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The Shifting Paradigm of the CIO

6 actions to help lead and adapt your organization through change

Introduction

In the ever-changing landscape where technology and business intersect, the CIO is no longer just a guardian of information systems, but a catalyst for innovation and a strategist shaping their enterprise.

Today's CIO is a strategic partner, collaborator, and visionary who not only harnesses the power of technology, but strategically leverages it to drive business growth, enhance customer experience, and achieve operational excellence. As organizations increasingly recognize the integral role technology plays in their success, CIOs find themselves at the forefront, leading transformative change beyond the server room.

Their responsibilities now extend to orchestrating digital ecosystems, fortifying cybersecurity, and integrating emerging technologies like AI and blockchain into business operations. Balancing the need for innovation with operational stability requires a delicate touch and strategic acumen.

CIOs grapple with cultivating tech-savvy workforces, bridging the digital divide, and ensuring organizational agility in a rapidly changing environment. The challenge lies in navigating the dichotomy between innovation and security, agility, and scalability.

The key to success for the CIO is adaptability — the ability to navigate this delicate balance. Success is no longer just implementing technology; it's aligning it strategically with business imperatives, understanding the digital ecosystem, and proactively mitigating emerging risks.

Let's delve into the strategic imperatives that will define the success of CIOs in 2024 and beyond.

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01 Balance innovation and stability

According to a recent Gartner report, organizations that prioritize both innovation and stability achieve, on average, 30% higher returns on their technology investments. This imperative requires CIOs to foster a culture of continuous innovation while maintaining robust cybersecurity measures.

Innovation initiatives should be aligned with business goals, ensuring that technological advancements contribute directly to revenue growth and customer satisfaction. However, stability cannot be compromised. The IBM Cost of a Data Breach Report found that the average cost of a data breach is $4.5 million, emphasizing the critical need for CIOs to prioritize stability and cybersecurity.

$4.5M

average cost of a cyberattack

*IBM report

Implementing DevSecOps practices can aid in this fusion by integrating security measures into the development process. By doing so, CIOs not only accelerate innovation cycles, but also fortify systems against potential vulnerabilities. Striking this balance allows organizations to capitalize on emerging opportunities without compromising operational integrity.

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02 Prioritize cyber resilience and security mastery

CIOs must proactively invest in advanced threat intelligence to anticipate and thwart sophisticated cyber threats. According to a study by Accenture, organizations with a robust cyber resilience strategy experience 50% lower incident response costs. This emphasizes the financial benefits of being prepared and resilient in the face of cyber threats.

Implementing a Zero Trust Security model is crucial. Forrester Research found that companies adopting a Zero Trust approach experienced 50% fewer security incidents. CIOs must champion the integration of advanced technologies like artificial intelligence and machine learning into their security frameworks, enabling real-time threat detection and response.

Furthermore, fostering a security-aware organizational culture is paramount. IBM's Cost of a Data Breach Report indicates that organizations with an established security culture have an average data breach cost that is $1.76 million lower than those without. CIOs need to ensure that cybersecurity is ingrained in the company culture, with employees actively participating in safeguarding digital assets.

By embracing cyber resilience and mastering security, CIOs position their organizations to withstand the evolving threat landscape, protect sensitive data, and maintain the trust of customers and stakeholders.

Future-ready CIOs are business technology leaders that will help drive innovation and business outcomes. This is good for the company and its customers, and will help with attracting and retaining ambitious, creative engineers, developers, and data scientists.

Organizations with a robust cyber resilience strategy experience

50%

lower incident response costs

*Accenture

Organizations with an established security culture have a

$1.76M

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*IBM

Companies adopting a Zero Trust approach experienced

50%

fewer security incidents

*Forrester Research

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03 Embrace AI

Artificial intelligence (AI) is showing up in many aspects of our everyday lives, from digital assistants and smart home devices to healthcare and customer service. Given the technology's ubiquity, it will only continue to advance as more data becomes available and algorithms become more sophisticated. So, what will AI look like in 2030?

According to a report from Harvard University, AI will be even more pervasive in the next decade. Harvard expects the technology to have a profound effect on multiple industries, such as education and public safety, and predicts that workplaces will become fully-AI enabled spaces.

"Big leaps that we have had recently in data analytics are important but it also leaves a lot of room for humans to assist these systems. So, it can be said that the wave of the future is the collaboration of humans and these artificial intelligence technologies," the report concludes.

Ray Kurzweil, Google's Director of Engineering, stated at 2023's SXSW that artificial intelligence will achieve human-level intelligence this decade. It's likely that you'll be working with AI-enabled cobots who will automate routine work, or take over tasks like analyzing large quantities of data. And those meetings you only listen in on might be reduced to AI-generated transcripts that include the important sections for you.

"

Artificial Intelligence will achieve human-level intelligence this decade."

Ray Kurzweil
Director of Engineering, Google

While many companies and workers are adopting generative AI, a PwC report believes AI will become an even greater influence in the world of work. It predicts that AI could contribute up to $15.7 trillion to the global economy in 2030, more than the current output of China and India combined, thanks to AI-enabled productivity improvements.

The report also notes that, in the world of technology, AI adoption currently sits at around 17%. In seven years time, this figure is expected to grow to 47%, when it's expected that the technology will be used for use-case specific and individualized content.

AI could contribute

$15.7T

to the global economy in 2030

*PWC report

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04 Invest in talent development

Thanks to advances in technology, today's tech leaders — and their employees — need to be well-versed in tomorrow's skills.

Not only does upskilling help employees and leaders alike to evolve their skills and knowledge, but it helps organizations remain competitive. Without the skills needed to apply, maximize and transform digital innovations, organizations risk being left behind. One study found that 70% of digital transformations do not reach their objectives due to digital skills gaps.

Looking to the future, these skills gaps are likely to arise in emerging technologies such as artificial intelligence and augmented reality, both of which are set to become a key component of almost every industry. Developers will need to have up-to-date skills in cloud computing as more organizations embrace digital tools and distributed working, along with cybersecurity — a growing area of importance that can no longer be ignored by organizations.

To build the skills required for the future, technology leaders need to identify the gaps across their organization, build a learning culture within their company, and ensure their employees have the necessary resources to expand their technical knowledge.

Take, for example, Andela Qualified. Not only does this performance-based assessment platform use real-world work simulations to predict on-the-job performance and identify the skills that developers need to improve, it also accelerates ongoing growth through Codewars, a gamified platform for developers to progressively upskill on increasingly difficult code challenges.

70%
of digital transformations do not reach their objectives due to digital skills gaps

*BCG study

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40%

of US adults would consider quitting if they had to return to the office full-time

Business Insider poll

05 Implement a remote working model

Employees prefer remote working to the extent that almost 40% of US adults said they would consider quitting if they had to return to the office full-time. This work preference will continue to inform what future work trends will look like. Gartner, too, expects remote working — or at least the demand for remote working — to increase by as much as 30% by 2030 due to Generation Z fully entering the workforce.

50-80M

of the world's 255 million desk jobs will be performed remotely the majority of the time by 2030

Gartner research

It's clear to see why employees prefer remote work arrangements. Many employees report that they are more productive when working from home without the distractions of the office, while others enjoy the better work-life balance gained by not having to commute into the city. Remote working also offers job opportunities for skilled individuals who are bound by location, family obligations, age, and health issues and cannot commute to work.

As per Deloitte's 2023 Global Technology Leadership Survey, tech leaders need to offer flexible and hybrid work environments, which the report described as "the single best way to retain top-tech talent." While leaders can onboard new and emerging technologies, it's much harder to recruit, upskill and retain a competitive pool of tech talent.

The good news is that IT professionals began working remotely in some capacity long before COVID made it a thing. This means they're already adept at managing their workload and day-to-day in a mostly asynchronous environment. From a hiring perspective, a remote work environment allows you to expand your hiring pool and attract qualified candidates from other parts of the country or around the world. This not only gets you the best people for the job, but can help with diversity, which research shows can improve a company's decision-making and financial performance.

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06 Break down the boundaries of geography

Technology leaders are taking the diversity of their technology teams seriously and are committed to contributing to their organization's wider ESG initiatives. Diversity, ethical considerations, and the ability to effectively manage and inspire teams in a remote and globalized work environment are becoming increasingly crucial.

+156%

increase in businesses
wanting to hire in LATAM

*report

In Latin America (LATAM), the remote work boom has been extremely beneficial. Over the last few years, LATAM has become a key partner in major global markets, especially for US tech companies faced with a shortage of local tech skills. A recent report found a 156% increase in businesses wanting to hire in the region, particularly for software engineering roles.

This has prompted local governments to empower its tech talent to meet this growing demand. The city of São Paulo, for example, recently launched a training collaboration with AWS to upskill citizens in areas such as cloud computing and the metaverse, which in turn has led to growth in the number of highly specialized developers.

Brazil, too, has invested heavily in IT engineering. With almost half a million tech graduates per year, tech giants including Meta, Google, IBM, and Unisys have set their sights on the region, and are offering free career training to ensure graduates have the skills to become future startup hires. What's more, a report shows that Brazil was the beneficiary of over $45 billion in total IT investment in 2022.

Since the start of 2021, Andela has seen significant growth in Latin America, doubling the number of engineers in Brazil, tripling our reach in Mexico, and quadrupling in Argentina. Coupled with the cost-effectiveness and flexibility offered, and the fact that Latin America operates in overlapping time zones to the US, this booming technology workforce has become an attractive option for companies.

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Plus, the African tech ecosystem has also grown exponentially. In 2022, funding for Africa's tech ecosystem grew 8%, fueled largely by investments in Nigeria, Egypt, Kenya and South Africa.

The startup boom has led to an increase in demand for — and supply of — African tech talent. Africa has the fastest-growing population of developers with over 22 million individuals joining the workforce each year, and substantial investments from tech giants like Google, Amazon, and Microsoft. The continent is becoming a key player in the tech market and is also the youngest continent in the world with 60% of the population under the age of 25.

As a result of this growth in tech talent across borders, companies can recognize the importance of diversity in all its forms. This includes gig and contract workers, going beyond full-time equivalent quotas.

Andela applies its extensive experience and deep domain knowledge to help CIOs build modern IT organizations fit for tomorrow.
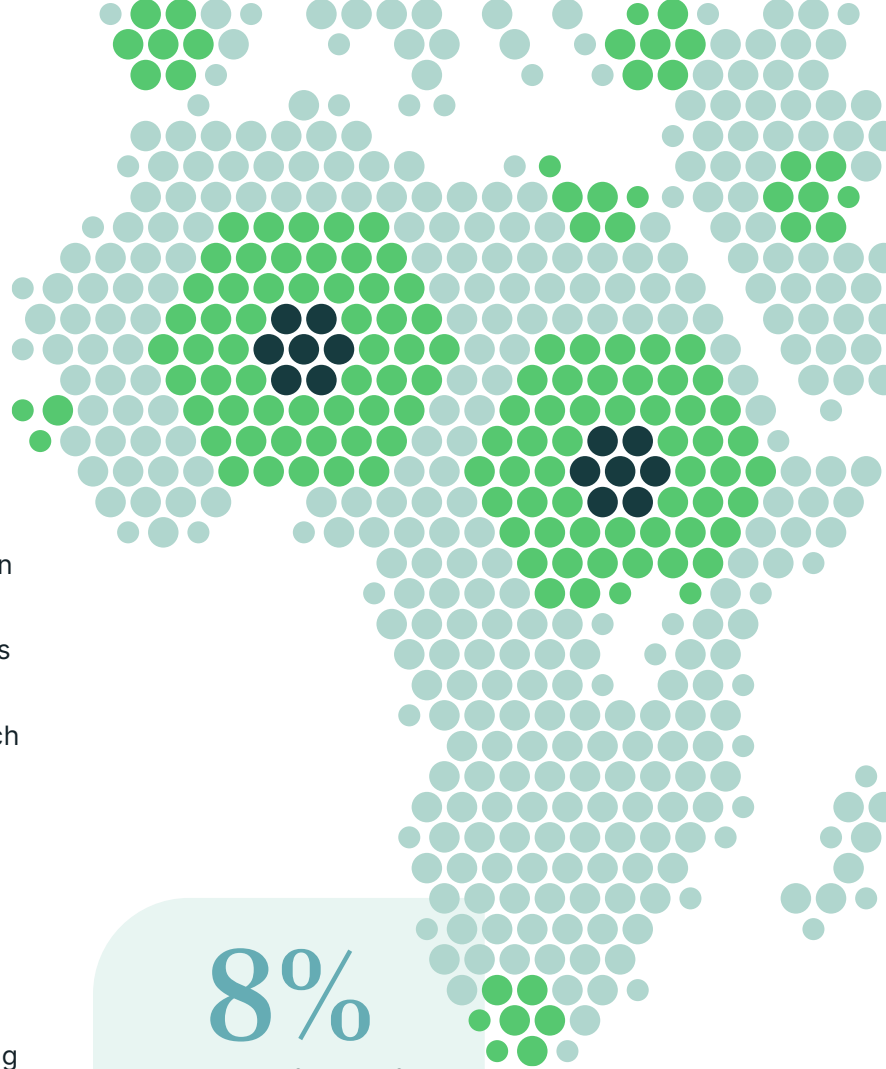
8%

increase in funding for Africa's tech ecosystem in 2022

*Partech report

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Thank you!

Andela is a global private talent marketplace powered by a unified platform to manage the complete tech talent lifecycle. Andela Talent Cloud is an AI-driven platform that helps enterprises source, qualify, hire, manage, and pay global technical talent in one integrated platform. Powerful AI-matching algorithms learn from thousands of touch points in the hiring journey to pinpoint the best technologists up to 70% faster at 30-50% less cost than other hiring approaches.

Market leaders partner with Andela to help rewrite their workforce strategies to include global, remote-fluent talent from emerging geographies such as Africa and Latin America to scale their teams and deliver projects faster.

Get in touch with us at **andela.com**

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