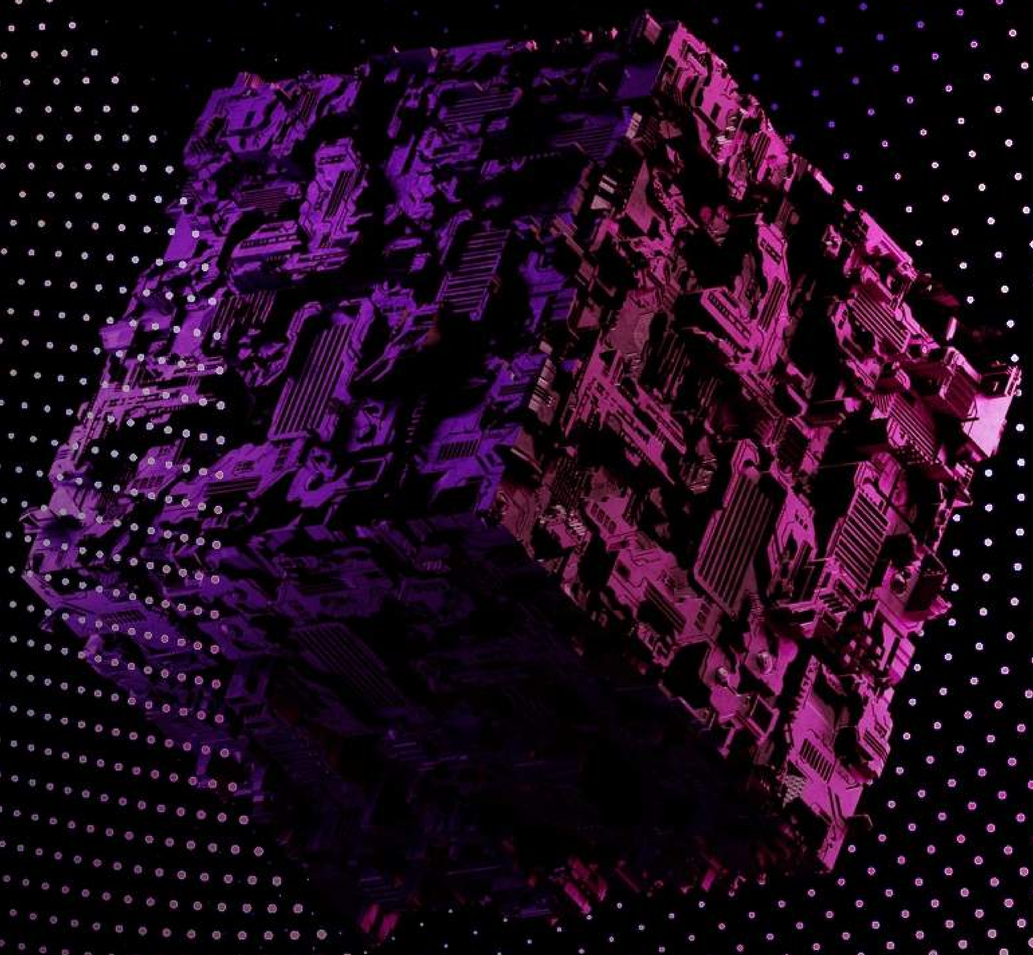
FACTOR

FUTURE-PROOFING ENTERPRISE IT STRATEGY

A CIO'S ROADMAP TO NAVIGATING TRANSFORMATION

10 MINUTE READ **JULY 2025**



EXECUTIVE SUMMARY

Australia's CIOs are standing at the edge of a transformation curve. With AI accelerating, hybrid work becoming permanent, and data ecosystems expanding, the pressure is on to modernise IT strategies while navigating regulatory, budgetary, and talent headwinds.

It examines four key imperatives reshaping the CIO agenda in 2025 and beyond:

From Cost Centre to Strategic Growth Enabler:
Boards now expect CIOs to directly influence growth, customer experience, and sustainability. The role of IT has shifted from maintaining systems to co-designing enterprise value. CIOs must embed themselves in business strategy, aligning delivery models with revenue and innovation outcomes.

Modernising Core Architecture:
CIOs are moving from monolithic legacy systems to modular, cloud native, API-first architectures that accelerate delivery, reduce change risk, and increase responsiveness. Case in point: ANZ's value stream-based IT delivery and NAB's composable architecture are setting new benchmarks in agility.

Building Smart, AI-Ready Data Cores:
Enterprises are consolidating siloed data into governed, real-time platforms to power predictive insights and AI use cases. NAB and Telstra demonstrate how investing in scalable data infrastructure unlocks business value, from personalised experiences to proactive risk mitigation.

Cultivating a Digital-First IT Culture:
Transforming technology capabilities also means reimagining IT talent, operating models, and culture. CIOs must upskill teams in cloud, automation, and DevOps while fostering agile, cross-functional squads aligned to business outcomes. Telstra's internal upskilling and agile reorganisation illustrate this shift in action.

QUICK PULSE FROM FACTOR RESEARCH:

WHAT'S ACCELERATING IN Q3

The CIO of 2025 must not only keep pace with change but lead it. This paper provides a roadmap to navigate transformation, break legacy constraints, and future-proof enterprise IT strategy in an AI-first world.

Factor research indicates that while 71% of CIOs see AI and analytics as strategic, most CIOs remain in mid-stage AI-readiness. Only 31% of organisations report being truly data-driven, and just 4% of tech leaders feel fully prepared for emerging disruptions. At the same time, cultural barriers persist with 38% of CIOs still struggling to connect IT value to business outcomes and 25% facing resistance to change.

Organisations are under financial pressure due to economic uncertainty, rising costs, and regulatory challenges, but they see AI and emerging technologies as critical investments to stay competitive and drive transformation.

CIOs across Australia and New Zealand face a growing list of pressures that are redefining the boundaries of their role. Factor's recent data found that CIOs in Australia and New Zealand are managing competing priorities under mounting pressure. On one hand, they face financial constraints, rising operational costs, and the demand to improve efficiency. On the other, they are expected to accelerate adoption of advanced technologies like AI and strengthen cybersecurity in response to increasing risk

The role of the CIO is shifting faster than ever. Three key changes are defining the technology agenda for Q3 2024:

62%

of CIOs now work closely with business unit leaders to align IT with revenue, customer experience, and product delivery, as they take a more direct role in shaping business outcomes.

71%

of CIOs identify AI and advanced analytics as strategic priorities, as they accelerate as competitive levers. However, data maturity and operational readiness continue to hold back full-scale adoption.

41%

of CIOs continue to prioritise cost reduction while trying to modernise infrastructure and deliver innovation in parallel, even as budget scrutiny remains high.

FACTOR'S RECENT RESEARCH UNDERSCORES THESE CHALLENGES:

78%
report that delivering value from AI is driving significant change

58%
identify financial pressure and cost control as key constraints

53%
cite increased cyber risk as a growing concern

While AI and cyber security are recognised as strategic imperatives, they also require significant investment, talent, and operational focus. CIOs must deliver modernisation, automation, and protection—without additional resources or compromising service continuity.

There's a tension between limited budgets and the urgent need to innovate with AI, modernise infrastructure, and address cyber security threats. It's a balancing act of prioritising what's essential while navigating resource constraints and external pressures.

This dual mandate is reshaping the CIO agenda: securing the organisation, enabling innovation, and making strategic investments that deliver measurable value under economic pressure.

The CIO Mandate: From IT Operator to Enterprise Strategist

ANZ enterprises are at an inflection point. The rapid shift toward AI-enabled operations, cloud-native ecosystems, and digital sovereignty requires CIOs to lead transformation and — not just support it. ANZ enterprises are at a critical inflection point. The convergence of AI, cloud-native ecosystems, and digital sovereignty has shifted the role of the CIO from a traditional IT operator to a pivotal business strategist. No longer confined to managing systems and infrastructure, CIOs are now expected to architect the digital backbone of the enterprise by driving growth, innovation, and resilience.

ANZ enterprises are at an inflection point. The rapid shift toward AI-enabled operations, cloud-native ecosystems, and digital sovereignty requires CIOs to lead transformation and — not just support it. ANZ enterprises are at a critical inflection point. The convergence of AI, cloud-native ecosystems, and digital sovereignty has shifted the role of the CIO from a traditional IT operator to a pivotal business strategist. No longer confined to managing systems and infrastructure, CIOs are now expected to architect the digital backbone of the enterprise by driving growth, innovation, and resilience.

WHAT'S HOLDING CIOS BACK? BARRIERS TO SUSTAINABLE PROGRESS

Legacy environments, fragmented applications, and inconsistent data governance frameworks impede the seamless flow of information, limiting the enterprise's ability to leverage AI, automation, and real-time analytics for competitive advantage.

While the vision for enterprise transformation is clear, CIOs often find their efforts hamstrung by persistent barriers that stall progress. The disconnect between strategic ambition and operational reality stems from a combination of technological, financial, and organisational challenges. Below, we explore the four key challenges that stand in the way of IT progress.

The Legacy Infrastructure Conundrum

60% of organisations cite data silos as transformation-blockers

Low-Cost, High-Stakes IT

32% of CIOs face cost scrutiny while needing to innovate

Mind the Skills Gap

Talent gap compounds digital transformation hurdles

The Compliance-Agility Dilemma

Governance overload slows adoption of innovations

THE LEGACY INFRASTRUCTURE CONUNDRUM

A primary obstacle is integration complexity. 60% of organisations cite data silos and outdated architectures as transformation blockers.

LOW-COST, HIGH-STAKES IT

Many ANZ enterprises continue to grapple with outdated, monolithic IT systems that are costly to maintain and poorly aligned with today's demands for agility and scalability. Legacy systems cost IT departments nearly $40,000 annually on average, consuming significant resources that could be allocated to innovation. (Source: Servicenow).

These legacy environments, once seen as reliable long-term investments, were built for stability rather than adaptability. A decade ago, the pace of technological change made such capital-heavy systems seem safe and economically sound. However, as business models have evolved and digital disruption accelerates, these rigid infrastructures now hinder integration with cloud-native technologies and AI-driven workflows, becoming a major roadblock to innovation. This is also reflected in CIO investment plans with 43% of ANZ CIOs planning to decrease investments in legacy infrastructure in 2025, signaling a strategic shift towards modernisation. (Computerweekly)

Factor's research indicates 32% of CIOs face the paradox of needing to innovate while operating under cost scrutiny.
The financial burden of sustaining legacy systems compounds the challenge. Custom integrations, manual workarounds, and reliance on scarce legacy specialists inflate operational expenses. Enterprises caught in this cycle often defer modernisation due to high upfront costs, inadvertently escalating their technical debt.

Additionally, CIOs are caught in a paradoxical situation where they are expected to drive innovation and digital acceleration while operating under relentless cost scrutiny. This tension often forces IT leaders into reactive spending patterns, focusing on immediate operational needs at the expense of long-term strategic investments.

Fragmented IT budgets further exacerbate the issue, with a disproportionate share allocated to maintaining day-to-day operations rather than strategic transformation. Without a clear link between modernisation initiatives and measurable business outcomes, CIOs struggle to secure investment, perpetuating a cycle of reactive spending and mounting costs.

MIND THE SKILLS GAP

Talent gap compounds these challenges. As digital fluency becomes critical for enterprise competitiveness, the scarcity of skilled professionals in data science, AI, and cybersecurity poses a significant hurdle. This shortage not only slows the implementation of new technologies but also increases dependency on external vendors, adding to costs and complexity. The absence of robust upskilling and talent retention strategies exacerbates this issue, leaving organisations vulnerable to disruption.

The digital skills deficit in ANZ is reaching a critical point. The State of the Service Report (APSC) 2023–24 highlights that 70% of Australian Public Service (APS) agencies report critical data skill shortages, particularly in data analysis, general data literacy, communication of data, and data governance. Additionally, the APS Data, Digital and Cyber Workforce Plan 2025–30 (Source: APS) notes that demand for cyber specialists is growing, but the APS struggles to attract and recruit them due to misconceptions about requirements and candidate suitability. This shortage is particularly acute in areas like AI, cyber security, and data analytics, which are essential for modern digital enterprises.

The Compliance-Agility Dilemma

Finally, governance overload adds another layer of friction. CIOs must navigate an increasingly complex web of compliance requirements across multiple sectors and jurisdictions. This regulatory burden not only demands significant resources but also introduces operational rigidity, slowing the adoption of innovative technologies and processes. Striking a balance between agility and compliance remains a critical, yet elusive, objective.

In sectors such as finance, healthcare, government, and energy, CIOs are subject to multiple concurrent regulatory regimes. The penalties for non-compliance, both financial and reputational, are significant. In ANZ, regulators have ramped up enforcement, with increased scrutiny on cyber readiness, data privacy, and critical infrastructure resilience. CIOs are often forced to delay modernisation programs or sandbox new technologies until they're confident in meeting regulatory standards. This caution, while necessary, creates inertia.

The underlying causes of these intertwined challenges stem from long-standing perceptions of IT as a cost centre rather than a strategic enabler. Past enterprise strategies prioritised cost control and risk avoidance, resulting in underinvestment in flexible architectures, proactive cost management, and talent development. As digital disruption accelerates, these outdated mindsets are proving unsustainable. The failure to align IT initiatives with broader business goals has left many organisations ill-prepared to navigate the complexities of the modern digital landscape.

Collectively, these barriers highlight need for CIOs to adopt a holistic approach to transformation; this includes one that addresses technical debt, aligns financial planning with strategic priorities, invests in talent development, and streamlines governance. Overcoming these hurdles is essential for translating digital ambition into tangible business

STRATEGIC IMPERATIVES FOR CIOS: BUILDING AN ADAPTIVE IT STRATEGY

CIOs face a pivotal opportunity to break the cycle of the recurring loop of constrained innovation caused by systemic IT challenges. By redefining IT's role from a support function to a core business driver, they can reposition technology as a catalyst for growth, innovation, and resilience. This requires a fundamental shift in approach—prioritising modernisation, embedding cost optimisation into IT strategy, and championing workforce transformation as a board-level priority. Only by addressing these foundational challenges can CIOs ensure their enterprises remain competitive, agile, and future-ready in an increasingly digital and AI-driven economy. Below we provide some key recommendations to investigate:

Align IT Vision to Enterprise Strat

Ensure IT is seen not as a cost centre but as a catalyst for innovation and growth

Modernise Core Architecture

Prioritise modular, cloud-native, and API-first systems to increase agility and resilience

Invest in a Smart Data Core

Build an AI-ready platform that ensures fast, trusted insights for all business functions

Foster a Digital-First IT Culture

Upskill teams, promote cross-functional collaboration, and embed agility into the DNA of the organisation

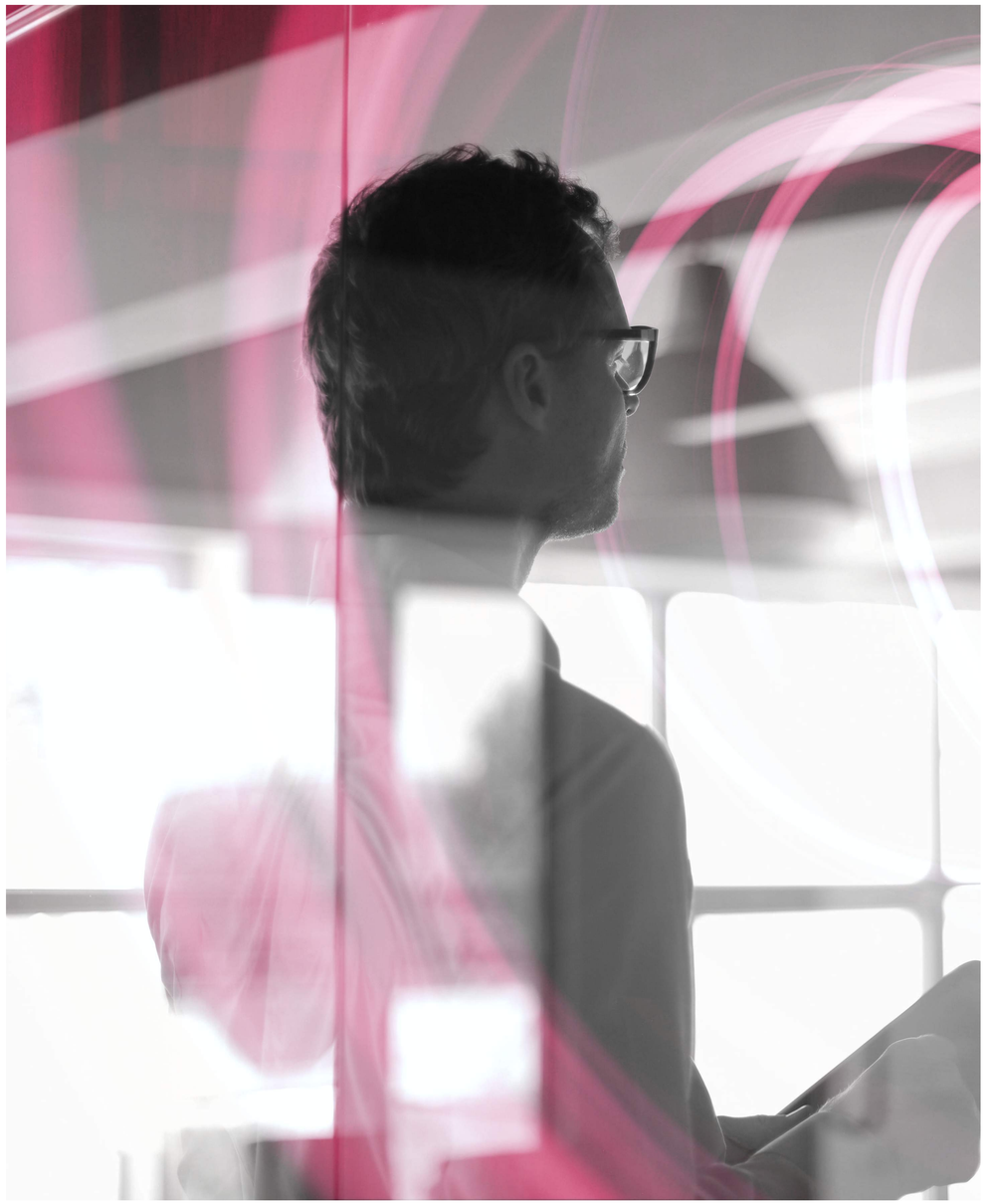
ALIGN IT VISION TO ENTERPRISE STRATEGY

ENSURE IT IS SEEN NOT AS A COST CENTRE BUT AS A CATALYST FOR INNOVATION AND GROWTH.

Aligning IT Vision to Enterprise Strategy is no longer optional, it's a mandate. For CIOs across ANZ, the conversation has shifted from "how can IT support the business?" to "how can IT lead the business forward?" Boards and executive teams now expect CIOs to shape strategic priorities such as revenue growth, customer experience, and environmental sustainability. This evolution requires CIOs to move beyond infrastructure maintenance and become architects of enterprise value.

Co-creation is key to this evolution, especially in B2B sectors where digital capabilities are tightly linked to client outcomes. Forward-thinking CIOs are working alongside sales, product, and operations teams to design technology that directly fuels client value and revenue.

For instance, logistics providers are co-developing real-time freight visibility platforms using IoT and predictive analytics to win enterprise contracts. In the construction sector, firms are embedding digital twin technology into client offerings to enhance project forecasting and maintenance. Australian telcos are launching tailored cyber security services for business clients, powered by in-house AI platforms which are a direct result of IT partnering with commercial teams.



CASE IN POINT

IT news cited ANZ Bank as one of the leading examples of how a traditional financial institution is realigning its technology function to directly influence business outcomes. The shift reflects a broader trend in Australia's banking sector — where CIOs are no longer seen as just infrastructure stewards, but as growth partners and innovation leaders.

Technology is no longer a back-office enabler but a core driver of ANZ's business strategy. The IT organisation is tightly aligned with the bank's four strategic pillars: customer-centric propositions, scalable platforms, strong partnerships, and people-first culture.

ANZ operates as one unified global tech organisation supporting its Australian, New Zealand, and Institutional banking businesses. Divisional CIOs work directly with business units to co-own outcomes. Central teams manage infrastructure, cloud, and security for bank-wide consistency. Under its new strategy, ANZ restructured its technology delivery around "value streams", each tied to a strategic business objective (e.g. home loans, small business banking, financial wellbeing).

This allowed IT teams to:

Collaborate directly with business units

Prioritise tech delivery based on customer impact

Shorten time-to-market by removing internal handoffs

ANZ now links IT performance with customer-facing and financial outcomes.

For instance:

Cloud adoption is measured by its impact on delivery speed and system resilience

API usage is tracked not just for volume, but for its ability to unlock new digital experiences

IT incident management is reported to the board as part of enterprise risk metrics

- Source: IT News

WHY THIS MATTERS

When IT is embedded into enterprise strategy, CIOs gain a direct seat at the table where decisions about customer experience, revenue growth, and sustainability are made. This shift empowers IT teams to shape outcomes, not just enable them. Without this alignment, technology investments remain tactical and disconnected from measurable business goals.

CIOs who don't reframe IT as a growth lever risk being sidelined. IT leaders who embed themselves into the business by working alongside product, sales, and operations can co-create technology that drives measurable value. Without enterprise alignment, IT will continue to fight for relevance and

MODERNISE CORE ARCHITECTURE

For today's CIO, modernising core architecture is not a technical upgrade, it's a business enabler.

Legacy systems, while viewed as stable, often limit speed, flexibility, and the ability to innovate at scale. Modernisation involves rethinking the foundational IT stack to better support the enterprise's agility, resilience, and growth ambitions. It's about evolving from rigid, monolithic systems toward an adaptive, service-oriented architecture that aligns tightly with business objectives.

CIOs should treat architecture modernisation as a multi-phase transformation, not a single initiative. Successful modernisation doesn't happen all at once. It begins with a clear architectural vision and prioritised roadmap. Companies should first identify high-value, low-risk areas for modularisation, often customer-facing or high-velocity domains, and pilot microservices architecture there.

Modernising the core typically entails three key shifts – adopting modular architecture to decouple systems into independently deployable services; embracing cloud-native infrastructure for elasticity, scalability, and automation; and enabling API-first integration to unlock interoperability and ecosystem connectivity. Together, these elements reduce change risk, accelerate delivery, and enable cross-functional teams to build and iterate with greater autonomy. For CIOs, this means moving beyond systems of record to building platforms for innovation.

Simultaneously, they can migrate workloads to the cloud in phases, focusing on non-critical applications first to build internal expertise and confidence. Using APIs to bridge old and new systems allows for incremental transformation without disrupting business continuity.

This evolution isn't about swapping infrastructure; it's about adopting architectural principles that allow organisations to respond faster to customer needs, regulatory changes, and market opportunities.

Modular Architecture

Decouple systems

Cloud Infrastructure

Enable scalability

API Integration

Unlock connectivity

INVEST IN A SMART DATA CORE

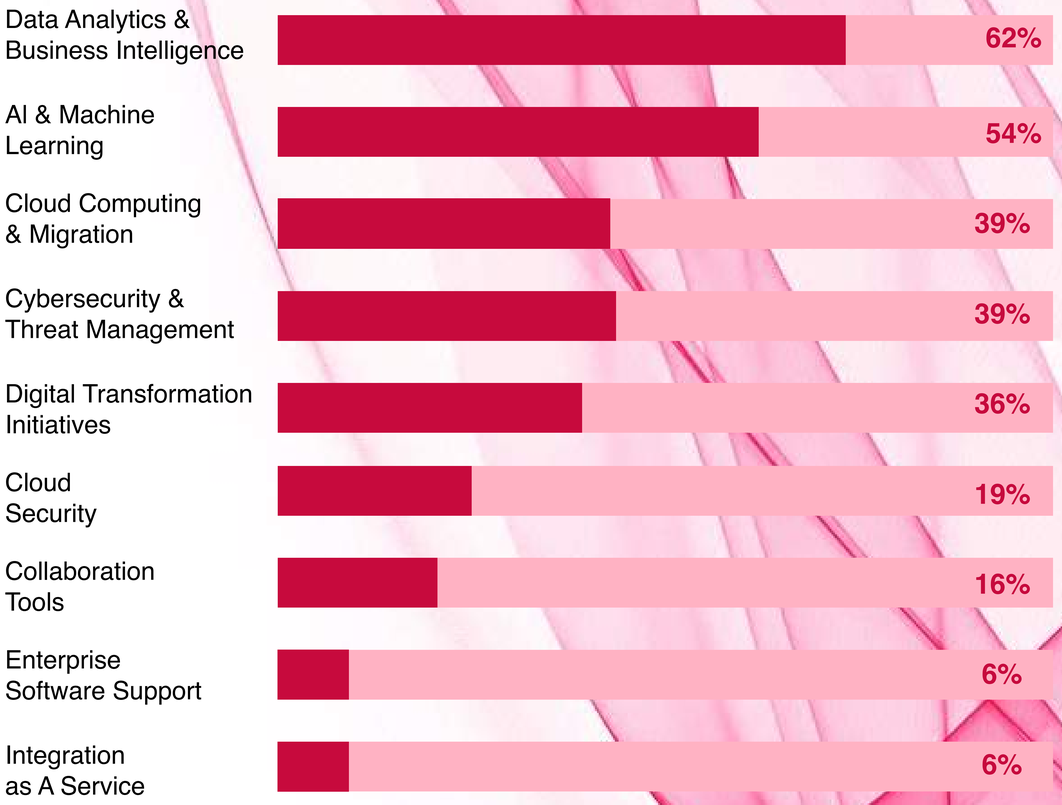
Data is no longer a byproduct of operations; it's the foundation of enterprise decision-making. Yet many ANZ organisations still rely on fragmented reporting systems and static dashboards that lag behind real-time business needs.

In fact, Factor's CIO pulse survey indicates IT investments are increasingly focused on areas that drive innovation, efficiency, and security. The current key investment priorities for IT leaders include data analytics & business intelligence, to make informed decisions, and AI & machine learning, to automate processes and enhance capabilities.

CIOs now face growing pressure to build smart data cores: integrated, governed, and AI-ready platforms that can enable faster, more confident decisions across functions like supply chain, customer service, and product innovation.

Unifying siloed data across cloud and on-prem environments is step one. In various industries like utilities, logistics, and financial services data often resides in legacy systems, edge devices, and third-party clouds; In such cases, unifying data means deploying data fabric or lakehouse architectures to enable seamless integration and frictionless access. For example, banks in ANZ are using these models to connect transactional data with behavioural insights, enabling hyper-personalised lending or fraud detection at scale.

TECHNOLOGY INVESTMENT PRIORITIES



Source: Factor Research; n=140

CASE IN POINT

Another Australian Big 4 Bank, recognised that in a fast-evolving financial services landscape, legacy data systems were becoming a constraint to innovation and responsiveness. To stay competitive and lead the industry in digital experiences, the bank set out to modernise its architecture and build a scalable, modular data platform.

With data flowing in from over 8 million customers and complex internal systems, the bank needed to eliminate data silos, reduce integration friction, and enable real-time access to high-quality data. The bank implemented a modular, cloud-native data architecture that leveraged automated data ingestion tools and a scalable analytics platform for processing and machine learning. This modern framework enabled the seamless integration of over 100 data sources with minimal engineering overhead, allowing the bank to centralize and refine data for enterprise-wide use.

The result was a high-quality, always-on data environment that supported advanced analytics and generative AI initiatives. This setup empowered teams across the bank, from marketing to risk to product development, with timely, accurate data, enhancing cross-functional collaboration and accelerating innovation.

Additionally, AI-powered decision-making is emerging as a competitive differentiator. CIOs are building platforms that not only support machine learning models but embed them into operational workflows by enabling predictive maintenance, dynamic pricing, or automated risk scoring. Telstra, for instance, uses its data and AI platforms to optimise network performance and customer churn interventions in real-time, delivering both cost savings and service improvements.

To succeed, CIOs must embed data governance, lineage, and quality as core tenets of their architecture. The shift to a smart data core isn't just about analytics, rather it's about building trust, transparency, and agility into the heart of the enterprise.

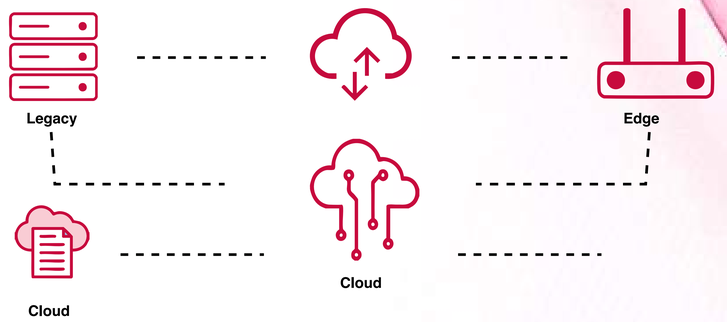
WHY THIS MATTERS

Informed decisions start with data. When data is scattered across silos and dashboards lag operations, organisations move slowly, or worse, in the wrong direction. Without integrated, governed, and AI-ready data platforms, enterprises risk slow decision-making and missed opportunities.

A smart data core eliminates bottlenecks, ensures high-quality inputs for AI models, and unlocks insights across departments. AI adoption makes data consolidation and optimisation even more critical. Poor-quality or incomplete data not only limits the effectiveness of machine learning models but can also lead to biased outcomes, regulatory exposure, or broken customer experiences.

Build a Smart Data Core

Unify Siloed Data Across Platforms



FOSTER A DIGITAL-FIRST IT CULTURE

Creating a digital-first culture within the IT organisation is critical to enabling enterprise-wide transformation. It involves more than adopting new tools. It requires a fundamental reorientation of how IT teams operate, collaborate, and drive business value. As technology becomes a central force in shaping competitive advantage, IT must lead by example in embracing agility, innovation, and customer-centric thinking

The foundation of this shift lies in continual technical development. IT teams are expected to possess deep expertise in cloud-native engineering, DevOps, automation, data platforms, and cybersecurity. At the same time, they are expected to work fluently across disciplines, from product design and agile delivery to stakeholder engagement. These capabilities enable IT to accelerate responsiveness to business demands and unlock new sources of value.

Equally important is the dismantling of internal silos to drive seamless cross-functional collaboration. High-performing teams operate as multidisciplinary squads aligned to value streams, not functional hierarchies. These teams are accountable for delivering end-to-end outcomes, enabling rapid iteration, reduced rework, and tighter feedback loops between technology and the business.

Continual Technical Development
Deep expertise across key disciplines

Embrace Agility and Innovation
Lead in adopting new technologies

Drive Cross-Functional Collaboration
Seamless teamwork for value delivery

WHY THIS MATTERS

Without a cultural reset, tech upgrades won't stick. A digital-first IT culture equips teams to respond quickly, work cross-functionally, and stay focused on business outcomes. This shift requires upskilling in areas like cloud, automation, and agile delivery. It also means breaking silos, embedding IT into value streams, and giving teams ownership of delivery. Without it, even the most advanced technologies will struggle to drive results, and transformation efforts will stall.

CASE IN POINT:

Telstra launched extensive digital upskilling programs for its IT teams, covering areas like agile delivery, DevOps practices, cloud infrastructure, data analytics, and AI. Beyond technical skills, the programs focused on product thinking, user-centric design, and cross-functional collaboration, thus enabling staff to think beyond code and understand their direct impact on customer outcomes.

To reinforce empowerment, Telstra restructured teams into autonomous agile squads, where engineers, architects, product owners, and analysts co-owned delivery from end to end. These teams were given decision-making authority over tooling, workflows, and sprint priorities while breaking from traditional top-down models. Leadership provided clear strategic direction but allowed teams to self-organise and experiment within that framework.

Importantly, Telstra also created internal communities of practice i.e. spaces where engineers and technologists could share learnings, experiment with emerging technologies, and grow their influence across the organisation

Source: AI Governance Light House Case Study

RECOMMENDED ACTIONS

Embed IT into Enterprise Strategy

Action: Formalize IT representation in strategic planning forums and executive committees.
Outcome: Ensures technology investments directly map to revenue, customer experience, and sustainability goals.

Cultivate a Digital-First IT Culture

Action: Roll out targeted upskilling programs (DevOps, agile, data literacy) and reorganize into cross-functional value-stream squads.
Outcome: Builds internal expertise, fosters collaboration, and embeds customer-centric, outcome-driven mindsets.

Link IT Investment to Measurable Business Metrics

Action: Define clear KPIs (e.g., time-to-market, API adoption, AI ROI) and report IT performance alongside financial and customer-experience metrics.
Outcome: Shifts perception of IT from cost center to strategic growth enabler, simplifying funding decisions.

Prioritise Modular, Cloud-Native Architecture

Action: Launch a phased roadmap to decouple high-value domains into microservices and adopt API-first design.
Outcome: Accelerates delivery, reduces deployment risk, and creates a flexible foundation for future innovation.

Invest in a Governed, AI-Ready Data Platform

Action: Consolidate siloed data into a scalable lakehouse or fabric, underpinned by strong data governance and quality controls.
Outcome: Provides trusted, real-time insights to power predictive analytics and generative AI use cases.

Balance Agility with Compliance

Action: Implement “compliance by design” guardrails within agile delivery processes and embed risk checks into CI/CD pipelines.
Outcome: Maintains regulatory adherence without slowing innovation, mitigating legal and reputational risks.

FACTOR

ABOUT FACTOR

Factor is a membership-based organisation with one goal in mind: betterment of every leader that we serve.

Stay at the forefront of industry developments with comprehensive insights into current and emerging trends. Our advisory services empower leaders like you to make informed, data-driven decisions, positioning your enterprise for lasting success. Each year, Factor assists numerous enterprise organisations in identifying enduring technology partnerships. We accomplish this through meticulous strategic research that places organisational excellence at the forefront.

Australia: info@factor-insights.com

Become A Member: https://www.factor-insights.com/memberships
Become A Partner: https://www.factor-insights.com/partnerships

Stay connected to the latest insights: