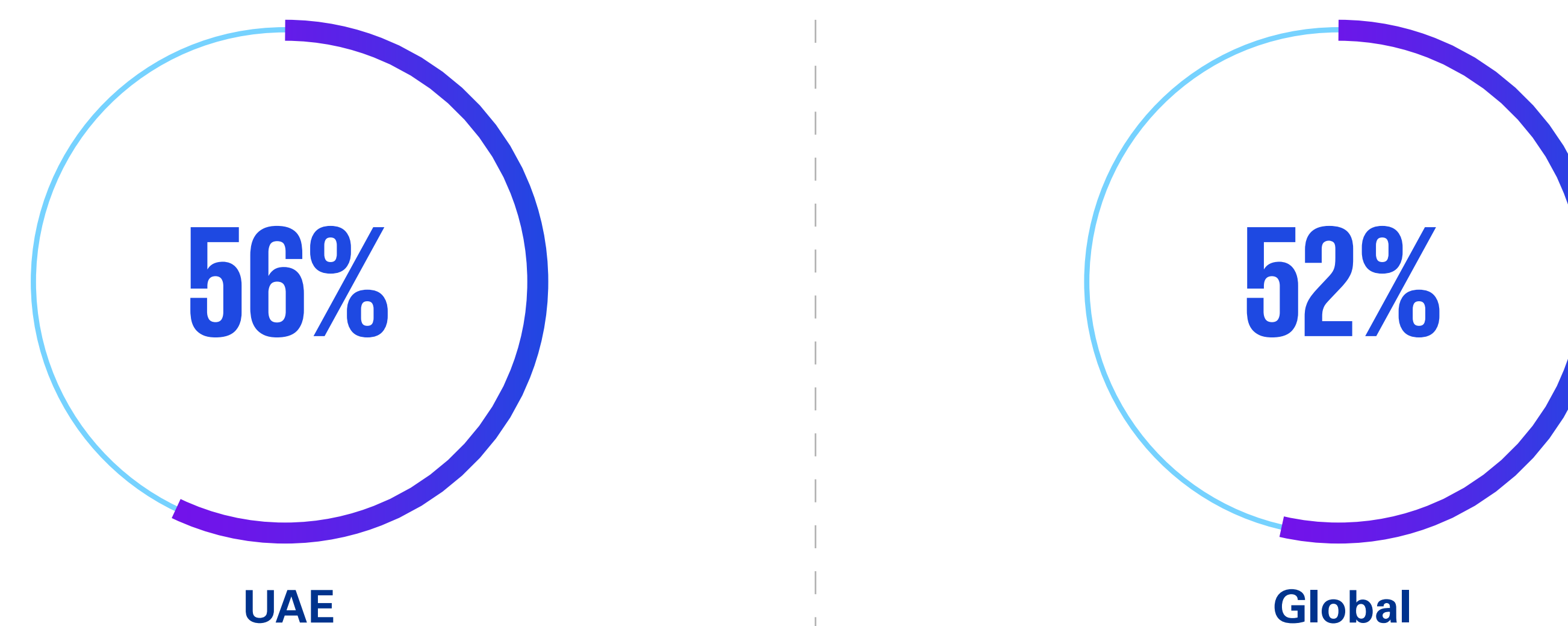
In the UAE, information security emerges as a key catalyst driving digital transformation. Regulatory obligations and heightened cybersecurity concerns are emerging as primary triggers driving the adoption of cutting-edge technology.



The UAE has introduced several data privacy laws to protect individuals' personal information and data, e.g. the Dubai International Financial Centre (DIFC) Data Protection Law as well as the Abu Dhabi Global Market (ADGM) Data Protection Regulations. While not a UAE-specific law, businesses operating in the UAE may also need to comply with the General Data Protection Regulation (GDPR) if they process data of EU residents.

More than half (56%) of respondents highlight the influence of customer expectations for stronger data privacy and cybersecurity on strategic priorities. A close second, at 47%, was convenience: customers appear to value having access to products every day of the week, at all hours.

Customer expectations affect data privacy/ cybersecurity priorities



## What is your cybersecurity team's top focus area over the next 24 months?

Help the enterprise confidently explore the potential of emerging technologies



Automate, streamline and embed security into the core of the business



Build resilience to be able to recover from an attack quickly and with minimal impact



Reinforce the trust that customers and clients have in the cyber security and protection of their data and service



Meet an increasingly demanding set of regulatory requirements and drivers for cybersecurity



Secure a complex ecosystem of third parties and external service providers



Key: ■ UAE ■ Global



Section 6:

# Skills and strategy





# A confluence of creativity and technical expertise

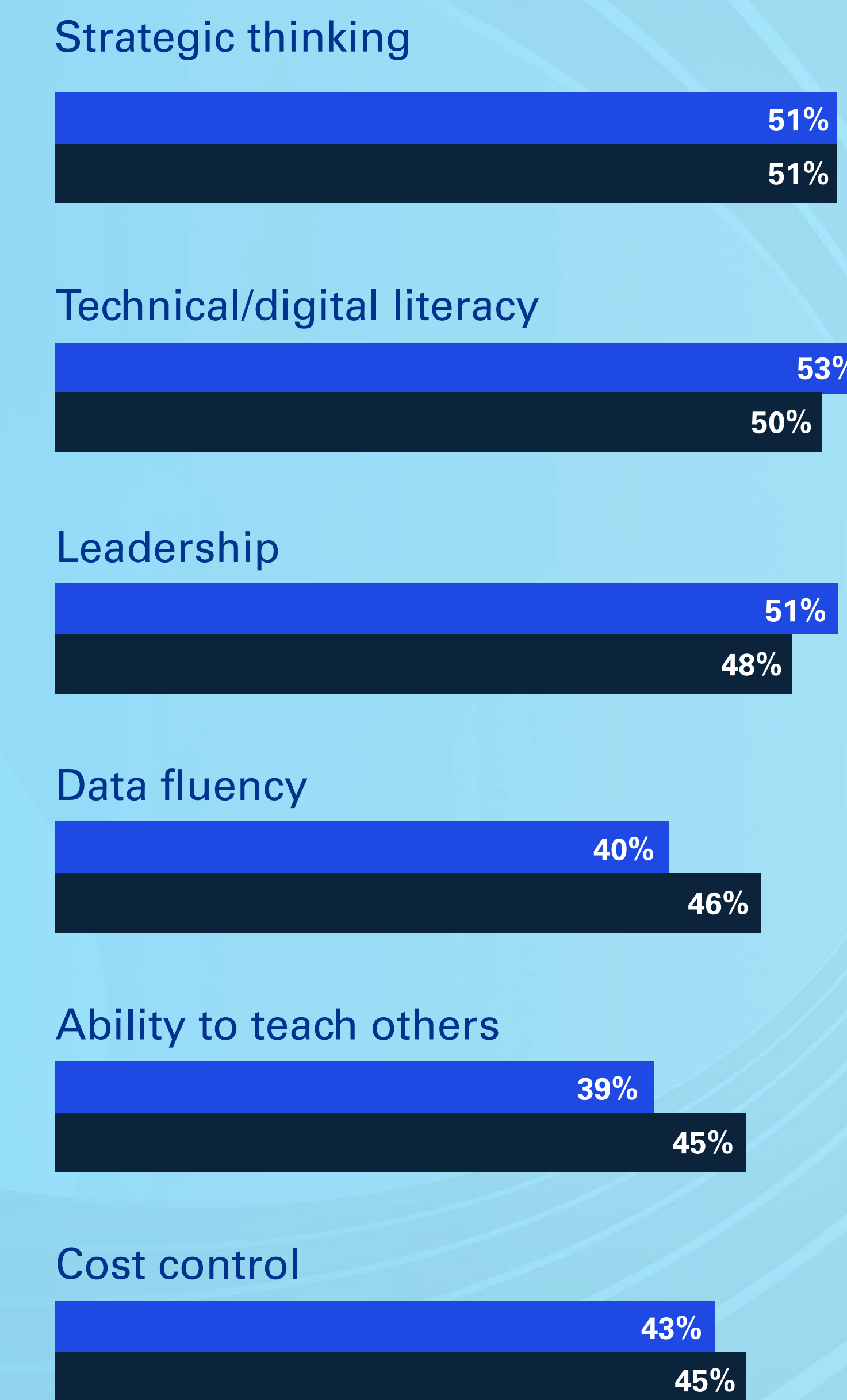


**The tech leaders of tomorrow combine technical expertise with essential soft skills, making informed choices that align technical and strategic objectives.**

Being a successful tech leader requires not only technical expertise but also a set of essential soft skills that enable effective communication, collaboration, and leadership. Tech leaders must make informed choices that align with both technical and business objectives.

UAE tech leaders recognize that high-performing technology teams require a unique set of skills to drive innovation and lead in a technology-driven world. Creativity and innovation, followed by persuasion skills, are identified as key personality traits. In terms of technical skills, digital literacy takes precedence, closely followed by strategic thinking and leadership abilities.

**With regard to individual professionals, which of the following technical skills are essential for being the tech leaders of tomorrow?**



Key: ■ UAE ■ Global



## Essential personality traits

With regard to individual professionals, which of the following personality attributes are essential for being the tech leaders of tomorrow?

Ethical understanding (for working with AI)



Creativity and innovation



Collaboration



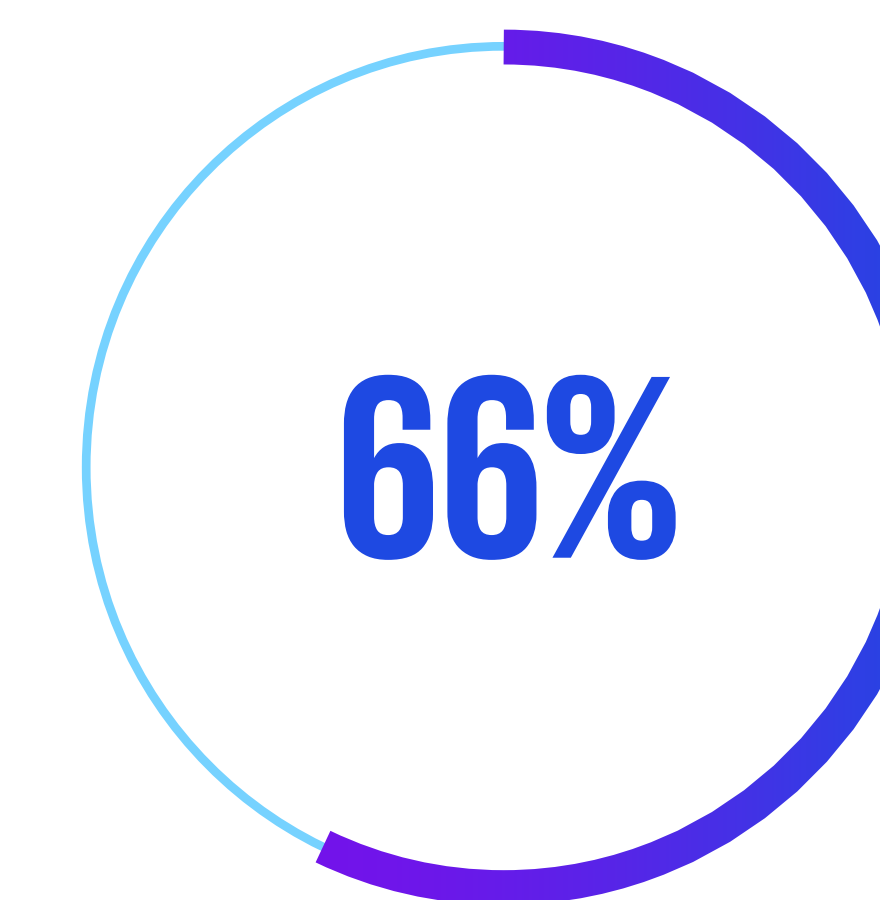
Ability to persuade



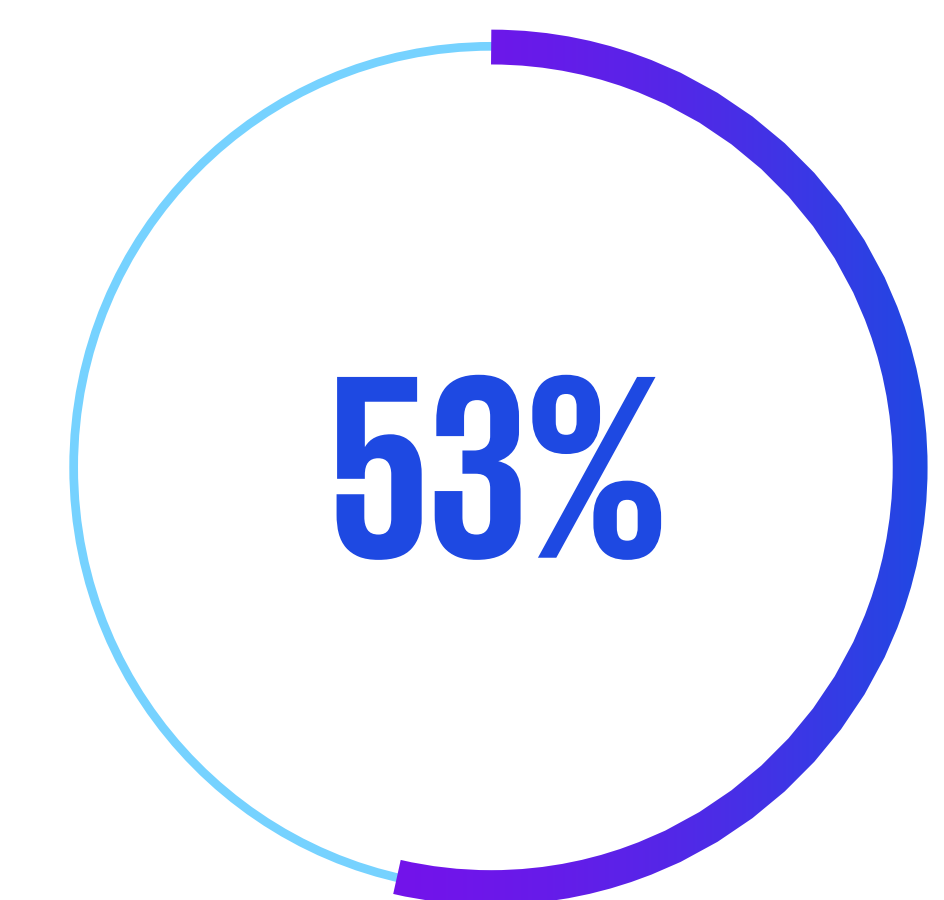
Agility



Key: ■ UAE ■ Global



identified creativity and innovation as key personality traits



prioritize digital literacy as the most important technical skill

Section 7:

# Digital transformation







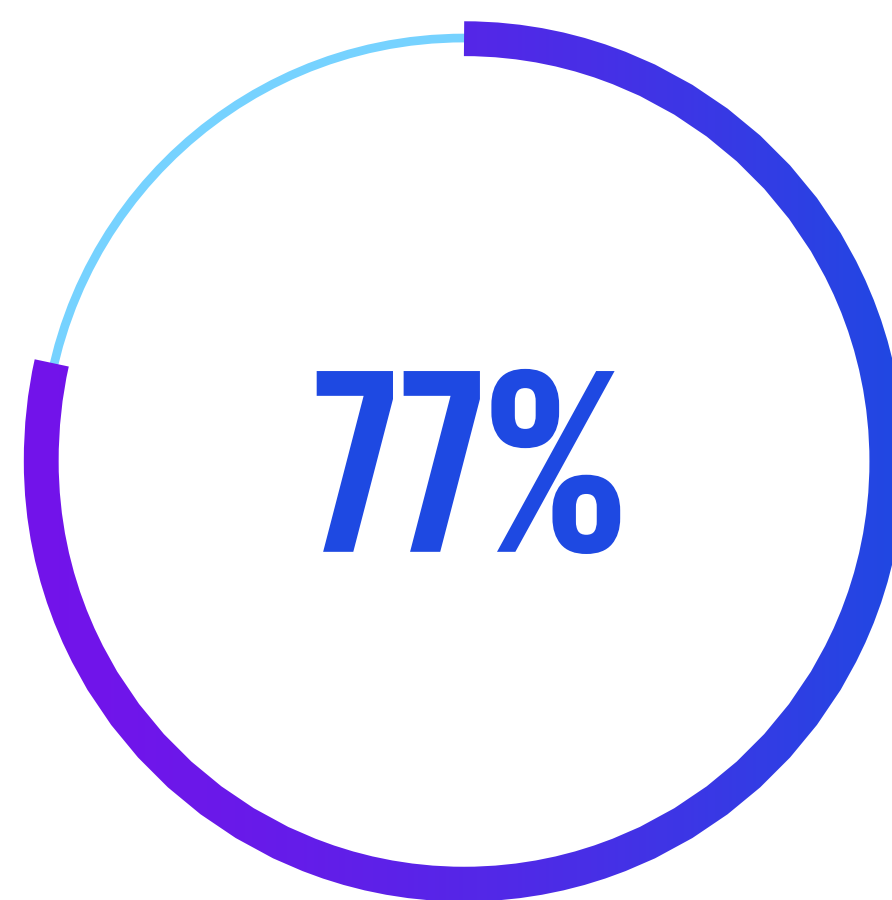
# Boosting engagement and productivity



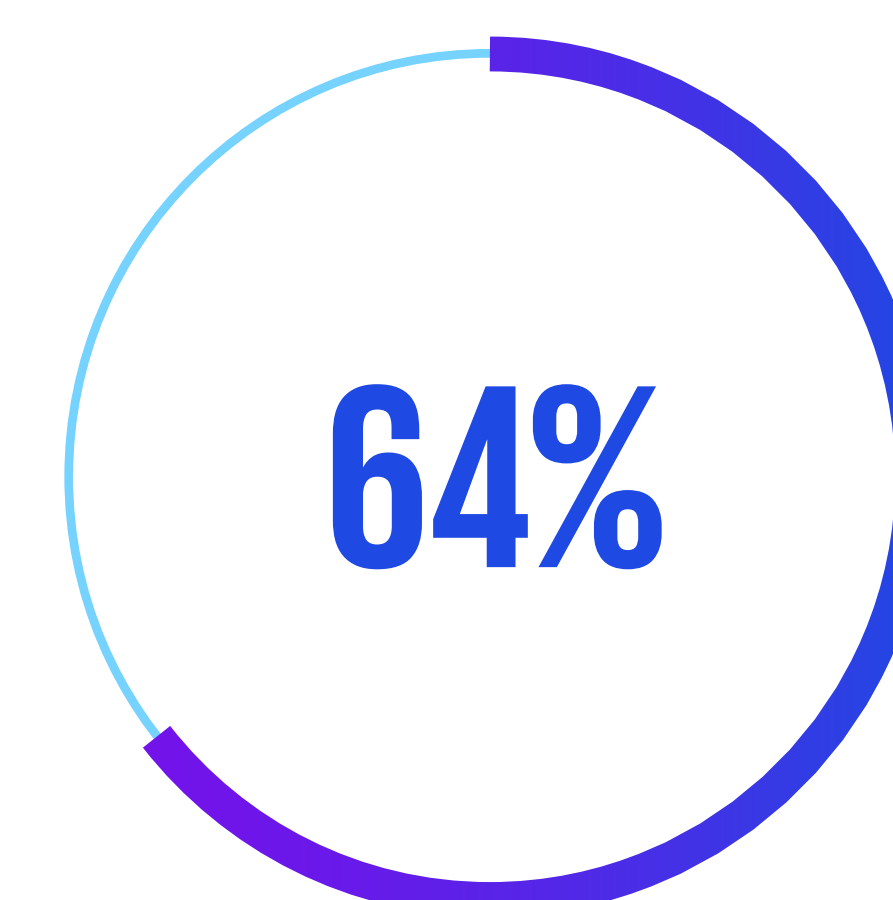
The UAE's digital transformation efforts have yielded outstanding results in both customer engagement and employee productivity. The UAE outpaces its global peers by 21% and excels in enhancing customer engagement. 64% of UAE leaders believe that their digital transformation investments have helped them with successful business development, a figure that is 13% higher than global results.

Moreover, the survey highlights an impressive 19% lead in employee productivity, reflecting the positive impact of technology initiatives on performance and resulting in tangible business benefits.

77% of UAE tech leaders said that digital transformation investments raised employee satisfaction, ahead of their global peers (52%), while 70% believed it improved employee productivity (global figure: 51%).



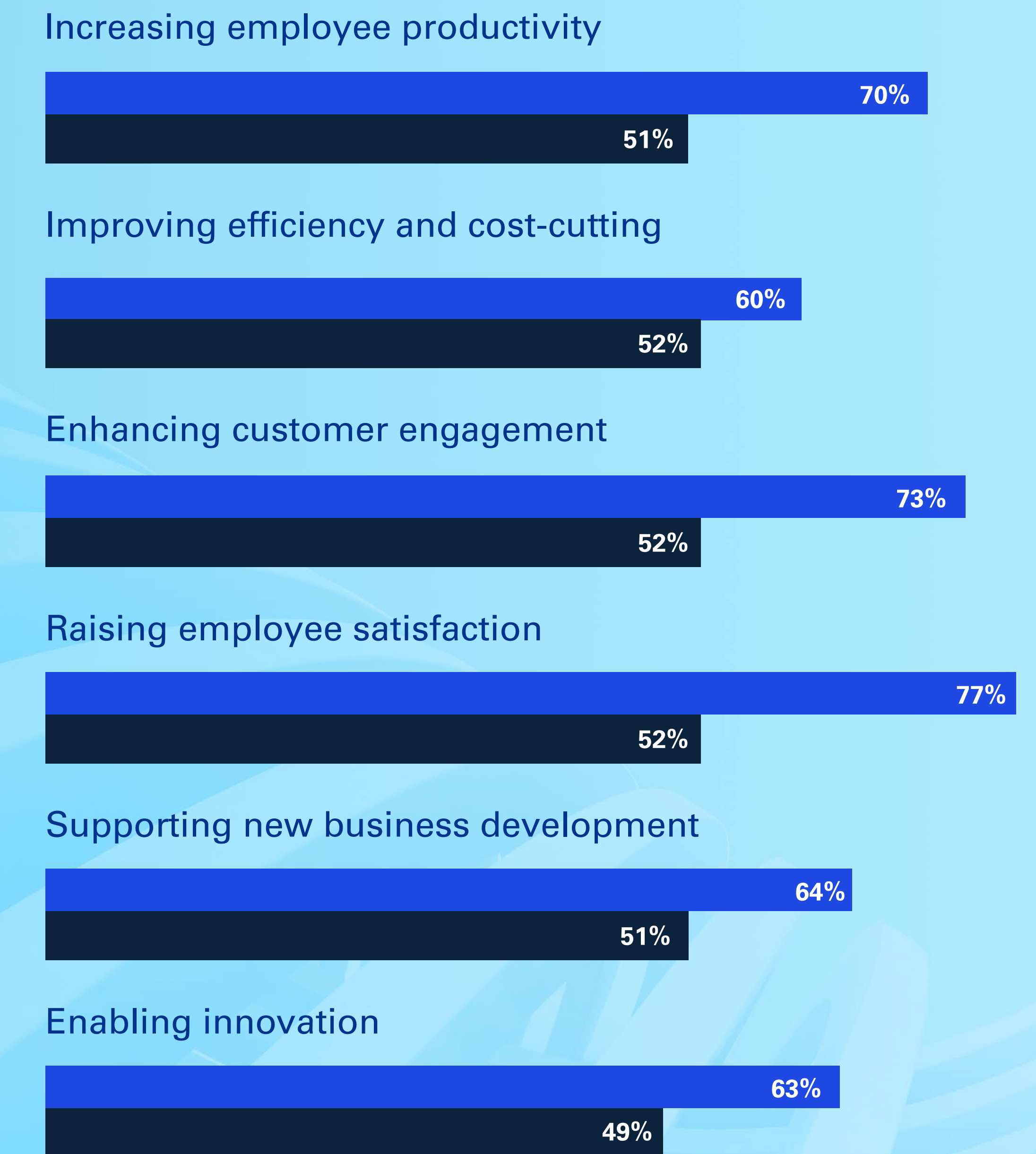
**said digital transformation investments have raised employee satisfaction**



**believe digital transformation investments have helped them with successful business development**

## To what extent would you say that your digital transformation investments in recent years have contributed to the following outcomes?

Leaders responding with 'Above expectations'



Key:  UAE  Global

## Section 8:

# Prioritizing ESG

“For organizations worldwide, ESG is a business imperative that has real impact on an organizations’ long-term resilience, trust, and value creation. As a company, we are committed to leveraging our immense talent and harnessing the power of the ServiceNow platform to create a world that is more environmentally friendly, offers equal opportunity to all and is more ethical.”

**Mark Ackerman**  
Area Vice President, ServiceNow  
Middle East and Africa



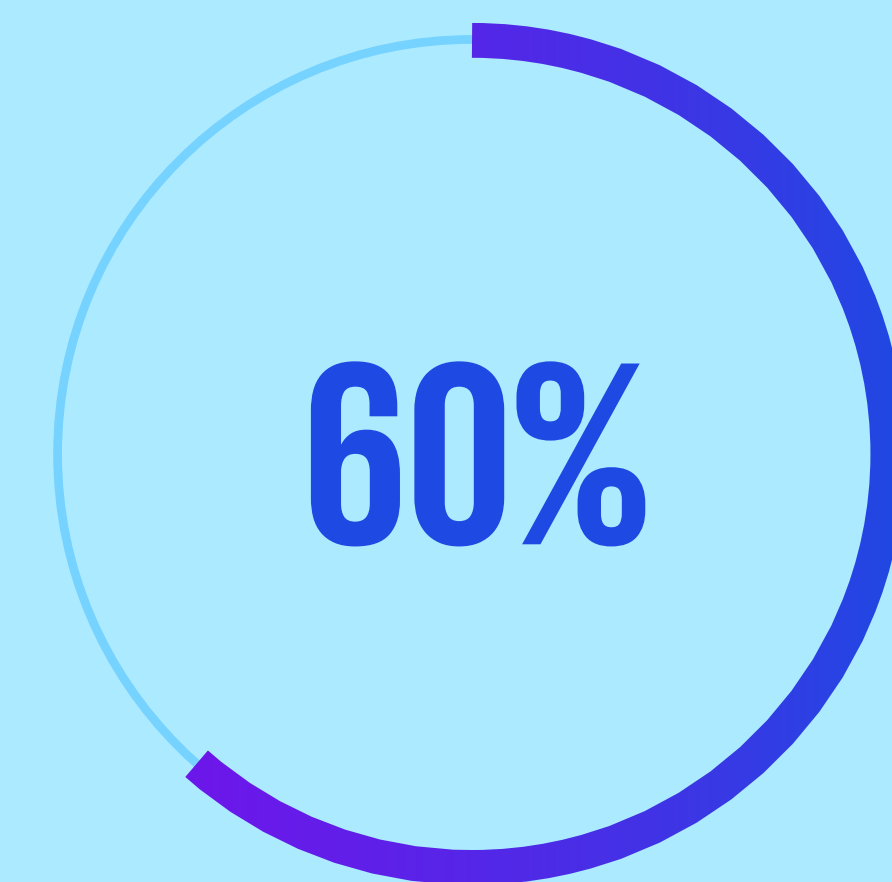


# Shaping a sustainable future

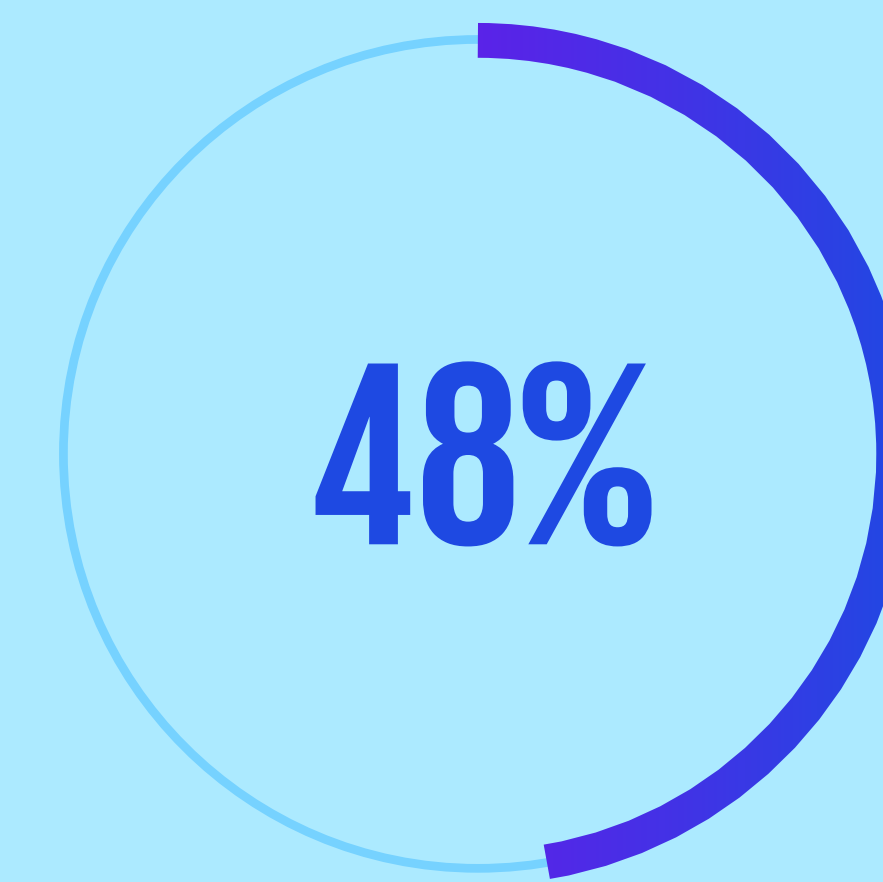


Within the context of ESG priorities, the significance of AI and digital technology is increasing as UAE tech leaders pave the way towards a more sustainable future. UAE tech leaders are looking ahead, with 60% indicating that their technology function will primarily contribute to the advancement of ESG priorities. This aligns with the UAE's commitment to sustainability and environmental goals, with technology serving as a crucial facilitator.

It is telling that ESG is respondents' top choice for this question, ahead of reaching new regions and customer demographics, and enhancing trust through cyber threat detection: yet another indication that ESG remains top of mind across the C-suite.



60% of UAE leaders said the tech function will advance ESG priorities



48% of global leaders felt the same way

## Which of the following innovation goals will your tech function primarily contribute towards in the next two years?

Advancing ESG priorities/commitments (including carbon emissions targets)



Enhancing trust through cyber threat detection and management



Reaching new regions/customer demographics



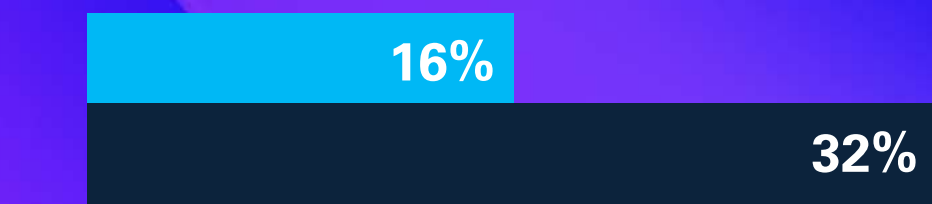
Improving processes across the business



Unlocking more value/insight from data



Improving products and services



Expanding into new industries



Key: ■ UAE ■ Global

## Section 9:

# The way forward

“Managing data quality is not just the future of digital transformation; it is the foundation for higher business-value applications like AI and ML that enable global organizations to enhance their adaptability and responsiveness to market challenges and disruptions. At Informatica, we believe that a modern data management strategy is key to redefining business innovation. As we venture into this new era, recognizing the value of holistic, governed, and trusted data will be pivotal in shaping success and driving unparalleled growth.”

**Yasser Shawky**  
Vice President, Emerging Markets, Informatica





# Navigating challenges and overcoming resistance



The way forward is fraught with headwinds. 47% of tech leaders identify immature data management strategies as a barrier to transformation (global figure: 34%). Additionally, 43% of respondents point to constraints from legacy technology, underscoring the need for strategic approaches to innovation that address these challenges head-on.

With 39% of tech leaders indicating that a risk-averse culture decelerates their transformation efforts, embracing change for some organizations in the UAE can be a challenge. UAE tech leaders also recognize that addressing employee resistance holds strategic importance. An overwhelming 83% of respondents agree that employee resistance influences investment decisions in new technologies. This acknowledgement emphasizes the importance of implementing effective change management strategies in fostering buy-in and maximizing the impact of technological initiatives.

## Which of the following challenges are most likely to slow down your transformation?

Technology function lacking the governance and coordination to effectively support transformation initiatives



Cybersecurity or privacy concerns



A risk-averse culture that is slow to embrace change



Lack of skills within our organization



Constraints from legacy technology



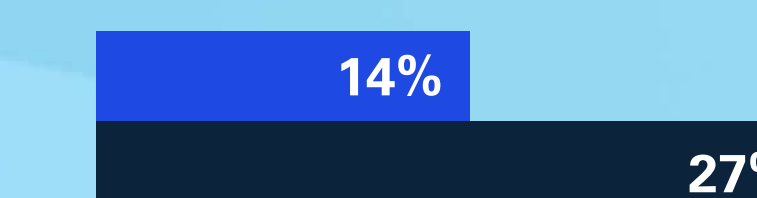
Immature data management strategies



Transformation fatigue



Spiraling costs



Key: ■ UAE ■ Global



# Tomorrow's tech leaders



CIOs are determined to keep their organizations' digital transformations on track. But they must do it intentionally, and collaborate with the broader business for maximum impact. Even in a supportive market environment, investing in technology for the sake of it would be indulgent; in today's challenging times, innovation must be tied to clear business outcomes and carefully monitored for bottom-line returns.

**The UAE's tech leaders are forging a path of innovation and technology-driven growth, setting a global example for strategic AI adoption, prioritizing ESG and cybersecurity, and advancing business technology.**

Tomorrow's tech leaders envision digital evolution holistically, cultivating innovation across all industries. As the UAE sets out to achieve its centennial 2071 ambitions, technology breakthroughs can reshape the future of education, healthcare, tourism, manufacturing, and ESG.

The UAE is leading the way in digital transformation, positioning itself for long-term success in a constantly evolving business landscape. This commitment to technological excellence, combined with a forward-looking approach, highlights the country's role as a global leader in the industry. Recognizing the transformative role of technology in all social and economic development initiatives, the UAE is keen on empowering a generation of visionary leaders capable of making the nation's aspirations a reality in the decades to come.



# About KPMG Lower Gulf



For about 50 years, KPMG Lower Gulf Limited has been providing audit, tax and advisory services to a broad range of domestic and international, public and private sector clients across all major aspects of business and the economy in the United Arab Emirates and in the Sultanate of Oman. We work alongside our clients by building trust, mitigating risks and identifying business opportunities.

KPMG Lower Gulf is part of KPMG International Cooperative's global network of professional member firms. The KPMG network includes approximately 236,000 professionals in over 144 countries. KPMG in the UAE and Oman is well connected with its global member network and combines its local knowledge with international expertise, providing the sector and specialist skills required by our clients.

KPMG is widely represented in the Middle East: along with offices in the UAE and Oman, the firm operates in Saudi Arabia, Bahrain, Kuwait, Qatar, Egypt, Jordan, the Lebanon, Palestine and Iraq. Established in 1973, the Lower Gulf firm now employs approximately 1,780 people, including about 190 partners and directors across the UAE and Oman.

As we continue to grow, we aim to evolve and progress, striving for the highest levels of public trust in our work. Our values are: **Integrity:** We do what is right; **Excellence:** We never stop learning and improving; **Courage:** We think and act boldly; **Together:** We respect each other and draw strength from our differences; **For Better:** We do what matters.

To meet the changing needs of our clients, we have adopted an approach aligned with our global purpose: Inspiring Confidence, Empowering Change.

Our KPMG IMPACT initiative aims to help clients future-proof their businesses amid times of increasing focus towards issues such as climate change and social inequality. The goal is to help them achieve success across **17** major Sustainable DevelopmentGoals (SDGs) and become more resilient and socially conscious.

Fifty years since its founding, the UAE has evolved into a hub of dynamism, an economic heavyweight and a symbol of perseverance. As the nation recently marked its golden jubilee, KPMG Lower Gulf is proud to celebrate its 50th anniversary in the UAE this year. Our three pillars – **exceptional quality of service, an unwavering commitment to the public interest, and building empowered teams** – are the foundation of our firm. Over the coming decades, we commit to lending our support to the UAE's journey as it goes from strength to strength: together, for better.



# Transformation never stops. Neither do we.

At KPMG we believe that business transformation is too valuable an opportunity to miss. Combining the right tech and the best processes with people whose insight is as broad as it is deep, are essential ingredients to successfully transform. KPMG member firms have worked at the heart of global businesses for many decades, helping our clients realize the full potential of their people and technology, working together to achieve real-world outcomes. Because when people and technology are in harmony, great things can happen.

## **Making a world of difference:**

KPMG people can make all the difference on your transformation journey. Together we can help you to orient your business around the customer, optimize functions for a new era, manage enterprise risk and regulation for a safer future, rise to a new level of value creation, and create an environment for managing ongoing change.





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