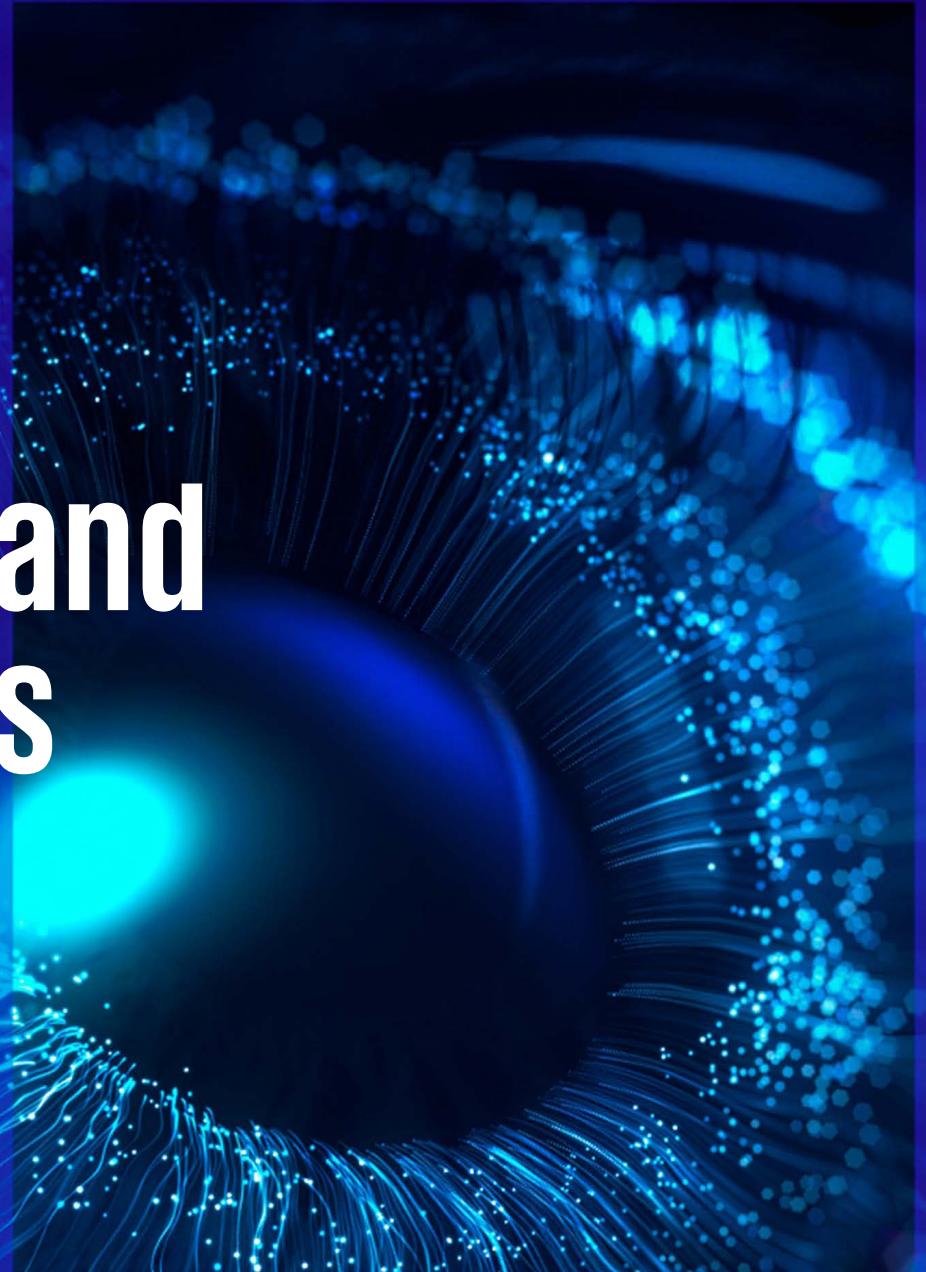




KPMG Tech Report Central Asia and the Caucasus

May 2026

KPMG. Make the Difference.



About the research

The study is based on a survey of:

2500

IT executives from 27 countries

Global version:



Top in process maturity, Top in technology maturity,
Top in return on IT investment (200% and above)

40

Caucasus

32

Central Asia

224

Global Technology
Leaders (TL)

Interviews with IT market leaders:

Ivan Belokhvostikov
CEO, Cybernet.AI

Dean Bortz
Director, AI Go-to-Market, Google

Zack Kass
AI Consultant, Former Head of Go-to-Market, OpenAI

Agiis Konkabayeva
CIO, Beeline Kazakhstan

Rubina Lozovaya
CDO, Bank CenterCredit

Phil Mottram
Executive VP and Chief Sales Officer, HPE

Seth Patton
GM, Microsoft 365 Copilot

Noelle Russell
CEO, AI Leadership Institute

Valery Semchukov
VP of Technology, Freedom Holding

Renat Tukanov
CTO Freedom Holding, CEO Freedom AI

Rustem Uvaliyev
Head of the Digitalization Office, BTS (ERG Group)

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Foreword

Based on the results of a survey of more than 70 companies in the region, we see that the technology agenda for Central Asia and the Caucasus has entered a phase of managed maturation. The region is acting less and less in line with the logic of feverish anticipation — “wait until things become clearer” — and is increasingly making decisions in situations where clarity emerges only after action has been taken. This is a qualitative shift. Whereas a year ago discussions with executives were dominated by anxiety over the pace of change, today we sense a shift in attitude: companies are launching initiatives faster, but increasingly — with a clear understanding of where risk is acceptable and where the cost of failure is too high.

Nearly half of the region’s organizations already view experimentation with technology as a standard part of their strategy rather than an exception. At the same time, only about a third of companies adopt a wait-and-see approach, preferring to “wait until the technology is proven,” which is significantly lower than in the global sample. This is important: the region is accelerating not “on a whim,” but selectively, striving to succeed where the effect can be demonstrated quickly and while avoiding dispersion of managerial attention.

But this is precisely where the key tension of the year arises. Confidence in the ability to deal with uncertainty in the region is higher than the

global average, yet the ability to regularly test this confidence against results is still lagging behind. Only about half of companies systematically compare the impact of technological initiatives with their business plans. In the age of AI, this ceases to be a methodological detail and becomes a strategic risk: when measurability cannot keep up with speed, strategy easily turns into a sense of movement without evidence of progress.

Paradoxically, Central Asia and the Caucasus are entering the AI era not as a late-moving region. In terms of the proportion of companies that have already integrated AI into their industrial operations with measurable results, the region is significantly ahead of the global picture (at least among the relatively large companies that were the focus of our review). This is precisely why the next step becomes critical: speed no longer provides an automatic advantage. What becomes decisive is the managerial “assembly” function —

the ability to transform individual successes into a sustainable organizational capability with clear accountability, mature governance mechanisms, and the trust of people.

In this report, we examine in detail where exactly this crossroads lies: between speed and sustainability, between experimentation and a portfolio approach, and between AI as a series of success stories and AI as a new production system. The answers to these questions will determine whether the region’s current momentum becomes a long-term competitive advantage — or proves to be a temporary window of opportunity.



Konstantin Aushev

**Partner, Head of
Technology Practice**

**KPMG Caucasus and
Central Asia**

Konstantin advises companies on digital transformation, cybersecurity, cloud technologies, data, and analytics for over 15 years. His project experience spans all countries in Central Asia and the Caucasus, as well as a number of large companies in other CAC countries.

The background of the slide features a person's legs in motion, running on a reflective surface. The person is wearing dark blue jeans and brown sneakers. The ground is highly reflective, showing vibrant, multi-colored light trails in shades of blue, purple, and pink. The overall scene is dynamic and futuristic, with a bokeh effect of light spots in the background.

Technology strategies: speed without illusions

“

Can we thrive amid disruption? The answer I believe lies in rejecting hype, embracing evidence, and committing to strategies that balance ambition with rational thinking.

Guy Holland, Leader of the Global CIO Competency Center
KPMG International



Companies in Central Asia and the Caucasus are increasingly moving away from waiting for “proven” technologies and are instead turning to controlled experiments. The region is accelerating not by breaking the rules of governance, but through a portfolio approach to innovation: rapid pilots, strict risk parameters, and a focus on internal capabilities. Compared to last year, anxiety is giving way to action, but caution remains an important part of strategic thinking.

Fast, but selective

Central Asia and the Caucasus (CAC) appear to be a region that has stopped waiting for the “perfect moment” and has learned to live in a reality where technological rules change faster than management habits can catch up. This is clearly evident in how companies respond to breakthrough technologies capable of improving results but simultaneously “disrupting” existing business model. There is noticeably less hesitation in the region ([Figure 1](#)): **the strategy “wait until the technology is proven” is chosen by 33% of companies in the CAC, compared to 44% globally.** At the same time, **“rapid but selective adaptation” is adopted much more frequently — 43% in the CAC vs. 36% globally.**

This combination is significant: CAC does not demonstrate unconditional enthusiasm for “forge ahead at any cost” approach. Rather, the region operates on the principle of “accelerating where quick wins are possible, but not spreading across the entire market.” This likely reflects the management logic of emerging markets: the window of opportunity is shorter, the gap

with the leaders needs to be closed faster, and the cost of a wrong decision is higher — thus, speed is essential, but it must be balanced with a disciplined selection process.

The most striking difference is the decision-making style. **Nearly half of CAC organizations (44%) opt for a proactive experimentation approach, whereas in the global sample, only 21% do so.** Conversely, the model “moving only in response to market demand” is twice as rare in the region — 14% vs. 30% globally.

This aligns well with the global context of the current year: globally, 56% of technology leaders acknowledge that technology plans quickly become obsolete due to the pace of change; and only 16% of the top-performing companies face this issue as frequently.

Against this backdrop, the CAC’s focus on “experimentation as the norm of strategy” does not appear to be a trend, but rather an attempt to build a practical mechanism for adaptability, where traditional planning no longer works as it once did.

From concern to action

When comparing the current situation to last year, it becomes clear just how much the region’s sentiment has shifted. Last year’s report was dominated by a sense of pressure: 78% of companies said they were concerned about the pace of technological change, and 80% noted that senior management’s caution was slowing the adoption of new solutions compared to competitors.

Today, this anxiety hasn’t gone away, but it has ceased to be paralyzing. The region is increasingly opting not to wait for “when things become clearer,” but rather to take controlled trial steps — with rapid case selection and strict scaling criteria. **Strategy is beginning to be perceived not as a fixed plan, but as a portfolio of hypotheses that is constantly being reconfigured.**

56%

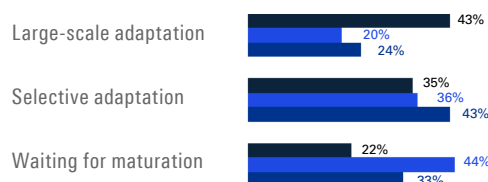
of technology leaders acknowledge that their development plans are not keeping pace with the rate of change.



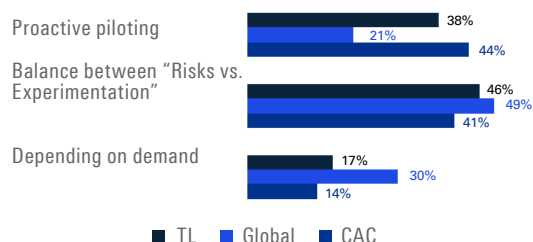
Figure 1. When adopting new technologies, CAC companies tend to rely less on external expertise and external demand; instead, they more often implement pilot projects in a decentralized manner.

Q: “Imagine the emergence of a new breakthrough technology that could improve the company’s performance while threatening the current business model. How would you approach it in terms of the following aspects?”
(n = 70 (CAC), 2,500 (Global), 224 (TL), SL = 95%).

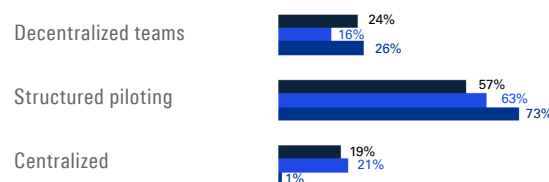
Strategic approach



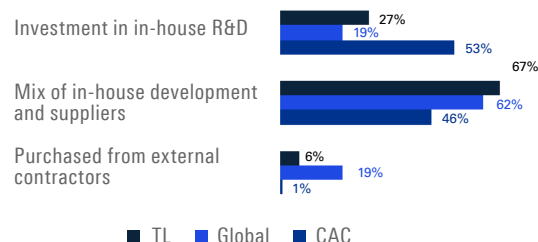
Approach to decision-making development



Innovation management



Competency



Frameworks instead of bureaucracy

The strength of the CAC region lies in its ability to strike a balance between boldness and discipline. In practice, this is reflected in how the region structures its innovation management. Unlike the global landscape, where there is a noticeable emphasis on strict centralization, in the CAC it is almost non-existent (this was particularly evident in the figures from Azerbaijan): **“centralized control” is chosen by 1% of companies in the region, compared to 21% globally.** Instead, a more practical management architecture dominates: structured pilots (CAC 73% vs. global 63% and 57% for technology leaders) and a moderately higher degree of decentralization of innovation at the team level (CAC 26% vs. general public 16%).

Essentially, this is a “framework and rules instead of heavy bureaucracy” model: not to build a cumbersome center that coordinates everything, but to manage a portfolio of pilot initiatives with clear constraints, success criteria, and decisions on scaling. It is precisely this structure that helps accelerate progress in conditions where, as the global report shows, plans often become outdated faster than implementation — and those who can quickly adjust course come out ahead.

Rubina Lozovaya from Bank CenterCredit emphasizes the importance of a systematic approach to innovation: “The question is not about avoiding experiments, but about building an experimentation factory and an innovation framework — from processes to rewards — designed to generate as many hypotheses as possible, test them quickly, and scale the most successful ones.”

Is incremental improvement acceptable in your business? If so, simple AI solutions — like out of the box tools — are sufficient. If you’re faced with daunting business challenges that require step-function improvements...that’s where you should aim your resources at reinventing the wheel.

Zack Kass, former - OpenAI



Figure 2. In CAC, there is less apprehension about new technologies, less FOMO, less talent shortage, and a lower impact of core system failures.

Q: "Do you agree with the following statements?" (n = 70 (CAC), 2,500 (Global), SL = 95%).

Technology is now more a source of risk than of sustainable development for us

I am concerned that we are falling behind our competitors in investing in new technologies

I am concerned that we are falling behind in preparing for threats related to quantum computing and the implementation of PQC

Our approaches to analytics and reporting enable us to make strategic IT decisions by balancing short-term...

Our business strategies often become outdated due to unexpected technological innovations

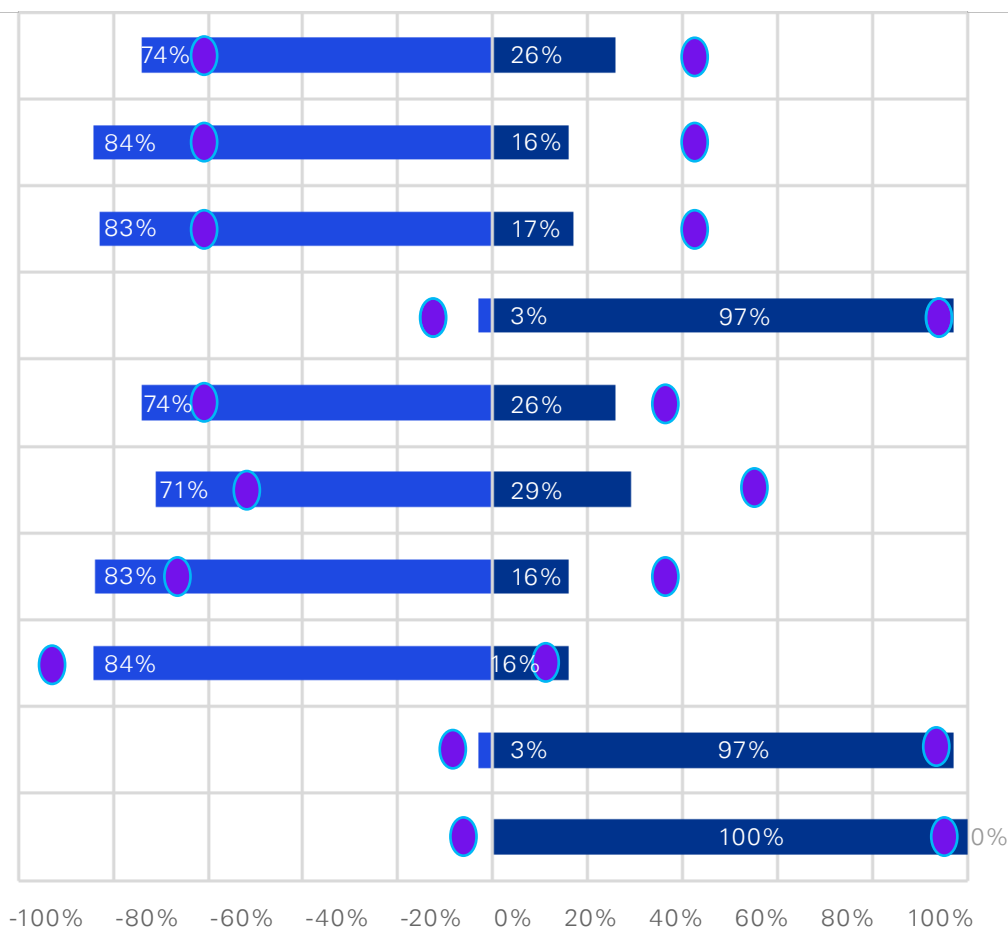
We have strong digital transformation ideas for the next 24 months, but we lack access to the necessary talent

Flaws in our core IT systems disrupt business processes on a weekly basis

We often feel we lack the budget to keep up with the pace of technological changes

We plan to expand and strengthen our technology ecosystem and partnerships

Long-term value of new technologies (quantum computing, AI, Agentic AI) justifies the investment



■ Agree ■ Disagree ● Global averages



Caution as a strategy

An important regional paradox emerges at the mindset level. On the one hand, CAC companies assess themselves as fairly resilient to change ([Figure 3](#)): 75% place themselves in the top tiers of resilience — nearly on par with the global average of 80%. On the other hand, **the region's investment style is noticeably more reactive**: 25% of companies admit that they focus on trends and external signals, whereas globally, only 3% do so.

But this reactivity is not the same as impulsiveness. Where the cost of error is particularly high, the region demonstrates rigidity ([Figure 2, Table 1](#)). **Adhering to zero-trust principles even at the cost of slowing down innovation is chosen by 58% of CAC companies, whereas globally, only 16% do.** This suggests that acceleration is permissible only within strict frameworks of trust and security, particularly in the financial sector, government services, and infrastructure.

Within the region, **Kazakhstan stands out. Here, the share of companies with pronounced risk aversion and a reactive investment style is 28% compared to 17% on average across the CAC.** At the same time, Kazakhstan more often than others demonstrates confidence in the manageability of external factors: the influence of the market, regulations, and technology is considered controllable by 50% of companies, compared to 40% in the region and just 14% globally.

Strategically, this forms a model of “confident caution”: here, technology strategy is neither a declaration nor a rare exercise, but a continuous process of fine-tuning, especially where the rules are set by the institutional and regulatory environment.

Table 1. CAC companies consider data, people, and culture to be the key factors for the successful implementation of an IT strategy.

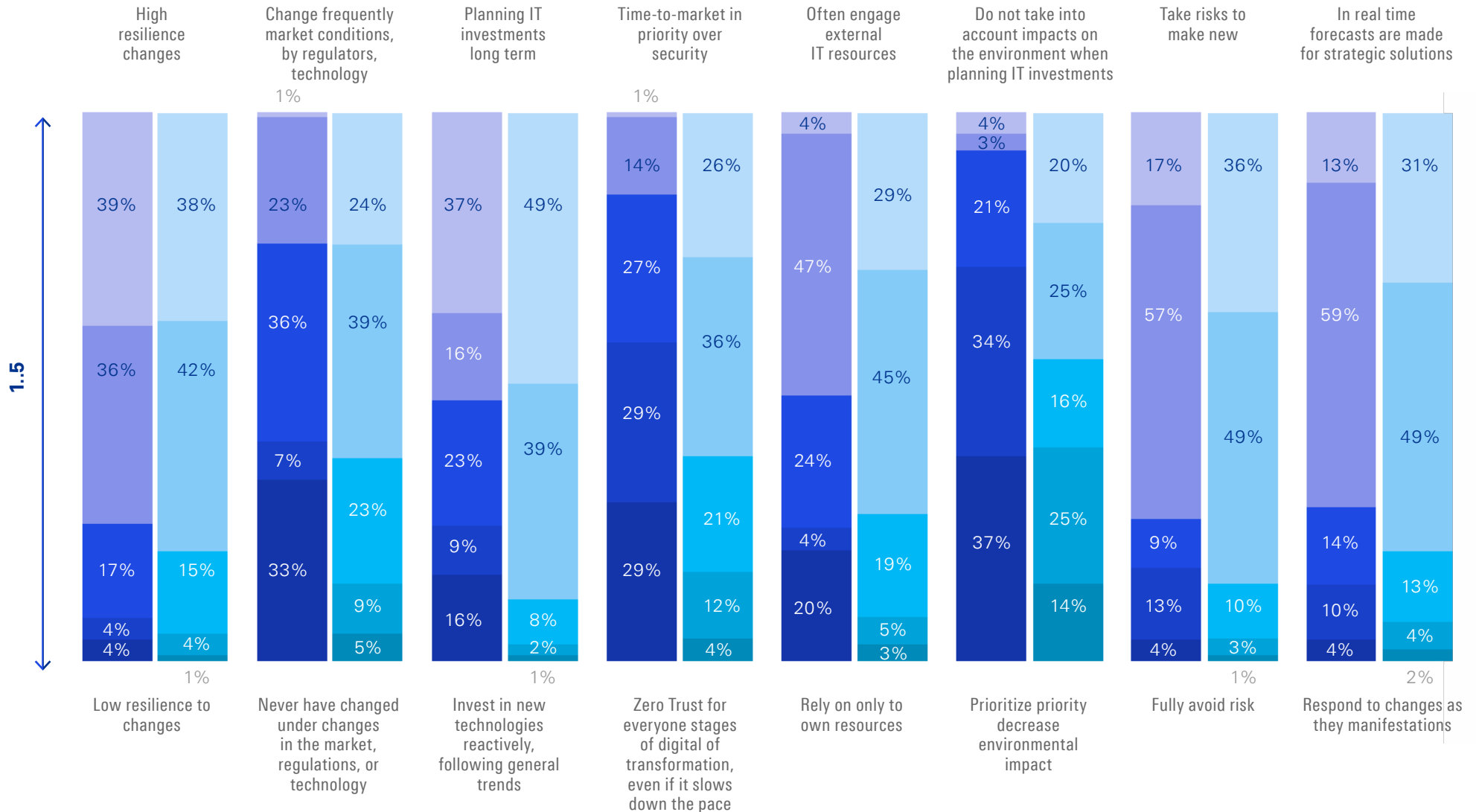
Q: “Which of the following factors do you consider most important for implementing your organization’s IT strategy?”
(n = 70 (CAC), 2,500 (Global), 224 (TL), SL = 95%).

Ranking of success factors for implementing an IT strategy	CA	Global	TL
High-quality and accessible data	1	1	1
A culture of innovation and adaptability	2	3 ▼	4 ▼
Skills and talents	3	1 ▲	2 ▲
Vision and leadership	4	5 ▼	6 ▼
Risk management and cybersecurity	5	6 ▼	3 ▲
High-quality execution and flexibility of IT team	6	4 ▲	5 ▲
Cost measurement and KPIs	7	7	7
Clear management and oversight procedures	8	8	10 ▼
Collaboration between teams	9	10 ▼	9
Collaboration with external partners	10	10	8 ▲
Effective change management	11	9 ▲	11



Figure 3. CAC companies are less resilient and less prepared for external changes, pay less attention to long-term planning, are more risk-averse, and rely more on internal resources (first column – CAC, second – Global).

Q: "On a scale of 1 to 5, how would you rate your organization based on the following statements?" (n = 70 (CAC), 2,500 (Global), SL = 95%).



**Technological
development: profit at the
expense of efficiency**





Today, the technology agenda in Central Asia and the Caucasus looks less and less like a race to keep up with trends and more and more like a controlled movement. The region is learning to accelerate without losing control: quickly testing hypotheses, rigorously selecting what works, and maintaining boundaries where the cost of error is high. This is the main theme of the year: speed is becoming not a slogan, but a managerial competency.

Acceleration without excitement

The nature of this acceleration is best seen in how companies approach the “proven track record” of technologies. In the CAC, there is noticeably less hesitation: 33% of companies in the region choose the “wait until the technology is proven” strategy, compared to 44% globally. Instead, it is much more common to adopt “rapid but selective adaptation” — 43% in the CAC region vs. 36% globally.

This acceleration is not impulsive: it is established as a behavioral style. **Nearly three-quarters of CAC organizations (73%) are pursuing a course of proactive experimentation with emerging technologies, whereas among technology leaders, only 57% do so, while 43% strive to establish a managed innovation development process.**

In a global context, these figures are particularly striking given the previous finding regarding the rapid obsolescence of IT strategies. Against this backdrop, CAC’s focus on experimentation appears to be an attempt to embed adaptability into regular practices, rather than clinging to a “plan as a

document” and avoiding processes that can slow down innovation — only 41% of CAC companies intend to strike a balance between experimentation and caution, while 44% will regularly launch pilots, and only 14% will make investment decisions in innovation based on market demand (distribution among tech leaders: 46%, 38%, 17%).

Technology as a lever for growth

While the rest of the world increasingly has to explain technology in terms of the complexities of ROI and integration, the CAC has begun to speak more often in terms of growth. **Among the expected benefits of the region’s technological ambitions, revenue growth (43% vs. 30%) and faster time-to-market to market (39% vs. 28%).**

This logic is supported by an almost unanimous view: 99% of **CAC respondents consider investment in cutting-edge technologies to be the main source of competitive advantage** over the next three years (globally — 90%).

The economic backdrop reinforces this choice (Figure 4): 91% of companies in the region report revenue growth over the past five years (88% globally), and 93% are confident of revenue growth in the next 24 months (89% globally). In such an environment, technology is naturally perceived as an accelerator, not as “an expense for optimization.”

From concern to action

The contrast with last year makes this shift particularly noticeable. Last year’s regional report was dominated by a sense of pressure: 78% of companies said they were concerned about the pace of technological change, and 80% noted that caution was slowing the adoption of new solutions compared to competitors.

Today, the anxiety hasn’t disappeared, but it has ceased to be paralyzing. The region is increasingly opting for controlled trial steps: not waiting for “when things become clearer”, but rather testing hypotheses and quickly reconfiguring the portfolio of initiatives. This is what strategic maturity looks like: it becomes not a one-time declaration, but a practice of regular recalibration.

99%

of CAC companies associate cutting-edge technologies with competitive advantage (90% globally).



Figure 4. CAC companies more often reported revenue growth and have a more positive outlook on the future, but are not always willing to take risks associated with new technologies.

Q: "Do you agree with the following statements?" (n = 70 (CAC), 2,500 (Global), SL = 95%; totals do not add up to 100% due to the "Neutral" response option).

We are confident that our income will grow over the next 24 months

Our income has increased over the past five years

We effectively manage uncertainties when making IT investment decisions

We should take on more risks associated with new technologies, to remain relevant

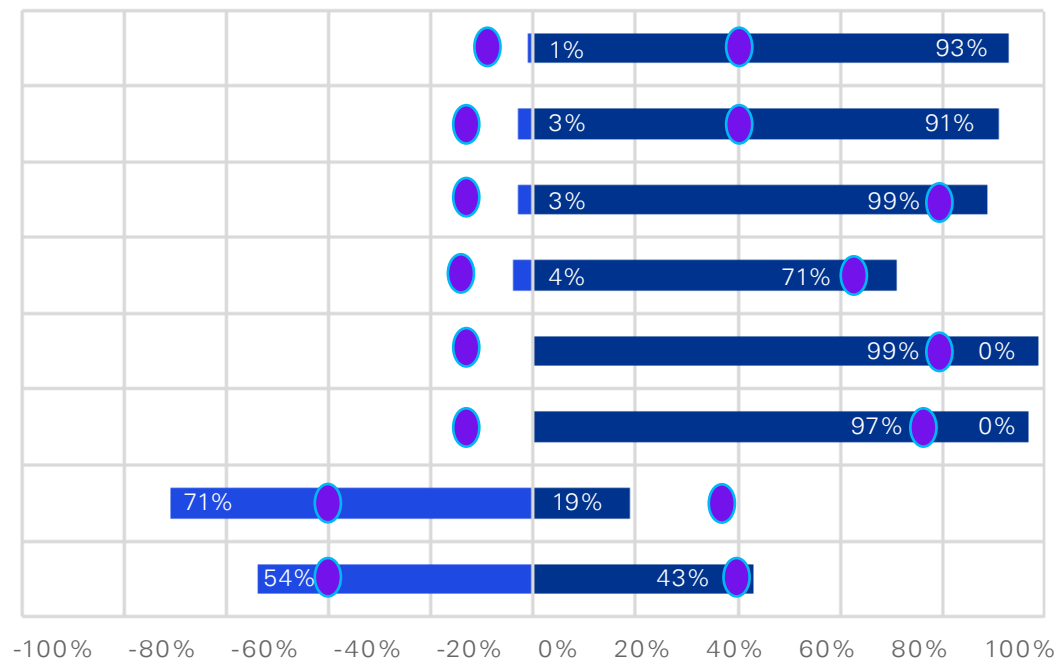
Investment in cutting-edge IT is the main driver of competitive advantage over the past 3 years

My role as an IT leader in the company has grown significantly over the past 24 months, and this pace will continue

Outdated processes often lead to a low ROI on IT investments

Our IT plans quickly become outdated due to the pace of technological progress

■ Agree ■ Disagree ● Global average



The advantage of measurability

This year, the CAC region is driven by three factors: faith in technology as a source of competitive advantages, management confidence in navigating uncertainty, and economic optimism that supports a willingness to invest. In numbers, this looks like a rare combination: more selective adoption of technology (43% vs. 36%), more proactive experiments (44%

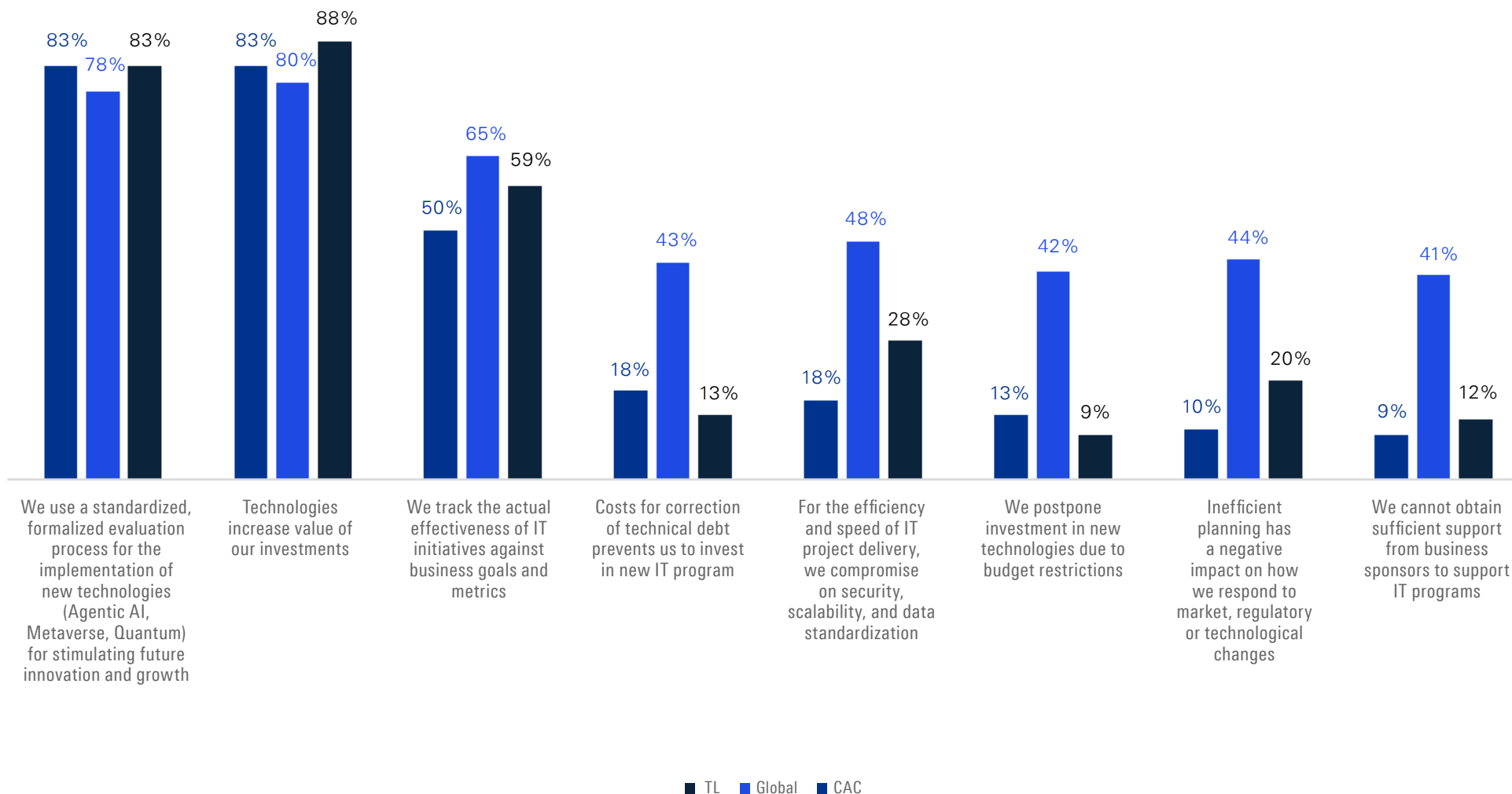
vs. 21%), near-maximum faith in cutting-edge technologies as a driver of advantage (99% vs. 90%), and higher management confidence (93% vs. 85%). However, the line between "rapid progress" and "paper effect" runs through measurability. Confidence without regular verification of results easily turns into an illusion of effectiveness, while regular measurability turns

into the competitive advantage that is the hardest to replicate: because it is built not on the purchase of technology, but on management discipline.



Figure 5. Half of the companies in the CAC do not track the actual effectiveness of IT projects; however, companies in the region are more diligent about security in innovation projects and more often find support from business sponsors.

Q: "How often do the following situations occur in your company?" (n = 70 (CAC), 2,500 (Global), SL = 95%; percentages of respondents who answered "Very often" or "Often" are shown).



Investment priorities: security and data





Today, the investment logic behind technology solutions in Central Asia and the Caucasus is no longer driven by available budget. It increasingly reflects the stage of business development and management ambitions. Companies in the region are not simply investing “a lot,” but in a fairly focused and thoughtful manner, choosing areas that directly support growth, sustainability, and business model transformation. The result is an investment profile that appears both mature in scale and risky in structure.

Medium-to-large scale without extremes

In terms of the size of annual investments in digital technologies, the CAC region differs significantly from the global picture. Nearly **three-quarters of companies in the region are concentrated in the \$100–499.9 million per year range**: about one-third invest \$100–249.9 million, and another 40% invest \$250–499.9 million ([Figure 6](#)). Globally, these same ranges cover only about 42% of respondents, while a quarter of companies worldwide remain below the \$50 million mark.

This “mid-to-large” profile appears to be a conscious choice. On the one hand, it may indicate that digitalization in the region is more often implemented through large, comprehensive programs rather than through scattered initiatives.

On the other hand, it reflects the structure of the economy and the sample: there are fewer global corporations with massive budgets, but there are enough major national and regional players for whom digital investments are becoming a significant component of their capital expenditures. Furthermore, due to a number of macroeconomic trends, the actual cost of projects in our region is often higher than the global average, which is driving a shift toward larger investments. It is also characteristic that the segment of ultra-large budgets (500 million dollars and above) is virtually absent in CAC — about 1% compared to 5% globally. This shapes the profile of a “fairly large”, but not “giant” technology investor.

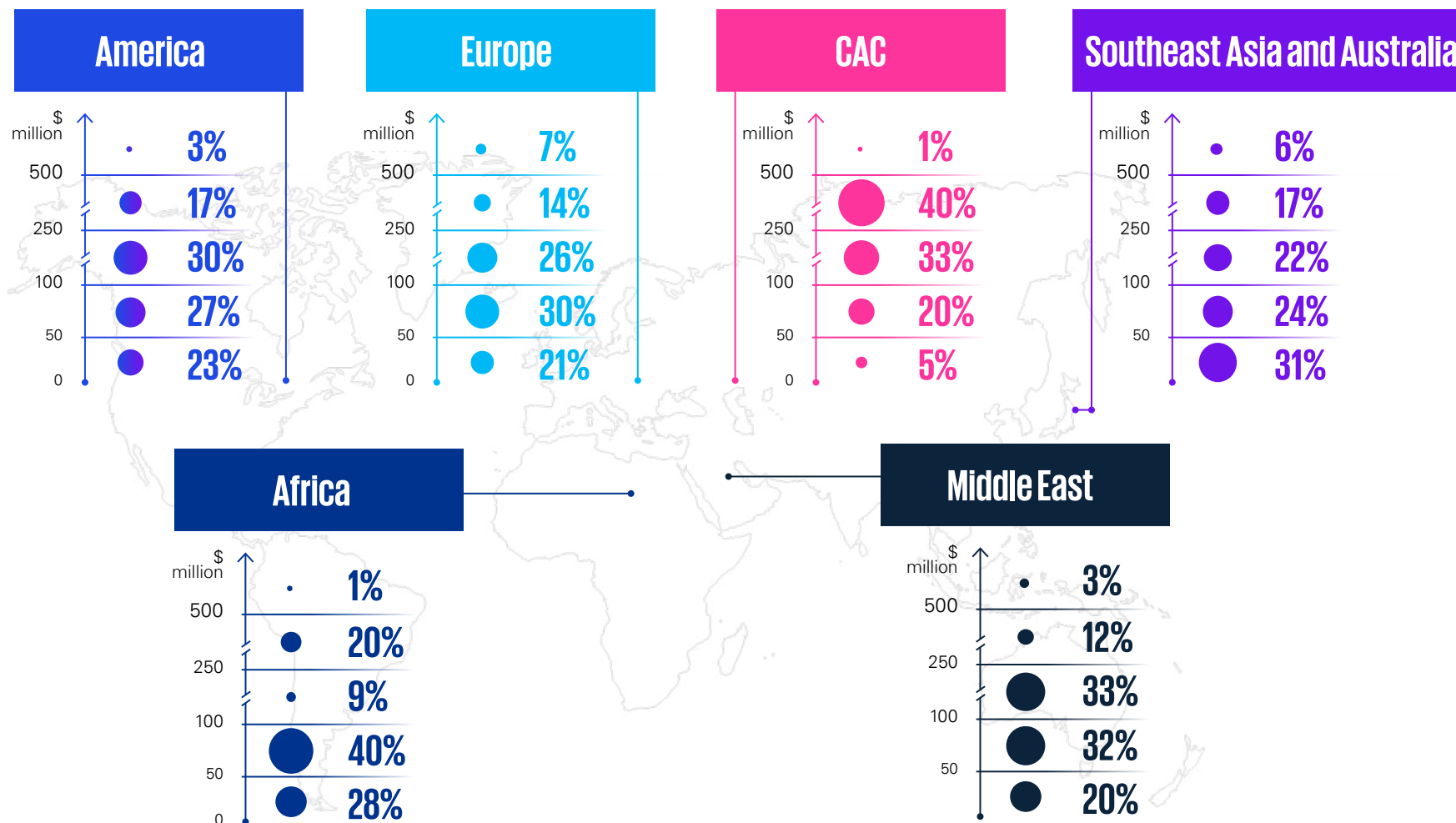
Unusually optimistic returns on IT investments

Far more than the scale of investment, the CAC stands out in terms of its self-assessment of the financial return on digital technologies. More than half of the region’s companies—about 51% — report that the realized financial value over the past 12 months amounted to \$250–499.9 million. In the global sample, only about 18% of companies fall within this range. At the same time, the lower segments are virtually absent: in the CAC region, there are almost no organizations reporting returns below \$50 million, whereas globally, more than 40% of respondents provide such estimates.

This distribution looks not just optimistic—it looks atypically smoothed out. This raises a key hypothesis for interpreting the data. In the region, “realized value” is often understood not only as the direct effect on revenue or profit, but also as the aggregate economic outcome of transformation programs: avoided losses, increased resilience, regulatory compliance, modernization of key platforms, and reduced operational risks. When digital initiatives are structured as large-scale corporate programs, the final effect is often aggregated at a high level, which leads to a concentration of responses within a single range.

Figure 6. In the CAC region, most large companies invest between \$100 million and \$500 million in IT annually, which is above the global average range.

Q: "What is the average amount of investment in technology in your organization?" (n = 70 (CAC), 700 (America), 790 (Europe), 70 (Africa), 210 (Middle East), 730 (Southeast Asia and Australia), SL = 95%).



An alternative explanation does not contradict the first. For many companies in the region, digital transformation is still in the phase of building the foundation — infrastructure, ERP, data platforms, and cybersecurity. At this stage, even mid-sized investments can yield quick and noticeable results by eliminating downtime, manual operations, and process fragmentation. In more mature markets, this “low-base effect” has already been exhausted, and the returns appear more moderate and more varied. The survey generally confirms this explanation. Companies in the region attribute a large share of the realized benefits to investments in core platforms (in Kazakhstan, this is roughly equal to the return on AI investments) and not at all significant — with investments in emerging technologies.

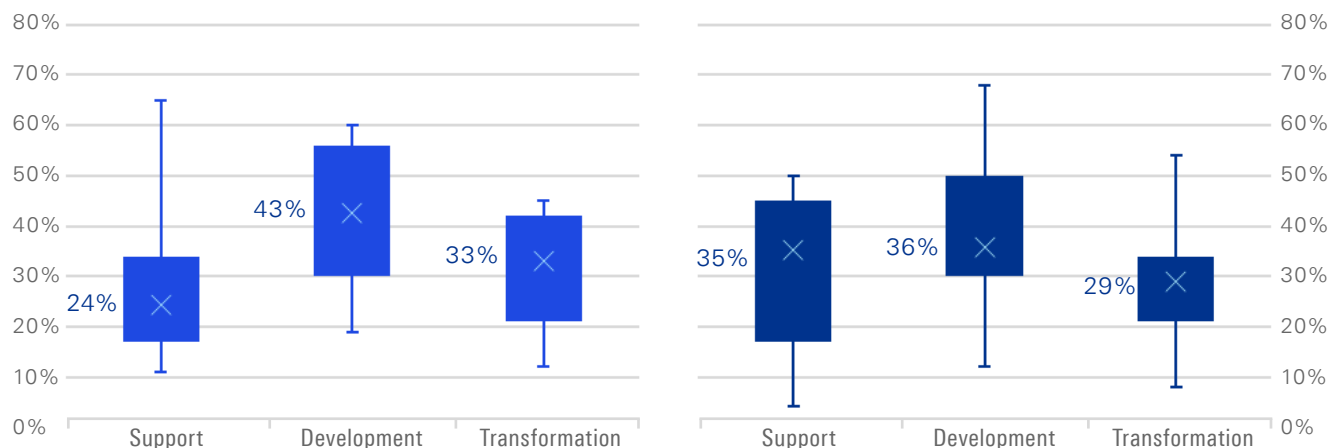
Portfolio as an indicator of the development phase

The budget allocation structure is even more revealing (Figure 7). In the CAC, spending on maintaining existing systems consistently remains at the lower end of the range: for most companies, **“maintenance” accounts for no more than 30% of the budget (in Kazakhstan, no more than 20%)**. Globally, the picture is different — support more often accounts for 30–50% and remains the largest expense category.

If we bring the distribution to a rough “average” estimate, **the CAC portfolio looks like approximately 21% for support, 41% on**

Figure 7. CAC companies may be underinvesting in IT support compared to development and transformation.

Q: “What percentage of your IT budget do you allocate to each of the following categories?” (n = 70 (CAC), 2,500 (Global), SL = 95%).



If run/maintenance is funded on a residual basis, the system eventually begins to generate more operational losses than benefits.

Agiis Konkabayeva, Beeline Kazakhstan

development, and 31% on transformation.

Globally, the ratio is closer to 34% / 34% / 26%. This is fundamentally different distribution. The region is consciously shifting its focus toward change, even if this means a thinner layer of protection in basic operations.

This shift can be interpreted as a sign of an accelerated catch-up phase: **companies are striving to quickly restructure their processes,**

products, and business models, without lingering too long in “maintain the status quo” mode. Plus, many companies in the region today are striving to rapidly increase their value and see opportunities for capitalization. However, this strategy has a downside. **Underfunding support amid increasing complexity almost inevitably leads to the accumulation of technical debt and operational risks.** In this scenario, the “cheap run” becomes a bottleneck: transformation begins to run up against not ideas and technologies,



but the stability, security, and manageability of core systems. **Agiis Konkabayeva** from Beeline Kazakhstan confirms the consistent impact of accumulated technical debt on operational efficiency: “This will immediately show up in the metrics: launching a new feature will take months instead of weeks; any change will require modifying dozens of systems; the number of incidents after releases will increase; teams will spend more time investigating the causes of incidents than on product development.” To prevent IT from turning from a driver into a constraint on business growth, we need to address potential problems proactively,” adds Agiis: “In advanced companies, 20–30% of sprint time is allocated to resolving technical debt.”

The most striking difference in the region is investment in cybersecurity (Figure 8).

In the CAC region, **63%** of companies report a significant increase in their budget for this area (compared to **41%** globally). Particularly strong growth is observed in Georgia and Uzbekistan. Such “asymmetry” typically arises not from a trend toward security, but from a combination of factors: (1) the rise of geopolitically driven threats and attacks on supply chains, (2) accelerated digitalization (including in critical industries), (3) stricter expectations from regulators and counterparties, and (4) historically accumulated

“technical debt” in security. In the region, security is increasingly viewed not as an IT function, but as a prerequisite for operational continuity and market trust — which is why spending is rising in “big-ticket” increments rather than gradually.

The second group of priorities—data/analytics and AI automation — is where the CAC region also appears more “aggressive.” The share of companies increasing their budgets in the region is about 82% for data/analytics (compared to 73% globally) and 81% for AI automation (compared to 76%). This resembles a shift in investment logic: from “building a digital showcase” to “monetizing data and boosting productivity.” In an environment where market growth is limited, the most obvious source of impact is operational efficiency, decision quality, and response speed. AI and analytics are becoming universal levers: from intelligent planning and inventory management to loss reduction, compliance, and customer service.

Digital twins and advanced simulation: in the CAC region, 87% of companies plan to increase their budget (100% in Uzbekistan, 72% worldwide). This is an unusually high figure, and it is likely explained by the region’s industrial profile: a significant portion of the economy relies on capital-intensive assets and infrastructure (energy, mining, manufacturing, logistics). There, the digital twin is not “futurism,” but a practical tool: predictive maintenance, operational optimization, increased reliability, and reduced downtime and technological risks.

Furthermore, for a long time, there was significant skepticism toward this technology in the region, which is why budgets are now growing faster than the global average.

50%

of CAC companies do not conduct regular measurements of the effectiveness of IT projects (35% globally).



Table 2. Reducing IT budgets in the CAC will lead to a drop in efficiency, the postponement of ESG projects, and the accumulation of technical debt.

Q: "If you had to cut your IT budget, what risks would increase for your organization?" (n = 70 (CAC), 2,500 (Global), SL = 95%).

Threat	Rank in CAC	Rank Globally	
Operational inefficiency	1	1	
Failure to meet ESG rating targets	2	3	▼
Accumulation of technical debt	3	7	▼
Lagging behind competitors in IT innovation	4	3	▲
Reduced flexibility and slow decision-making	5	7	▼
Realization of threats of unethical AI use	6	3	▲
Decreased employer appeal (dissatisfied employees, difficulties in hiring and retaining staff)	7	13	▼
Paused digital transformation initiatives	8	7	▲
Increasing cybersecurity risks	9	2	▲
Declining customer satisfaction and loyalty	10	7	▲
Slower innovation and time to market	11	3	▲
Non-compliance with regulatory requirements	11	12	▼
Reduced availability of IT systems	11	7	▲

Table 3. IT investments in the CAC are more often aimed at revenue growth and less often at risk reduction.

Q: "If your organization achieves its goals in these technologies by the end of 2027, what benefits will it be able to gain?" (n = 70 (CAC), 2,500 (Global), SL = 95%).

Advantage	Rank in CAC	Rank Globally	
New revenue streams (business models, products)	1	3	▼
Accelerating innovation and time-to-market	2	4	▼
Operational efficiency (level of automation, employee productivity, rapid problem resolution)	3	1	▲
Improvement in ESG ratings (improved energy efficiency, reduced carbon footprint)	4	6	▼
Improvements in cybersecurity	5	2	▲
Improving brand reputation	6	10	▼
Improving customer satisfaction and loyalty	7	5	
Improved accessibility and performance	8	6	▲
Enhanced employer brand (employee satisfaction, ease of hiring and retention)	9	6	▲
More effective risk management	10	6	▲
Reduced IT costs	11	11	



We are not prepared to take the risk of losing control over customer data or of violating regulatory requirements. In our industry, this is fundamental. Without security, control, and regulatory compliance, there is no point in talking about scaling, innovation, or growth.

Ivan Belokhovostikov, Cybernet.AI



Against this backdrop, it is telling that **regarding cloud technologies/XaaS (last year's leader) and especially VR/AR/XR, the region is more cautious.** For XaaS, the share of those planning to increase spending in CAC is slightly below global figures (approximately 66% vs. 70% overall and 74% among tech leaders), while **in Azerbaijan and Kazakhstan, appetite for the "cloud" remains high (80% increasing spending),** while in Kyrgyzstan and Uzbekistan it is falling particularly sharply — with 60% of companies in these countries reporting reduced cloud spending. For VR/AR, the share of "significant increases" in CAC is only 10% (compared to 24% globally), while the share of "no change" is higher (36% vs. 27%). This suggests **a rational portfolio selection logic: companies prefer areas with a clear business case and quick results, platform and "showcase" investments, on the other hand, tend to scale gradually.** Potential constraints also play a role — data sovereignty, architectural maturity, the availability of mature cloud providers, migration costs, and a shortage of expertise — which is why the transition to the cloud tends to occur in "stages" rather than sudden leaps.

Finally, in the area of PQC (post-quantum cryptography), a mix of pragmatism and caution: in the CAC region, the share of slight decline is higher (7% vs. 3% globally), yet a significant share of growth remains (about 66%). This is typical for technologies with a long-term horizon: some organizations are "postponing" due to uncertainty

regarding standards and timelines, while others are already starting to invest, especially if they operate in regulated industries or are building long-term cryptographic resilience. Interestingly, within the region, companies from the Caucasus countries are showing heightened interest in PQC.

Fundamentals: value exists, but not at its peak

The distribution of digital value across fundamental platforms confirms this duality. In the CAC, the peak return from core platforms (cloud, infrastructure, ERP, CRM) falls in the range of 31–40% of total digital value — reported by about 40% of companies. Globally, the upper limit is higher: 41–50%. At the same time, the proportion of organizations worldwide that derive more than half of their total digital value from core platforms is several times higher than in the region.

This aligns well with the hypothesis of an "operational ceiling": **the foundation has been laid and is functioning, but its potential is not being fully utilized.** The reasons can vary — from legacy architectural compromises **to insufficient integration and a focus on "quick wins."** In last year's study of the region, this problem manifested at a more practical level: more than half of the companies reported regular failures in key systems and a clear focus on short-term effects at the expense of long-term ones.

IT budgets: changes over the year

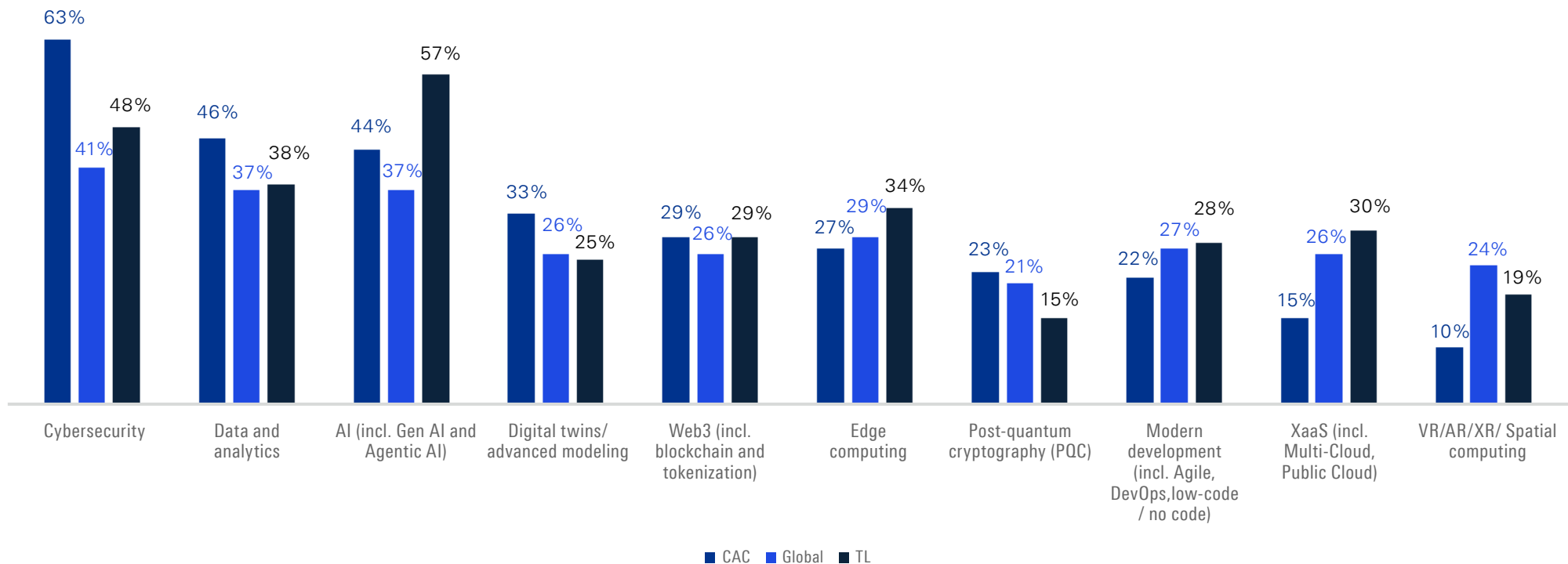
Compared to last year, it is not so much the external environment that has changed as management behavior. While previously there was a sense of pressure and an inability to keep up, the market now appears more composed. **Companies are universally thinking in terms of large-scale programs, investing more actively in development and transformation, and are more often willing to recognize digitalization as a strategic asset.**

But the price of this composure has risen. The greater the scale of investment and the promised return, the stricter the requirements for execution discipline and measurable results become. Global experience shows that a sustainable advantage is built not by those who spend more, but by those who manage their portfolio better: who know how to balance support and change, systematically derive value from fundamentals and honestly measures the impact.



Figure 8. The top priority areas for technology investment in the CAC are cybersecurity, data and analytics, and AI.

Q: "For which technologies have you significantly increased your budget (by more than 10% compared to last year)?" (n = 70 (CAC), 2,500 (Global), 224 (TL), SL = 95%).



The investment priorities of the CAC region shape the region's image during a phase of accelerated restructuring.

This includes medium-to-large budgets without extremes, a very high self-assessment of returns, and a structural bias in the portfolio toward growth and transformation.

This offers a chance to quickly close the gap with more mature markets, but simultaneously raises the bar for management.

Key takeaway: with this investment profile, the priority is not the selection of the next technology, but the ability to turn large investments into

sustainable, measurable value. Where this succeeds, investments become a source of competitive advantage. Where it does not, budgetary optimism sooner or later collides with operational reality.



**Technological maturity:
confidence in chaos**



In 2025, technological maturity will be less about IT assessment and more about a measure of business manageability in the age of AI: today, it is important not only to maintain stability but also to rapidly implement innovations. The global trend — integrating AI and automation into key processes—faces barriers of technical debt and a skills shortage. This is particularly relevant for Central Asia and the Caucasus: is the region's foundation of maturity ready for large-scale transformation, or is the discussion still limited to basic, minimally necessary practices?

The trap of self-assessment

The technological maturity of CAC companies demonstrates solid stability — the region is holding its own where stability and manageability are particularly important (Figure 9). Impressive figures confirm this trend: **corporate data management maturity here reaches 93%, which is significantly higher than the global average of 85%.** Cybersecurity is also among the leaders — **89% (86% globally)** are confident in their processes. When looking at operations, the gap becomes even more evident: IT service management maturity is estimated at **92% vs. 85%** globally. Even technology compliance (**87% vs. 85%**) and network and cloud infrastructure (**86% vs. 85%**) are at or slightly above the global benchmark.

This trend suggests that the region has learned to maintain operational discipline: companies consistently deliver services, ensure basic security,

and are gradually getting their data in order. However, behind the impressive figures lies a critical crossroads. The high ratings for data and security partly contradict market feedback and last year's conclusions — perhaps the issue is a form of “perceptual optimism.” Last year's report noted that cybersecurity is often viewed as a formal necessity covered by regulations, rather than as a strategic function. It is telling that **94% of regional executives do not consider cybersecurity and personal data protection to be a strategic priority during the planning phase of new IT projects**, whereas globally, early integration of security is observed in **72%** of companies.

This gives pause for thought: a high self-assessment of current cybersecurity maturity may be misleading. There are two scenarios. The first is that the market has truly “matured” and evolved from formal compliance to — built-in security “from the start,” which could have raised the perception of maturity. The second is the more risky scenario: “highest maturity” is equated with meeting basic requirements and having standard security measures in place, while strategic practices (security as part of architecture, product development, and portfolio solutions) remain an area for growth. This is precisely why **the concept of “compliance traps” has emerged—when formal compliance is perceived as maximum maturity.**

The example of post-quantum cryptography shows just how cautious the region is in its assessments: the share of “full maturity” in PQC here is only 3%, which is lower than the global average (9%

and 4% for technology leaders). This is a marker of a realistic and conscious approach to complex challenges.

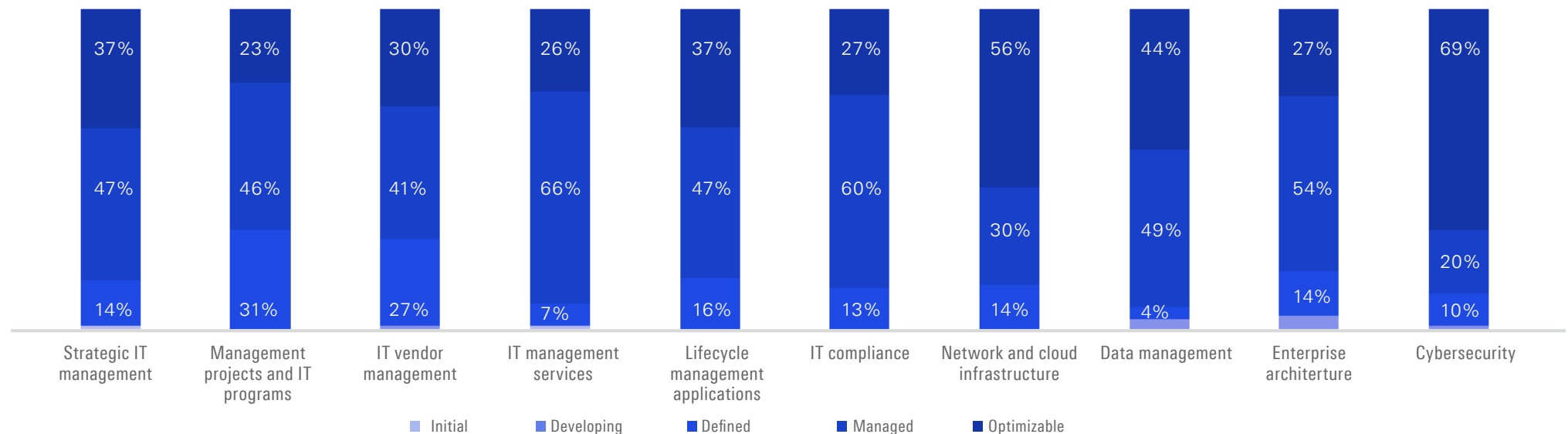
Ultimately, a region's maturity is not merely a set of impressive statistics, but rather a reflection of its ability to maintain discipline and move forward steadily. Yet this is precisely where the main challenge lies: avoiding the trap of the illusion of maturity and not losing sight of the strategic shifts that transform formal compliance into a real competitive advantage.



Figure 9. CAC companies highly rate the maturity of their data management and cybersecurity processes, while basic processes for IT project/program management and supplier management remain at a lower level.

Q: "Which description best fits the processes established in your company?" (n = 70 (CAC), 2,500 (World), SL = 95%).

Values: 1 – "Informal, undocumented processes," 2 – "Partially documented processes that are not always followed," 3 – "Fully formalized, standardized processes across the entire organization," 4 – "Processes are monitored, evaluated, and actively managed," 5 – "Processes are continuously improved through innovation, automation, and the implementation of best practices."



The "glass ceiling" of scalability: change and vendor management

If we accept that the foundation of technological maturity has been firmly established in the CAC: corporate data and IT services are managed at the level of global leaders, and process and infrastructure security is on par with global standards. However, a serious scaling challenge still lies beneath this impressive foundation. It is here **that the region faces its most pressing challenge: the processes that turn local initiatives into large-scale transformation are noticeably lagging behind.**

When comparing the maturity of IT project and portfolio management, the region lags behind the global level — **69% vs. 78%** report maturity in these processes (much lower in Kyrgyzstan, though the sample of companies there was small). Sourcing and vendor management also lag slightly: **71% vs. 78%**. "These figures are not merely statistics, but a direct reflection of the scaling "bottleneck": it is precisely these functions that serve as the engine needed to transform innovations from experiments into corporate standard practice.

It is worth noting a few more barriers to strategy execution. 53% of organizations acknowledge a shortage of the talent needed to implement transformation plans, while **69% are forced to make compromises for the sake of speed, sacrificing security, scalability, and data standardization, and 63% face high costs of addressing technical debt, which hinders new initiatives.**



For CAC companies, this global “maturity tax” is felt particularly acutely: weaknesses in portfolio and vendor management prevent them from quickly setting priorities, synchronizing interdependent projects, and viewing suppliers as part of a unified strategy. Even with strong data and high-quality operations, organizations risk remaining stuck in a mode of local innovation — unless they can quickly and effectively scale their progress, turning it into a sustainable competitive advantage.

To this must be added an assessment of the maturity of modern development approaches (Agile, DevOps, low-code). The situation is similar to the global one (**27%** in the region vs. **31%** globally report using these approaches in their organizations), but the share of those that have “fully scaled” them is only **3%**, which is **significantly lower than the global level (13%) and the level of technology leaders (18%)**. This is the “glass ceiling”: the region is capable of launching modern practices, but more often fails to embed them into corporate standards.

The same pattern is evident in AI: **50% of companies in the region acknowledge that their AI strategy is stalling at the scaling stage** — this is significantly higher than the global average (**35%**) and several times higher than the rate among global technology leaders (**15%**).

The global framework reinforces this conclusion: organizations are, on average, overly optimistic in their maturity growth forecasts, and the question is not whether they want to become mature, but whether they will be able to overcome the barriers to implementation. Therefore, for the CAC, the

thesis on progress in maturity for 2025 goes like this: the foundation has been laid, but scaling up is hampered by the managerial and process-related “transition to standardization.”

Maturity as the ability to scale

The dynamics over the past year make maturity particularly susceptible to the test of practice. Last year, the regional picture revealed not only the formal nature of cybersecurity but also signs of systemic limitations: **54%** of respondents noted that vulnerabilities in key corporate systems regularly lead to disruptions in day-to-day operations.

It is precisely these disruptions that most often “hit a wall” when attempting to scale up AI and automation, as the demands on data, integration, and stability surge. As a result, the key practical test of maturity for the region is not how highly companies rate themselves on individual functions, but how quickly and smoothly they can transition innovations from pilot projects into industrial operations.

The CAC maturity profile appears strong in “hygiene” areas — data, security, operations — and noticeably weaker in mechanisms for managed acceleration — portfolios and project programs, vendors, and the industrial scaling of modern practices.

Maturity in the AI era is measured not by the number of implementations or by self-assessment of processes, but by the ability to turn changes into the standard — with a clear portfolio, a managed

ecosystem, built-in security, and sustainable operations. Where this is achieved, a strong foundation truly becomes a springboard into the “AI era.” Where it is not, the region risks remaining in a zone of “island maturity”: strong momentum today, but limited scalability tomorrow.



Outlook: Selective technology development

Plans for the development of key technologies in the CAC for the next 12 months (Table 4) imply growth in most areas. At a minimum, companies in the region expect to move from the stage of formalizing strategies and securing funding to scaling, though the pace of this transition varies significantly between applied and supporting technologies. **The most pronounced progress is forecast in the areas of data, analytics, and AI**, which aligns with the region's current investment priorities, where these areas, along with cybersecurity, are seeing the largest budget increases. Together, this paints a picture of accelerated growth focused on technologies with rapid and tangible business impact.

AI and data appear to be leading the way, but a comparison of the forecast with the technology maturity profile reveals a potential structural gap. High ratings for data management, cybersecurity, and IT operations maturity create the impression of readiness to scale AI, but processes that ensure the repeatability and scalability of success — such as the management of IT initiative portfolios, programs, and vendors — remain less mature. In practical terms, this means that **the further expansion of AI will depend not so much on technological limitations, but rather on organizations' ability to synchronize initiatives, reallocate resources, and turn individual use cases into corporate standards.**

Unfortunately, the platform foundation is developing in the region at a noticeably slower pace than applied AI initiatives. It is cloud platforms and modern engineering practices that

more often remain at the partial-scale stage even in the forecast for the coming year. This pattern logically aligns with the structure of the region's IT budgets, where the share of spending on system support is consistently lower than global benchmarks, and the focus is shifted toward development and transformation. This model accelerates the launch of new solutions, but at the same time increases the risk of accumulating technical and platform debt — especially amid growing AI workloads, data volumes, and integration requirements.

Rustem Uvaliev from the ERG group speaks about the importance of the platform approach: “The BTS team doesn't just automate processes; but creates platform solutions that are deeply integrated into enterprises' production processes. This approach allows us to incorporate new technologies and then scale successful practices across the entire Group.”

Today, the delivery of the stated progress is increasingly shifting from the technological to the managerial realm. The projected increase in the proportion of digital workers and the reduced reliance on external contractors increases organizations' operational capacity but also heighten demands on architectural discipline, data quality, and accountability for decisions. At the same time, the federated IT governance model characteristic of the region facilitates rapid deployment but weakens the central framework for prioritization, value measurement, and stopping ineffective initiatives. Taken together, this creates a key crossroads for the next 1–2 years: **the region is capable of making significant strides**

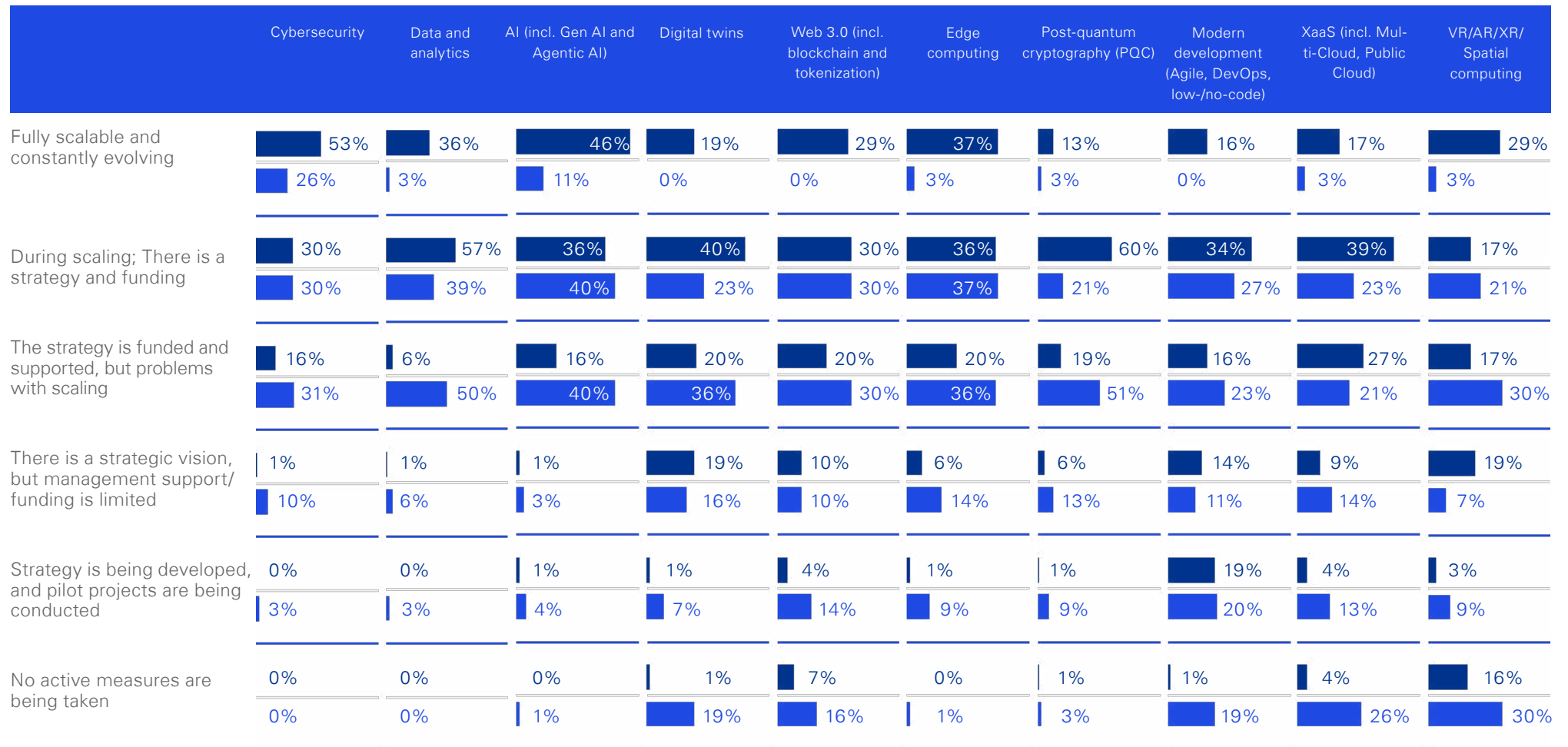
in the maturity of specific technologies, primarily AI and analytics, but the sustainability of this progress will depend on how synchronously the platform foundation, scaling mechanisms, and the governance model for hybrid technological capacity are strengthened.



Table 4. On average, across all technologies, CAC companies were at the stage of formalizing strategies and securing funding in 2025, and plan to move to full-scale scaling by the end of 2026. A lower level of maturity is expected in the areas of PQC, digital twins, Web 3.0, cloud computing, modern development methods, and VR/AR.

Q: "For each technology, how do you assess your organization's current position and goals 12 months from now?" (n = 70, SL = 95%).

■ – now ■ – in a year



A conceptual image of a digital corridor. The walls and ceiling are composed of glowing binary code (0s and 1s) in shades of blue and purple, creating a sense of depth and perspective. Several silhouettes of people are walking away from the viewer down the center of the corridor, suggesting a journey or path. The floor is highly reflective, mirroring the lights and the figures above.

IT staffing: on the path to digital labor



IT staffing in the Central Asia and the Caucasus has finally ceased to be a question of “how many people are needed.” It has become a question of capacity architecture—how companies assemble results from a combination of their own teams, digital workforce, and external resources. The data shows that the region is already operating under a hybrid model, but its trajectory differs significantly from the global one. While the hybrid model is stabilizing globally, in the CAC it is actively being reconfigured—with a clear shift toward digital productivity and reduced reliance on external contractors.

The hybrid model as the new norm

The current staffing snapshot shows (Figure 10) that the CAC region is structurally almost indistinguishable from the global profile. About half of all technological capacity is provided by in-house staff (approximately 50%), about a third by “digital labor” (bots, RPA, low-code, AI agents), and about a fifth is provided by external contractors and consultants. The overall picture is virtually identical: the differences in shares amount to just a few percentage points and are statistically insignificant.

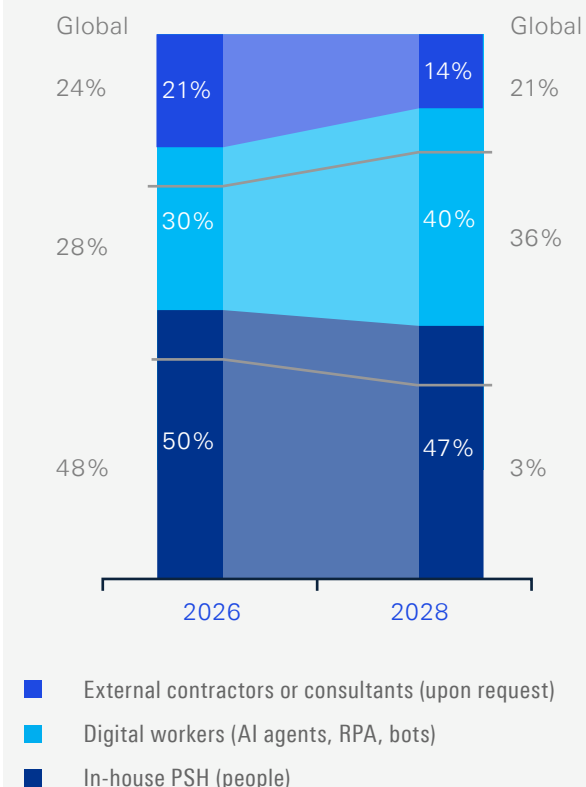
This is a significant shift from how the region is often perceived from the outside. The CAC is no longer a market of “outsourcing out of necessity” or a market of “closed IT towers.” It is a market that has effectively arrived at the same formula as the rest of the world: **People + Platforms + Partners**. But what becomes decisive is not the fact of hybridity itself, but how exactly this hybrid will develop further.

The most significant difference between the CAC region and the rest of the world is evident in the forecast over the next two years. Companies in the region expect a significant increase in the share of “digital workers” — by approximately ten percentage points, to around 40% of total technological capacity. At the same time, the role of external contractors is shrinking by nearly seven percentage points — to around 14%. **In-house staff is decreasing only moderately, remaining the largest component of the model.** “At the same time, companies are beginning to reduce their dependence on contractors: AI agents are already effectively taking over repetitive processes, while the internal team focuses on oversight, architecture, and decision-making,” confirms **Valery Semchukov** from Freedom Holding. “The human role is shifting toward orchestration, supervision, and decision-making, while the organization itself is gradually transforming into a **hybrid work-force** model, where digital employees become part of the operational environment on par with humans.”

Globally, the world is moving in the same direction — the share of “digital workers” is also growing, — but the key difference lies in the retention of external resources. **In the global model, the share of contractors remains stable, at over 20%, whereas in the CAC, there is actually a reduction in outsourcing, rather than merely a redistribution of it.**

Figure 10. In the CAC, there is a stronger tendency toward reducing the number of contractors.

Q: “Estimate the share of PSH in your IT team by the following types today and in two years”
(n = 70, SL = 95%).





Even considering that, formally speaking, these differences do not yet reach strict statistical significance, the region's management logic is clear: future scaling is expected to be built not through the contractor market, but through internal teams and "built-in" digital productivity. However, as **Seth Patton** from Microsoft notes, with the enormous volume of tasks facing organizations today, it is impossible to do everything alone: "To be successful, by definition you must rely on partners. This is a fact for any organization; it is a fact for Microsoft."

Why the region is betting on in-house

Rustem Uvaliyev from the ERG Group links the focus on in-house capabilities to technological independence and business efficiency: "In-house solutions allow us to reduce dependence on vendor policies, manage the total cost of ownership more effectively, and develop digital products tailored to specific production needs more quickly. The key advantage here is a deep understanding of industry specifics, which ensures high technology adoption rates and practical value." However, Noelle Russell from the AI Leadership Institute believes that in-house teams should only be chosen for specific areas where it is strategically important to build internal expertise: "Select areas for in-house development where you want to develop specialized internal competencies, and then find trusted partners to fill the gaps in your portfolio of initiatives."

Overall, we see three drivers of the regional shift toward in-house teams. **The first driver is the scarcity economy.** The growth of initiatives in the fields of data, cybersecurity, and AI is outpacing

the labor market's ability to supply the necessary skills. Under these conditions, "digital labor" ceases to be an experiment and becomes the only scalable way to increase productivity without a proportional increase in headcount. Operations automation, platform services, vibe coding, and low-code allow companies to "amplify" the impact of key specialists rather than hire dozens of new ones.

The second driver is risk and boundary management. The CAC is characterized by heightened sensitivity to control issues: geopolitics, the availability of external partners, data sovereignty, and the resilience of supply chains. Reducing dependence on external contractors and transferring some functions to standardized digital processes increases predictability and control. In this context, the "digital workforce" — is not just about efficiency, but also about the sovereignty of the operational model.

The third driver is the maturity of management thinking. The growth of the digital workforce means not just the implementation of tools, but a reconfiguration of roles, KPIs, and responsibilities.

IT is increasingly viewed not as a "number of people" but increasingly as an integrated production system where data quality, security, architecture, and observability are paramount. It is precisely this logic that brings staffing closer to the themes of technological maturity and portfolio management.

Last year's regional study struck a different note: a skills shortage, fragmented teams, reliance on individual "key people," and the sense that many IT projects are carried out with great effort but do not scale well. Against this backdrop, the results of the latest survey appear to signal a shift toward a more systematic approach. **The market is increasingly looking away from "more people" and toward a more productive model.**



Infrastructure development must keep up with the growth of the team's competencies, the development of business lines, and data preparation.

That is why we built a hybrid architecture from the start: stable on-premise hardware for sensitive banking systems and a multi-cloud setup with different providers for projects where speed is critical.

Rubina Lozovaya, Bank CenterCredit

In part, this shift aligns with the global picture. International data highlights that **high performance in the AI era is achieved not through workforce expansion, but through a combination of people, digital agents, and execution discipline**. Skills shortages and technical debt remain persistent barriers, but the digital workforce is seen as one of the few tools capable of mitigating both constraints simultaneously.

Strategic risk: digital power without discipline

As logical as the regional trajectory may be, it also carries risks. Rapid growth of the digital workforce without a corresponding increase in the maturity of control and management, data quality, and security can lead to unstable performance: automation multiplies not only results but also errors. **If digital power grows faster than the ability to manage it, the effect proves to be short-lived.**

This is precisely why staffing is increasingly linked to issues of architecture, portfolio, and process maturity. Where the digital workforce is integrated into a unified operating model, it becomes an amplifier of transformation. Where it is added “on top” of existing problems, it merely accelerates their manifestation.

Decentralized management or division of responsibility

The centralization of IT functions in the IT Department (Figure 11) does not resemble a “command-and-control hierarchy,” but rather a **pragmatic federation, the central office sets**

the framework and standards, while actual implementation is “spread out” across business units to ensure speed and proximity to the market. This is particularly noticeable in areas where mistakes are costly but local specifics are inevitable: for example, **the establishment and monitoring of architectural principles** in the CAC region are formally kept within the IT perimeter (centralization or “federation with overall control in IT” — 80%), but almost always through a federated mode (66%), whereas as is the case globally, federated management for the same solutions is significantly lower — 42%.

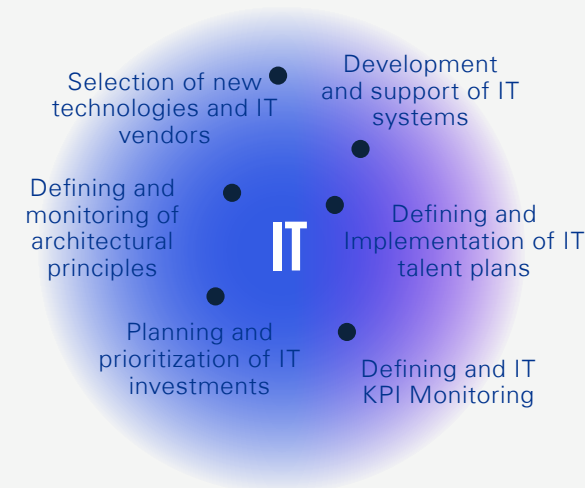
In other words, the region more often chooses the “common principles, varying implementation speeds” model, whereas mature players more often ensure uniformity through a strong central platform and standardized discipline. “The most costly mistake [of decentralizing IT functions] is when autonomy starts to be interpreted as the right to create one’s own incompatible standards. The problems with such models don’t become apparent right away. For the first year or two, everything even seems to move faster... But then the cost of changes begins to grow exponentially... At some point, the organization starts spending a huge amount of energy simply on synchronizing itself. That’s why I’m more of a proponent of the ‘centralized principles with decentralized implementation’ model,” adds **Renat Tukanov** from Freedom Holding.

Only
1%
of CAC companies apply a centralized approach to the implementation of new technologies (21% globally, 19% among tech leaders).

14%
of CAC companies centralize IT development and monitoring of architectural principle compliance (37% globally, 55% among tech leaders).

Figure 11. Management of IT functions is becoming less centralized.

Q: “How is responsibility for decisions on the following IT issues distributed in your organization?” (n = 70; the further from the center, the less likely decisions are centralized in the CAC).





The most telling divergence lies in **the management of IT investments**. In the CAC region, the prioritization and planning of technical investments generally remain under the purview of IT (**81%** centralized/federated), but again through federation (**54%**)—significantly more often than globally (**44%**) and among tech leaders (**37%**). At the same time, the role of the central control loop is much “stricter” among tech leaders: nearly half of their investment decisions are fully centralized (**49%**), whereas in CAC organizations it is **27%**. This usually implies different portfolio management mechanisms: **in CAC, the investment process more often turns into a “negotiation room” between IT and the business**, while among tech leaders, it becomes a managed capital reallocation factory with a high degree of decision repeatability.

The difference is even more striking when it comes to building an evidence base for effectiveness — **defining and tracking IT performance metrics**.

In CAC, the central control loop is noticeably weaker here (**63%** centralized/federated vs. **69%** globally and **81%** among TL), while the share of shared responsibility is highest: **36%** (vs. **25%** globally and **16%** among tech leaders). **The region willingly shares responsibility for “how to measure”—but it is precisely this that often leads to a discrepancy between what is launched and what actually scales**. In practice, this may mean that in **the CAC, a portfolio of initiatives accumulates more quickly, but it is harder to “kill” weak projects** and systematically reinvest in the strong ones—

because the common language of value (metrics, control loops, benchmarks) is not as centralized as it is among tech leaders.

A similar pattern is visible in the “backbone” of a technology organization — **staffing strategy**. In the CAC, it is formally centralized/federal in **82%** of cases, but the distribution again favors a federated model (**49%**), whereas tech leaders are dominated by full centralization (**55%**; in the CAC — **33%**). This is an important signal: tech leaders typically centralize HR architecture (careers, competencies, training, capacity planning, incentive systems) as a strategic lever for scaling, whereas the CAC’s federated model may be a response to the labor market. Perhaps the region compensates for the talent shortage with management flexibility, but pays for it with greater variability in quality and the difficulty of establishing uniform engineering practices.



A bad center is one that tries to coordinate everything. Then the organization simply drifts into shadow IT. A good center sets not approval processes, but clear ground rules. In other words, not “come ask for permission,” but “here are the boundaries within which you are free” ... An organization’s scalability is not determined by the level of centralization or decentralization. It is determined by how well the organization can distinguish between things that can be standardized and those that require local speed and autonomy.

Renat Tukanov, Freedom Holding



Finally, at the operational execution level (“development and support”), the CAC demonstrates a drive toward shared management: the central control is lower (63% vs. 71% globally and 66% among tech leaders), while the division of responsibility is higher (33% vs. 22% globally and 24% among tech leaders). This can be interpreted as a rational adaptation: the business wants to keep a finger on the pulse of operational priorities, especially when digital products are directly linked to the P&L. But this is precisely where tech leaders typically apply “platform discipline”: they can afford greater centralization of metrics, talent, and investments—and, as a result, can more safely delegate execution without losing control. For the CAC, this implies a management strategy: **while maintaining a federated governance model as a source of speed, strengthen the central “evidence loop” (defining the vision for technological development, setting and monitoring KPIs) and the “scaling loop” (managing staffing and architectural principles)** — otherwise, the federated model will function as a launch accelerator but not as an engine for sustainable results.

Agiis Konkabayeva from Beeline Kazakhstan notes that a clear management model is particularly critical when implementing AI: “To avoid turning ‘IT and AI in business’ into a set of unrelated solutions, you need a clear governance model. This is particularly critical for AI. Currently, many companies are implementing AI in a piecemeal fashion: individual chatbots, copilots,

and analytical models — without a unified platform or governance framework. As a result, functions overlap, support costs rise, and security and compliance become more complex.” At the same time, Agiis highlights the following key elements of a clear governance model:

- a unified architectural strategy,
- clear rules for system integration,
- a centralized data model,
- assigning ownership for each product and service,
- uniform requirements for security, APIs, and lifecycle management,
- assessment of business impact before implementation, not after.

Rubina Lozovaya from Bank CenterCredit shares this view, adding that control mechanisms must be understandable to everyone: “Governance only works when it is user-friendly: a unified model registry, clear validation rules, centralized quality monitoring, and a dedicated AI & Data Governance department.”



In the age of speed and AI, the key solution is to centralize standards while decentralizing usage.

Rubina Lozovaya, Bank CenterCredit

A close-up portrait of a woman with dark hair and glasses, looking directly at the camera. The image is heavily stylized with a blue and purple color palette. Overlaid on the image are various digital elements: a glowing blue circuit board on the left, a DNA double helix in the center, and various data visualizations like bar charts and line graphs. The background is a blurred array of lights and data points, creating a high-tech, futuristic atmosphere.

The AI era: fragility of scaling



By the end of 2025, AI had ceased to be “just another technology” and became a new management environment: it is changing not only the tools, but also the rules of decision-making, the distribution of responsibility, and people’s expectations. This is particularly noticeable in Central Asia and the Caucasus: the region is simultaneously demonstrating a faster pace of transition to industrial-scale AI and weaker management “package” — a strategy, a management structure, and a set of common rules. It is precisely this contradiction that shapes the main narrative of the year: AI is already delivering results, but the sustainability of those results still needs to be secured.

The leap to scale

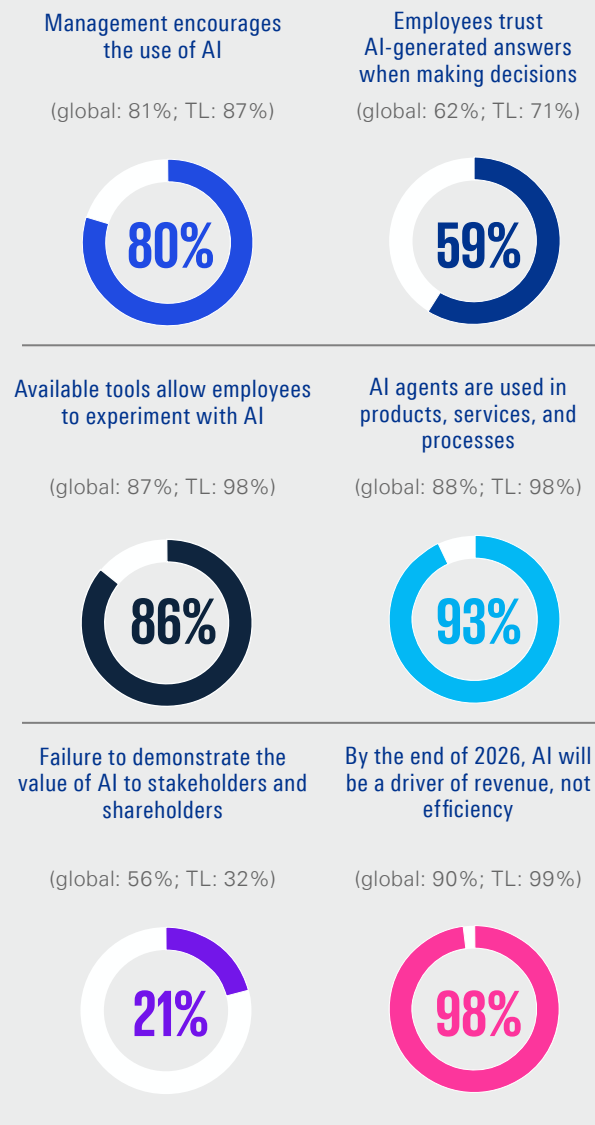
Looking at the adoption trajectory, the CAC appears to be in the “rapid transition” phase (Figure 13). Today **53% of organizations are already at the stage of industrial AI implementation with measurable returns across multiple scenarios**. Globally, such companies account for 24%. **At the same time, the “middle zone” of maturity — where AI is already delivering value but has not yet become a production system — is significantly smaller in the region: 29% in the CAC vs. 49% globally.**

This pattern resembles skipping an intermediate stage: organizations either rapidly bring AI into industrial use or deliberately keep their portfolio compact, selecting only those use cases that can be quickly validated. For the region, this may be a rational strategy: resources are limited, so the winners are those who turn an idea into a result

faster. However, this model comes at a cost: the smaller the “experimental layer,” the greater the importance of the quality of the initial use cases, data, and engineering discipline — otherwise, scaling up will quickly hit limitations.

It is also important to note that a lead in pace is not guaranteed forever. Over a 12-month horizon, the gap with the rest of the world is narrowing significantly: the expected share of companies at industrial scale with returns is 79% in the CAC and 68% globally. The world is catching up fast. This means that **the region’s competitive advantage will be determined not by who “implemented AI first,” but by who first turned that implementation into a sustainable capability — with repeatable practices, metrics, and risk control.** As **Renat Tukanov** from Freedom Holding notes: “The main misconception of the past two years has been to view AI as a competitive advantage. When AI becomes a commodity, the advantage won’t lie in the model or in access to GPU. It will lie in an organization’s ability to quickly and securely turn new opportunities into operational business changes... When you have dozens of teams, products, jurisdictions, and legacy systems, the problem is no longer about “building AI.” The problem is ensuring that changes don’t destroy the system faster than they create value.”

Figure 12. In the CAC region, there is a high level of AI adoption and high expectations from for AI.





Ivan Belokhovostikov from Cybernet.AI emphasizes the importance of choosing the right use cases for AI and measuring its value: “AI is already becoming a hygiene factor — not only for companies, but also for people who use ChatGPT, Claude, or Gemini on a daily basis. Therefore, the advantage will not lie in the mere use of AI, but in the experience of its industrial implementation: understanding which scenarios actually work, in which industries, in which markets, and with what measurable impact. Our advantage is that we view this experience globally — we operate in dozens of countries and can compare practices in Central Asia, the U.S., Mexico, the Middle East, and other markets.”

AI as a business agenda

The region’s most significant distinction lies in how leadership is distributed. **In the CAC, only 30% of respondents believe that the IT function specifically leads AI implementation, whereas globally, 73% do (74% among technology leaders).** This is not a matter of terminology, but a different organizational structure. In the region, AI more often originates closer to business verticals and the P&L: product, commerce, internal processes. IT in this model more often acts as a partner and integrator — providing the platform, architecture, and oversight, but not the sole owner of initiatives.

This configuration delivers speed: initiatives are easier to “ground” in real-world processes. But it also raises the bar for overall coordination: without a unified strategy and common standards, it’s easy to end up not with chaos among pilots, but with chaos in maturity — where individual solutions

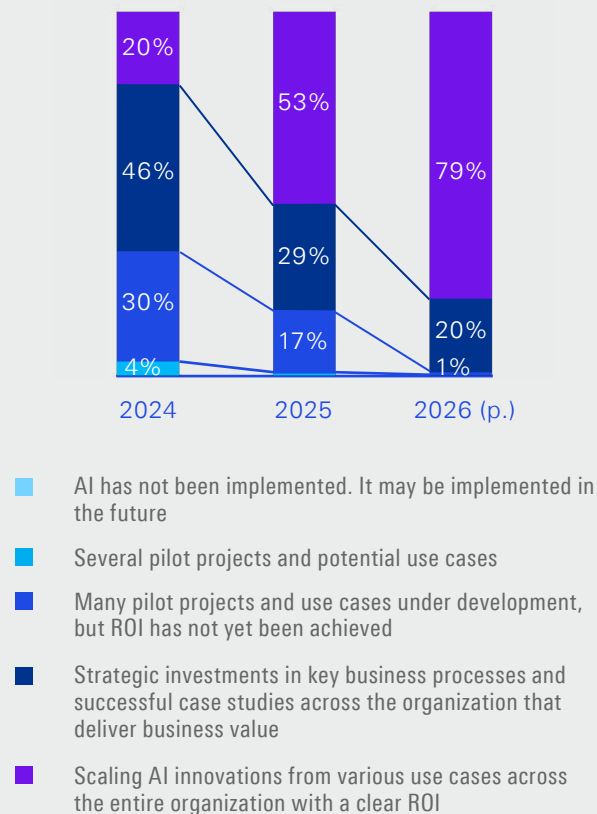
work, but it’s difficult to integrate them into a cohesive system.

Less chaos—and this is also a mixed signal

In terms of AI perception, the CAC looks **more cohesive: only 14% believe that the organization has too many unrelated AI projects and teams, whereas globally, the figure stands at 33%, while among technology leaders it is 17%.** At first glance, this is a positive sign: less of a “mishmash,” more consistency. But there is another way to interpret this figure. **“No chaos” isn’t just found where management is better, but also where the portfolio is still small.** And in that case, the absence of fragmentation may be a sign not of management maturity, but of an early stage of scaling. For the region, this is critical: as the number of cases grows, the issue of coordination will arise anyway. The only difference will be whether it emerges early on — in the form of a well-thought-out governance model, or later — in the form of costly fixes and conflicts between teams. As **Valery Semchukov** from Freedom Holding warns, “AI Governance is becoming not an IT task, but an organizational-level management function at the intersection of technology, risk, security, and business.”

66% of CAC companies still do not have a corporate AI development strategy (24% globally; 11% among tech leaders)

Figure 13. By 2025, CAC significantly increased AI adoption in business.



Value is easier to prove than to manage

One of the region's most striking figures concerns value: **only 21% of companies in the CAC acknowledge that they find it difficult to demonstrate and explain the value of AI; globally, that figure is 55%.** This suggests a mature “value case”: AI is more often chosen where the impact is clear and measurable.

However, this is precisely where the region's main paradox arises. Against the backdrop of confidence in the impact, the region is noticeably weaker at establishing AI as a corporate system. **A clear, company-wide AI strategy aligned with business and technological goals — is found in 34% of CAC companies, compared to 76% globally and 89% among global technology leaders.** A cross-functional AI governance structure (including policies, risk management procedures, the legal function, and compliance) is present in **25% vs. 69% globally and 74% among technology leaders.**

In other words, the region can “demonstrate value” at the level of individual use cases, but is less effective at embedding that value at the organizational level — through strategy,



Today, the main risk for companies is not the absence of AI, but the absence of AI governance. In many organizations, AI development is fragmented: different teams use different models, tools, and data, while there are no uniform rules for security, accountability, and quality and controls are either absent or implemented much later. As a result, AI begins to scale faster than the company can establish risk management and architectural frameworks.

Valery Semchukov, Freedom Holding

accountability, data governance, vendor oversight, and a unified registry of models and solutions. This is **the key crossroads: either quick wins translate into industrial capability, or they remain a collection of success stories.**

Phil Mottram from HPE notes the danger of “AI for AI's sake” cases: “It's important to understand very clearly exactly how you're using AI and how you track the results — to ensure that it truly delivers value in line with the business case, rather than being applied “with a broad brush,” without a clear goal or measurable outcome.” **Mottram** adds that the focus should be on finding truly transformative use cases: “Some companies have already identified suitable scenarios and integrated AI into their day-to-day business model. However, many organizations are still struggling — they have yet to determine which specific AI use cases truly make sense and how AI can significantly transform their operations.”

99% of CAC companies consider geopolitical risks critical when choosing AI technologies (83% globally)

Figure 14. The CAC is proactively preparing for the transition to digital work.

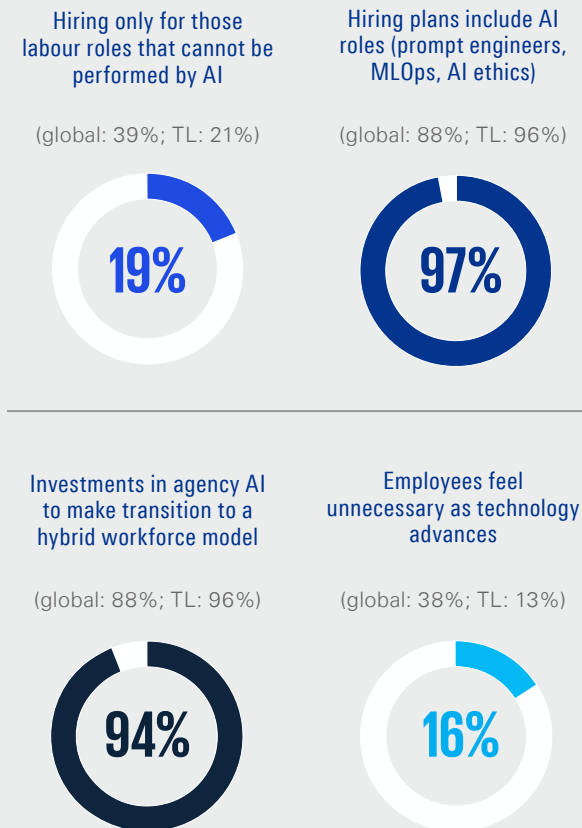
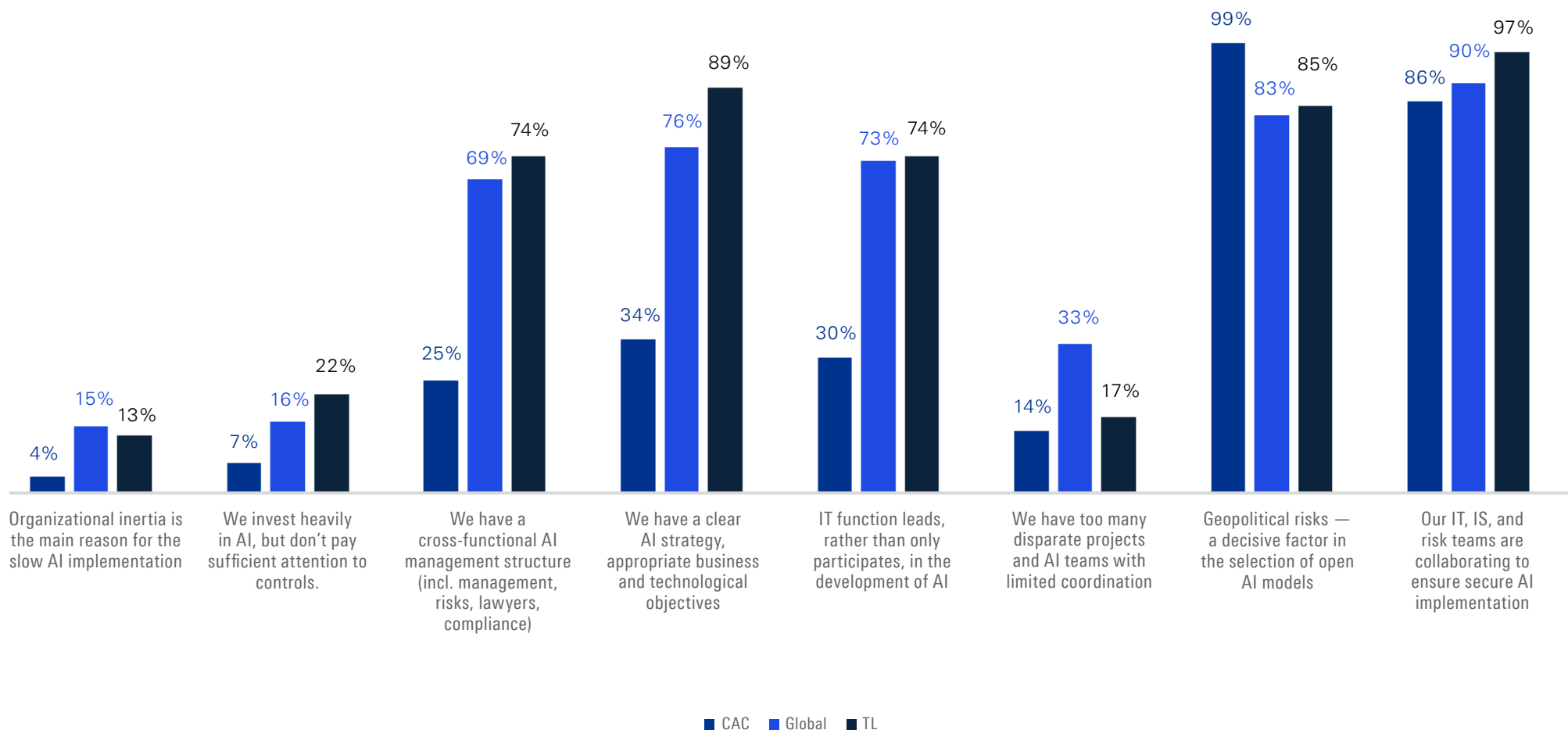




Figure 15. Approaches to AI governance in the CAC region appear less systematic and risk-oriented than those used globally, and especially by technology leaders.

Q: "Do you agree with the following statements?" (n = 70 (CAC), 2,500 (Global), 224 (TL), SL = 95%; percentages of respondents who answered "Strongly agree" or "Agree" are shown).





Sovereignty by default

The CAC is not only overly focused on pilot projects but also, as a rule, very reluctant to abandon ineffective projects. Speaking specifically about AI-related projects, **Rubina Lozovaya** from Bank CenterCredit identifies a number of triggers for when work on pilots or entire innovation projects should be halted, specifically: “when, during the formalization of the ML specification, it becomes clear that the problem can be solved using classical methods without AI, and the cost of maintaining the ML solution will exceed the business benefit <...>; when an assessment shows that the available volume of high-quality data is insufficient for a robust model <...>; when it is impossible to ensure full transparency of the algorithm; when projects create a critical dependence on foreign ‘black boxes’ such as OpenAI”.

For the CAC, AI is not only a technological choice but also a geopolitical one. **99%** of respondents consider geopolitical considerations critical when selecting open AI models; globally, the figure is **83%**. This shifts architectural decisions toward ensuring sustainable access, legal compliance, and supply chain manageability.

Such an approach could become a competitive advantage for the region — if it is backed by mature control and management mechanisms (AI Governance). Without a strategy and cross-functional management, sovereignty turns into a set of restrictions rather than sustainability.



Many companies can hire strong engineers. Far fewer companies are capable of eliminating organizational friction... You can buy hardware, consultants, and platforms. You can't quickly replicate an environment where people actually make decisions and take responsibility for them, rather than just passing everything up the chain.

Renat Tukanov, Freedom Holding

With them, it becomes a design principle: choosing solutions that remain manageable and predictable in the long term.

Humans in the loop—a rare window of opportunity

The most “human” disconnect from the world looks encouraging (Figure 14): **at CAC, only 16% believe that employees feel “left behind,” whereas globally, the figure is 38%**. This may suggest more precise communication and the right choice of scenarios, where AI assists humans rather than replacing them. But a second scenario is also possible: AI has not yet become a widespread tool in everyday work, and therefore anxiety has not yet reached a “boiling point.”

Both scenarios lead to one practical conclusion: **the region now has a window of opportunity to build trust and skills before AI becomes ubiquitous**. If this is done in advance — increased adoption will not necessarily lead to increased tension. If delayed — the “social curve” may catch up with the global trend later, but more sharply.

Within the CAC, differences in the perception of AI are minor but do exist. Azerbaijan appears more determined in terms of scaling up AI, with nearly 100% support from management for the use of AI tools, whereas in Kazakhstan, 57% of companies report that management is trying to prevent all employees from using AI tools in the workplace. At the same time, the level of skepticism regarding the use of AI recommendations in business decisions is, conversely, higher in Azerbaijan—only 29% there trust AI, whereas in Kazakhstan, this figure is the highest in the region — 86%.

HR: don't freeze hiring, but build up core competencies

The region's HR policy also appears pragmatic. **The CAC region is less likely to support the approach of “hiring only if the task cannot be performed by AI”—19% vs. 39% in the world**. It's like a scarcity economy: companies aren't ready to stop hiring in anticipation of automation and are seeking a balance between team expansion and productivity growth.



At the same time, the region is placing a significantly stronger emphasis on AI-native roles: 97% of organizations include such roles in their recruitment strategy (compared to 88% globally). This is important: the limitation is seen not in ideas, but in the engineering and managerial “inner workings” — MLOps, quality and security management, architecture, data governance, ethics, and accountability.

It is clear that AI is reshaping the distribution of roles and responsibilities, and in this shift, as **Dean Bortz** from Google reminds us, it is important not to forget about training and reskilling programs: “In an organization, there will always be a small portion of employees who will start using such tools naturally — out of curiosity and intrinsic motivation. But about 90% of the organization will need targeted training and support to truly understand how these tools work and how to make the most of them.”

Conclusion: Accelerating pace of entry into the AI era

Last year’s regional narrative was more cautious. AI was perceived as a technology “on the radar,” but not a priority: only 17% of companies were actively using AI, and a significant share cited a lack of management support and investment constraints as factors holding back adoption.

Against this backdrop, we are now seeing more “industrial” scale, where it becomes easier to demonstrate the value of AI (or top management does not require this), there is less of a sense of chaos, and less social anxiety. But at the same time, **the management deficit has become more**

apparent: AI strategy and cross-functional management lag significantly behind global standards. This means that 2026 will be a turning point: it will determine whether the era of intelligence will become a sustainable advantage for the region or a series of strong but difficult-to-scale use cases.

CAC is entering the era of intelligence with a clear advantage in terms of pace: more companies have already brought AI into industrial use with measurable returns, experience less fragmentation and social anxiety, and are more actively building specialized competencies. But the sustainability of this advantage depends on the next step — management execution.

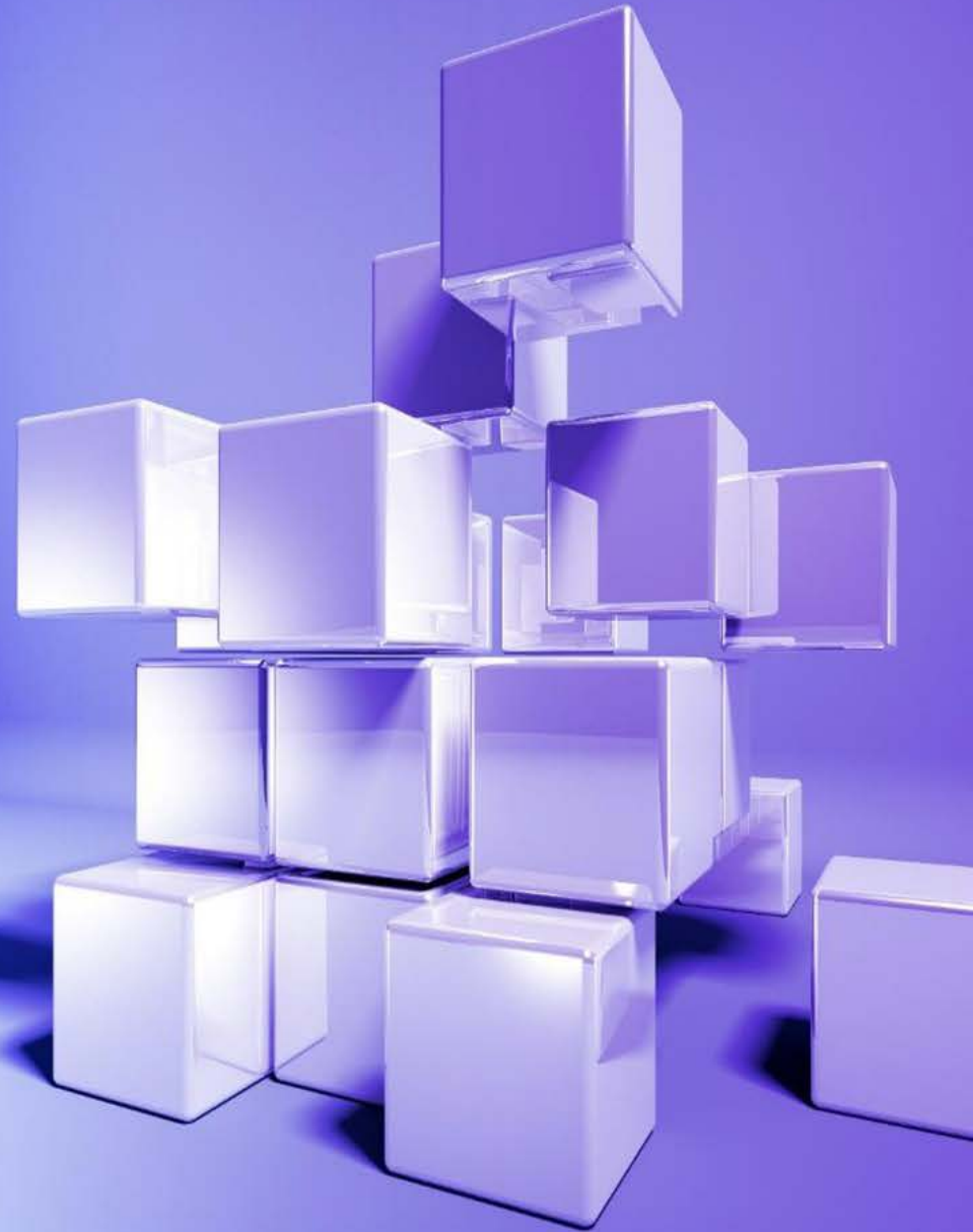
The rest of the world is quickly catching up in terms of adoption rates. Therefore, **the winners will not be those who deploy AI faster, but those who transform AI into a manageable operational capability sooner—with a strategy, a unified accountability framework, clear value metrics, data discipline, and trusted usage policies.**

Table 5. Between 16% and 30% of companies see significant risks associated with AI, both globally and in the CAC region. At the same time, the influence of regulators and cybersecurity is noticeably stronger globally.

Q: “Select the top 3 risks associated with AI” (n = 70 (CAC), 2,500 (Global), 224 (TL), SL = 95%).

Relative risk ranking:	CAC	Global	TL
Insufficient human oversight/ judgment	1	10 ▼	11 ▼
Biased responses/data	2	4 ▼	4 ▼
Resource shortages (energy, water, technical components)	2	11 ▼	7 ▼
Spiral rise in costs	4	9 ▼	9 ▼
IP theft via leaks from open models and code	5	2 ▲	12 ▼
Cyberattacks	6	1 ▲	1 ▲
Inaccurate data	6	4 ▲	4 ▲
Deepfakes or malicious synthetic content	8	6 ▲	6 ▲
Lack of transparency in decision-making	9	7 ▲	3 ▲
Lack of proper oversight	10	12 ▼	5 ▲
Regulatory and compliance risks	11	3 ▲	2 ▲
Errors or hallucinations	12	13 ▼	13 ▼
Insider risks	13	8 ▲	10 ▲

Conclusions and recommendations: achieving technological leadership



Strike a balance between innovation and the fundamentals

Only 6–8% of transformation leaders are forced to cut investments in new technologies due to accumulated tech debt or high project costs, whereas in the CAC region, 19% of even fairly large companies do so.

Unless we start investing in the fundamentals, problems with scaling IT initiatives will only grow. Today, the region spends 1.4 times less on supporting current systems (as a proportion of the total IT budget) than technology leaders.

Ensure speed through clear frameworks, not bureaucracy

The region's strength lies in its propensity to experiment with pilot projects and decentralizing their implementation. However, it is important that acceleration does not undermine control or increase the fragility of scaling. Formalization and monitoring of basic architectural principles is fully centralized by 34% of technology and transformation leaders, while in the region only 14% do so.

Regularly review technology development plans

Where the pace of change makes plans obsolete (56% globally; 43% in the CAC), the strategy should function as a regular portfolio rebalancing process — with clear selection rules, exit criteria, and transparent decisions regarding scaling. The region appears to be risk-averse and reluctant to adopt bold innovative solutions (transformational leaders are willing to take risks associated with new technologies, 23% more often). But, at a minimum, it is necessary to establish : during quarterly reviews of the initiative portfolio, the “right to halt” projects without a proven impact.

Approach the implementation of AI systematically, rather than on a “case-by-case” basis

The region is already showing a willingness to accelerate, but without cross-functional management, clear accountability, and a formalized strategy, scaling remains a challenge. A unified management framework for AI must include components such as data handling rules, an accountability model, quality and security, supplier requirements, and, of course, a clear AI implementation strategy. A clear AI strategy is present in 89% of technology leaders, but only 34% of companies in the CAC. At the same time, only 2% of leaders have a set of unrelated AI across the entire organization (14% in the CAC).

Focus the technology strategy on talent management

As is the case globally, a significant portion of roles in the CAC will shift to digital work (up to 40% within three years), while another 14% (21% among tech leaders) will be filled by external contractors. Given this trend, it is already necessary to take a detailed approach today to reskilling planning and overall talent management. Unfortunately, technology talent management issues are addressed centrally in only 33% of CAC companies, compared to 55% among technology leaders.

Actively engage with partners

85% of high-performing companies and transformation leaders regularly collaborate with external partners, and only 4% rely on in-house competency development, whereas in the CAC, these figures are 51% and 24%, respectively. In the face of a talent shortage and fierce competition, open ecosystems and external partners are becoming the key to sustainable growth.

Surely, it's important not to overlook third-party risk management. Today, 40% of tech leaders already conduct regular independent audits of their suppliers regarding data protection.



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Launching and supporting AI transformation

KPMG helps launch and implement AI as a program for growth and efficiency with a focus on rapid business results: in 2–6 weeks, using the KPMG Jumpstart.AI method, we will identify a priority portfolio of use cases, launch pilots with proven benefits (cost savings, revenue growth, process acceleration), and then scale the solutions and establish AI governance aimed at risk control and building trust based on the KPMG Trusted AI framework — so that AI makes a measurable contribution to the P&L and remains manageable for management, regulators, and clients.

Enhancing cyber resilience

KPMG's cybersecurity team helps achieve cyber resilience with a focus on rapid results: 1–2 months from diagnosis to the development of a detailed roadmap mapping out information security strategies while simultaneously establishing security procedures and implementing technical measures for IT assets — from "traditional" IT to OT, AI, and the Cloud — to reduce the risk of incidents and ensure business continuity, even with high reliance on third parties. Our insights enable us to provide flexibility and address current risks for the industry and geography.

Building an effective IT architecture

KPMG has extensive experience in streamlining IT landscapes and designing target hybrid (on-prem + cloud) architectures based on industry reference models: in 1.5 months, we will map out applications, integrations, and data, identify duplicates, high-maintenance areas, and opportunities to reduce licensing costs. The result is a reduction in total cost of ownership, a decrease in technical debt and accelerated change through standardized architectural principles and a clear modernization roadmap.

Accelerating the time-to-market for IT products

KPMG accelerates the time-to-market for IT products as a managed product transformation: we implement Agile approaches and DevSecOps "from idea to release," help reset the incentive structure and KPIs for product teams, and select and implement platform solutions. We carry out implementations in collaboration with technology partners (Microsoft, Creatio, OutSystems, Salesforce, ServiceNow, and others) to quickly achieve a predictable, secure, scalable delivery pipeline, release more frequently, and monetize product initiatives faster.



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