Navigating the Digital Shift

October 2024

Matthew Wilkins
Research Director,
European Services

An IDC InfoBrief, sponsored by **endava**

In this InfoBrief

The business landscape continues to evolve due to increased reliance on technology through digital transformation, as well as market changes through disruption and demand.

One in two companies, globally, considers itself to be a digital business, with CEOs expecting half of their revenues to come from digital products and services in five years' time. These projections underline the importance of businesses leveraging every means at their disposal to achieve a competitive advantage.

Artificial intelligence represents the latest phase in the evolution of organisations' digital journeys and brings with it an opportunity to change how businesses operate – perhaps unlike ever before. While artificial intelligence has many forms, recent developments such as ChatGPT have increased interest in one form of the technology – generative AI – across organisations, including technology vendors and services providers.

Organisations must embrace the disruption AI brings and be ready to react to and address challenges along the way. Core infrastructure, the human impact, and external partners all play critical roles and must ultimately be included in organisations' strategies if success is to be achieved.

This InfoBrief, sponsored by Endava, explores how AI represents the next phase of the digital journey for organisations. Together with Endava, IDC assesses the critical factors required for success.

Where digital transformation began

Digital Transformation is a term widely used in the modern economy, but it has been present in various forms for many years, if not decades. Plotting its origin is really an exercise in how far back we want to look. Is it from the mainframe in the 1960s and 70s, through to the widescale adoption of personal computers in the 1980s and 90s, facilitated by the microprocessor and graphical user interfaces that made computing **cheaper** and more **accessible** to the masses? These early examples are connected by common themes – namely, the speed and simplification of tasks using technology.

In more recent times, digital transformation has continued to change the business landscape, leading to the era of the digital business. This has been facilitated through the advent and widescale use of cloud technology, underpinned by high-speed connectivity (both mobile and fixed), low-cost storage, and continual evolution in computing devices, with mobile devices having become more powerful and versatile and a cornerstone of the modern business.

Yet the evolution and importance of digital transformation has not simply been driven by technology. Market disruptions and changing demand have also played critical roles.

The global COVID-19 pandemic necessitated businesses adjusting to huge numbers of staff working remotely – in an incredibly short space of time.

By doing so, staff and businesses became more accepting of working digitally and more open to developing and selling digital products and services – in line with demand and changing mindsets.

But, if firms are continuing to invest in and employ strategic initiatives, the benefits of doing so must be clear. For example, globally, companies cite the leading benefits of **adopting digital platforms** as:

39%
Improved security

36%
Reduced costs

34%
Improved operational efficiency

The percentages of companies that have realised these benefits
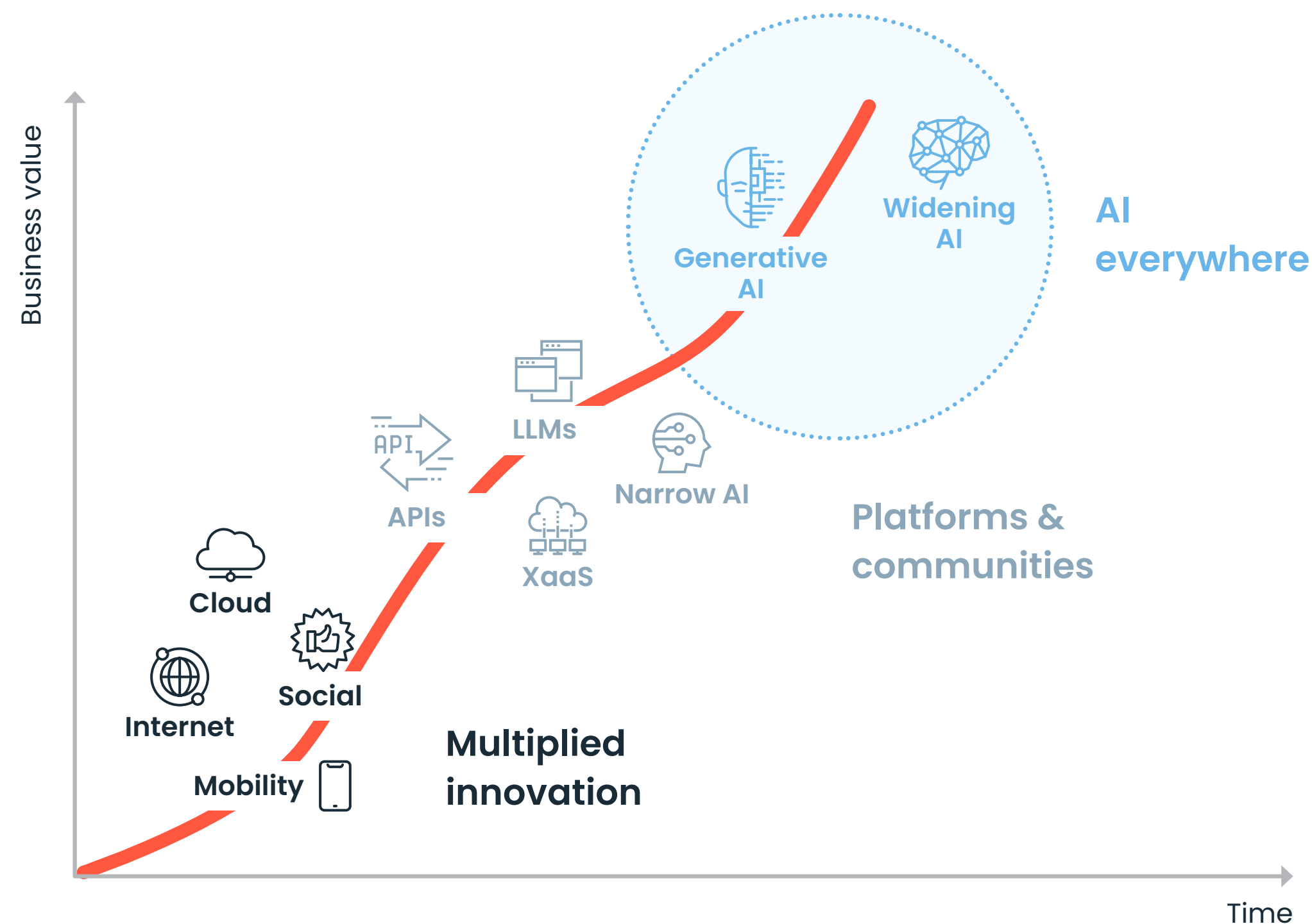
Digital transformation today – and tomorrow

In the context of digital transformation, new market drivers, and changes in demand,

48%

of firms globally now consider themselves to be digital businesses.

But *digital transformation* must be considered a journey with no end destination – something the history of technology and business evolution clearly illustrates.

But what is the next phase of the digital journey?

Business value

AI everywhere

Widening AI

Generative AI

AI everywhere

LLMs

APIs

Narrow AI

Platforms & communities

XaaS

Cloud

Social

Internet

Mobility

Multiplied innovation

Time

AI everywhere:

The next leg of the digital journey will see the time and costs to develop a range of automation and intelligence use cases dramatically reduced, enabling the digital business to innovate at scale.

Businesses not reacting to or adapting to the changing business landscape or embracing AI **risk** being left at a disadvantage to their competitors that have embraced the technology. This can result in various negative consequences, including diminished business opportunities through slower time to market, a less advanced portfolio of offerings, or not being perceived as market-segment leaders.
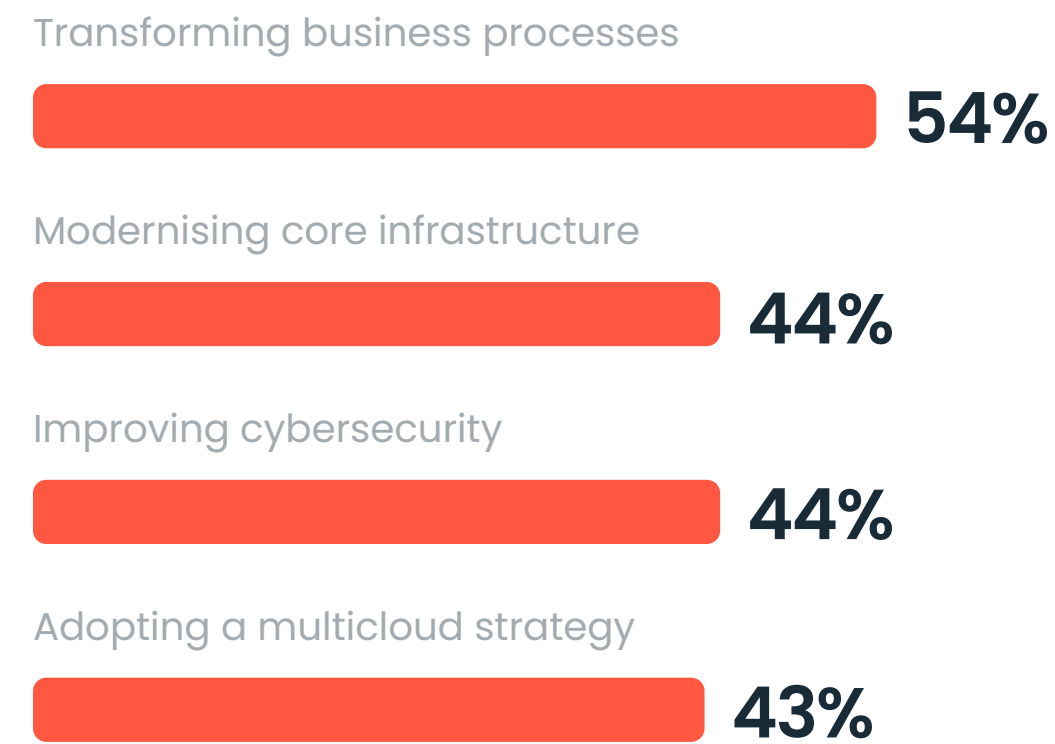
Enabling digital business ambitions

Globally, CEOs anticipate at least

49%

of their revenues to come from digital products and services in five years.

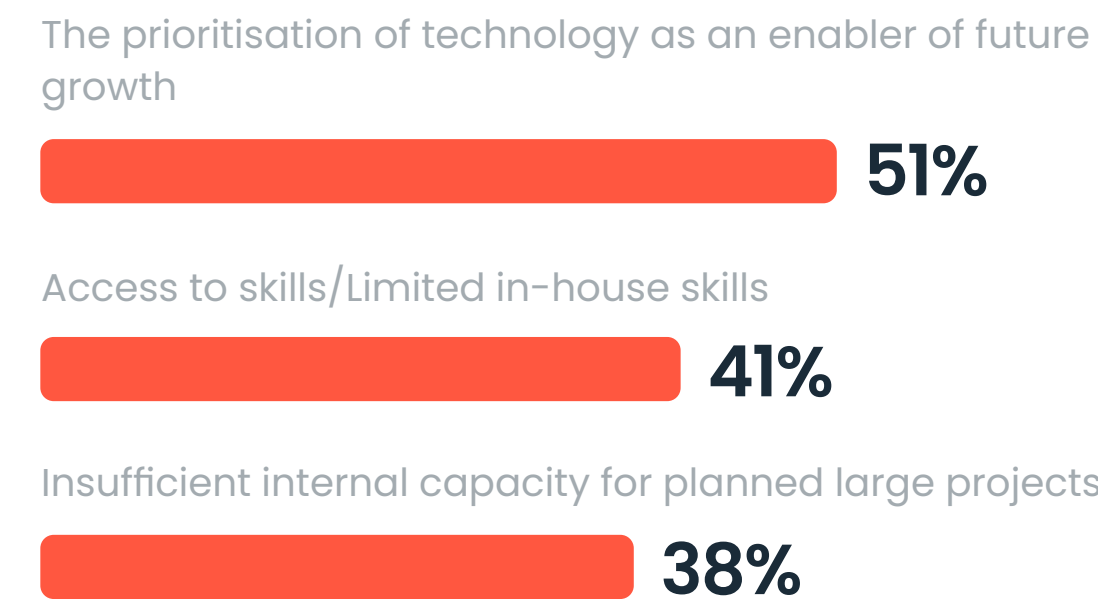The evolution of digital spending from **building to scaling** sits at the core of this expectation.

Leading modernisation and transformation initiatives supporting digital business ambitions

Transforming business processes

54%

Modernising core infrastructure

44%

Improving cybersecurity

44%

Adopting a multicloud strategy

43%

Q. Which of the following modernisation/ transformation initiatives is your organisation planning to start in the next 2 years? [Top 4 responses]

Top reasons for organisations increasing their external IT services spending:

The prioritisation of technology as an enabler of future growth

51%

Access to skills/Limited in-house skills

41%

Insufficient internal capacity for planned large projects

38%

Q. What are the most significant reasons for the increase in external IT services spending in your organisation?

While **transforming business processes** is the leading short-term modernisation and transformation initiative in support of digital business ambitions across all personas (as nominated by 54% of IDC survey respondents), 60% of CEO's highlighted **deploying AI, ML, generative AI**, making it the **leading priority** for CEO's.
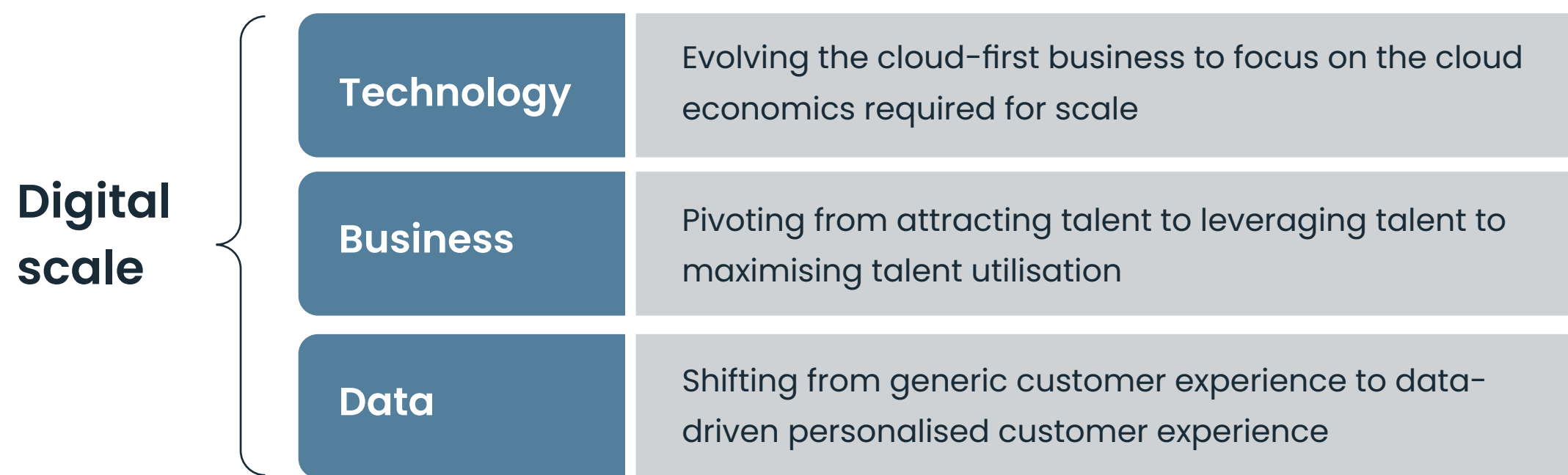
External IT services providers – enablers of future company growth

Globally, **a shortage of staffing/labour preventing the effective use of technology** is a top risk factor related to organisations' tech strategies for the next 12 months. An external partner strategy is essential.
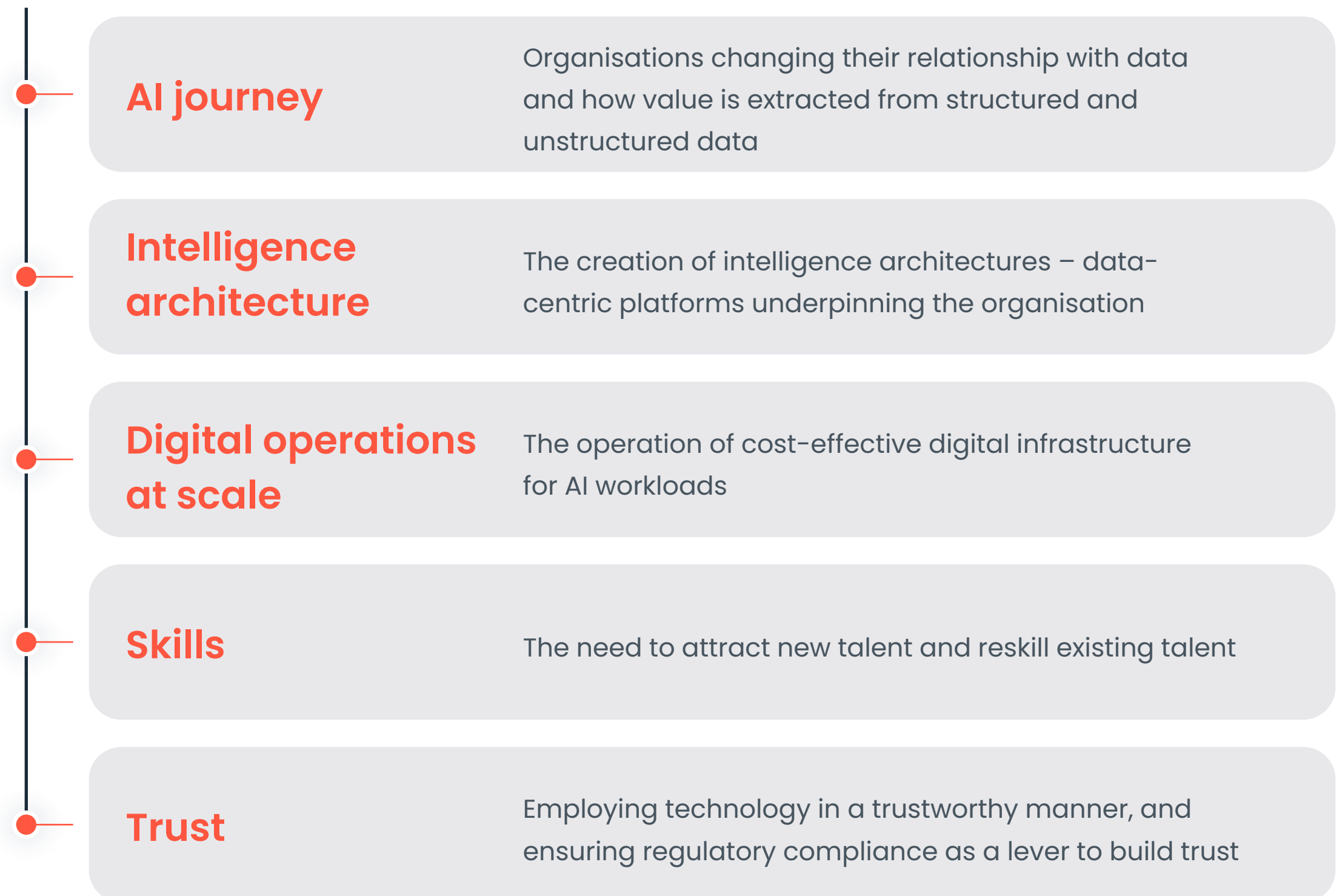
The current digital shift: AI as the catalyst?

Coming out of the digital-acceleration era, post pandemic, organisations are moving into a period of **digital scale**. This involves scaling technology, scaling business, and scaling data.

Digital scale

Technology	Evolving the cloud-first business to focus on the cloud economics required for scale
Business	Pivoting from attracting talent to leveraging talent to maximising talent utilisation
Data	Shifting from generic customer experience to data-driven personalised customer experience

But, in the digital business era, organisations must also look to **innovate at scale** – innovation in new products and services and innovation in how the organisation operates. Data is a prime example, with data starting to lose value within hours and losing most of its value within days.

Dependence on and the importance of data are therefore growing significantly. In the next phase of the digital journey, the *AI everywhere era*, a critical theme is how organisations capitalise on their data.

The key characteristics of the *AI everywhere* phase

AI journey	Organisations changing their relationship with data and how value is extracted from structured and unstructured data
Intelligence architecture	The creation of intelligence architectures – data-centric platforms underpinning the organisation
Digital operations at scale	The operation of cost-effective digital infrastructure for AI workloads
Skills	The need to attract new talent and reskill existing talent
Trust	Employing technology in a trustworthy manner, and ensuring regulatory compliance as a lever to build trust

Ultimately, to support digital business at scale, organisations need to reevaluate and realign digital strategies and ensure the intersection of modernisation and innovation.

AI: Where are we now?

AI covers many types of artificial intelligence, but recent developments, such as ChatGPT, have galvanised interest in one form of the technology – generative AI.
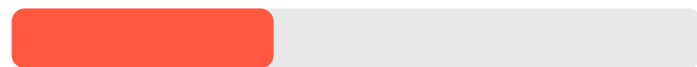
30% of global AI spending in 2027 will be on *generative AI*.

38% of CEOs are pursuing generative AI initiatives, as they believe the technology will give their organisations a competitive advantage.
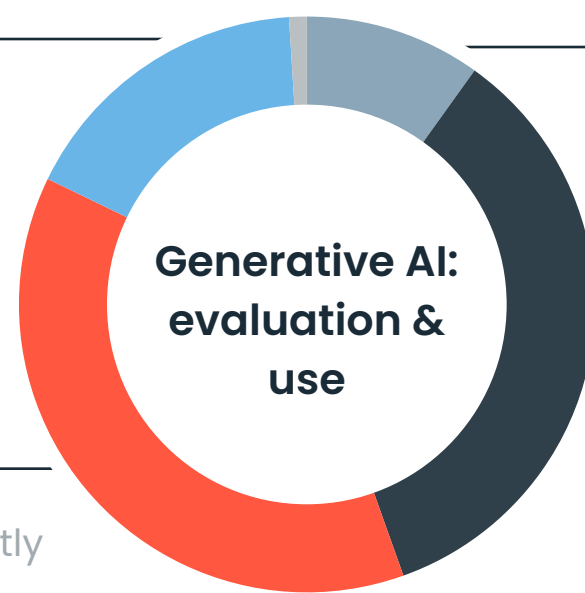
17% Introduced several generative AI-enhanced applications/ services into production

38% Investing significantly in generative AI

Generative AI: evaluation & use

10% Nothing significant

35% The initial testing of models and focused proofs of concept (PoCs)

41% of firms see the *implementation of data sharing and ops practices to ensure data integrity* as the most important process to ensure success with generative AI.

For organisations experiencing low failure rates in their generative AI projects...

1 in 2 organisations cited *having a strong relationship with their strategic generative AI partners to prioritise* projects as the most important factor contributing to the success of generative AI projects.
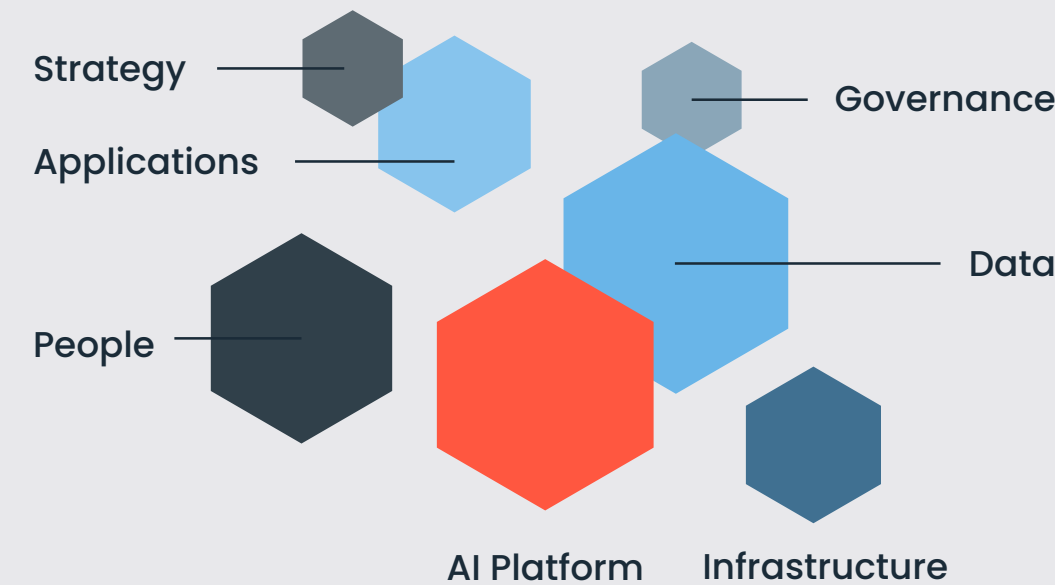
The future state

Organisations typically conducted 34 generative AI proofs of concept in the past year, with only a limited number making it into production.

Organisations will need to pivot out of the experimentation phase and take a more structured approach to AI projects, with the goal of operating a business fuelled by AI.

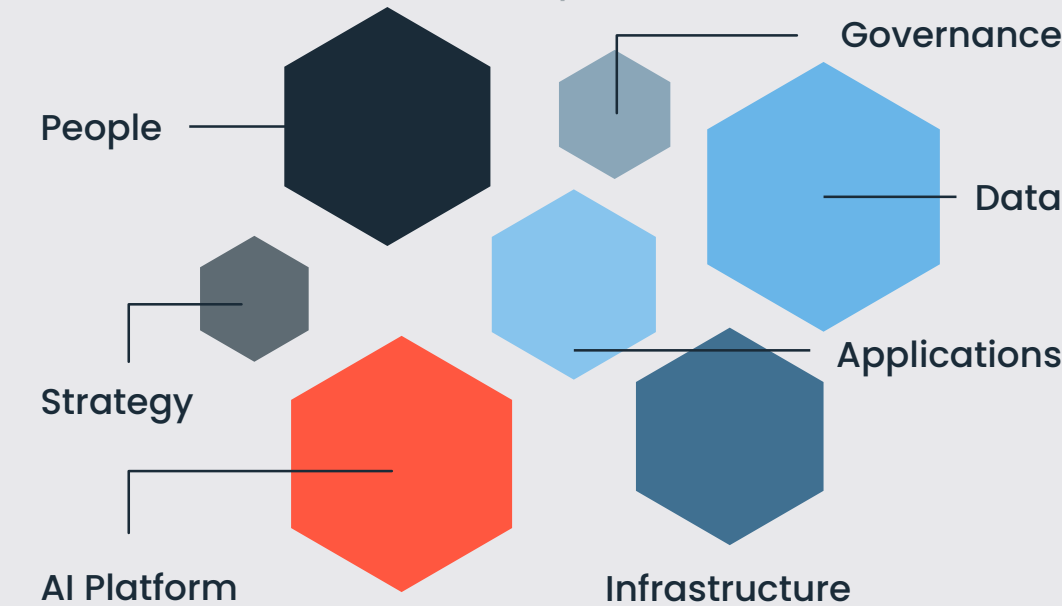**2023–2024**

The generative AI scramble:
Experimentation

Strategy
Applications
Governance
Data
People
AI Platform
Infrastructure

2025–2026

The AI pivot:
Adoption

People
Governance
Data
Strategy
Applications
AI Platform
Infrastructure

2027+

The AI-fuelled business:
Acceleration

Strategy
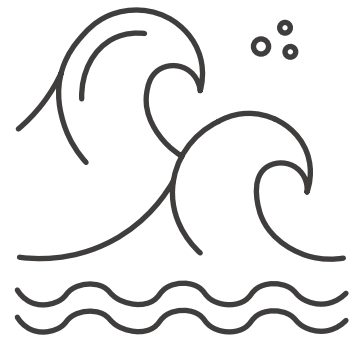Governance
Data
People
Infrastructure
Applications
AI Platform
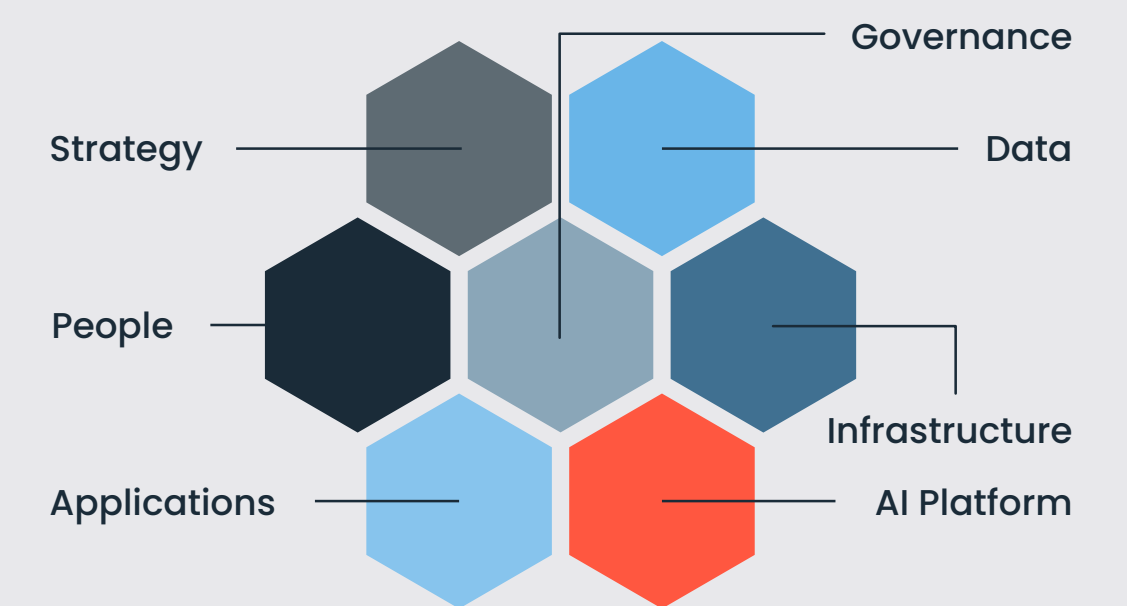
The impact of AI

Organisations are being disrupted by generative AI.

Today
34%
have already had their business disrupted or are starting to have it disrupted

In the next 18 months
36%
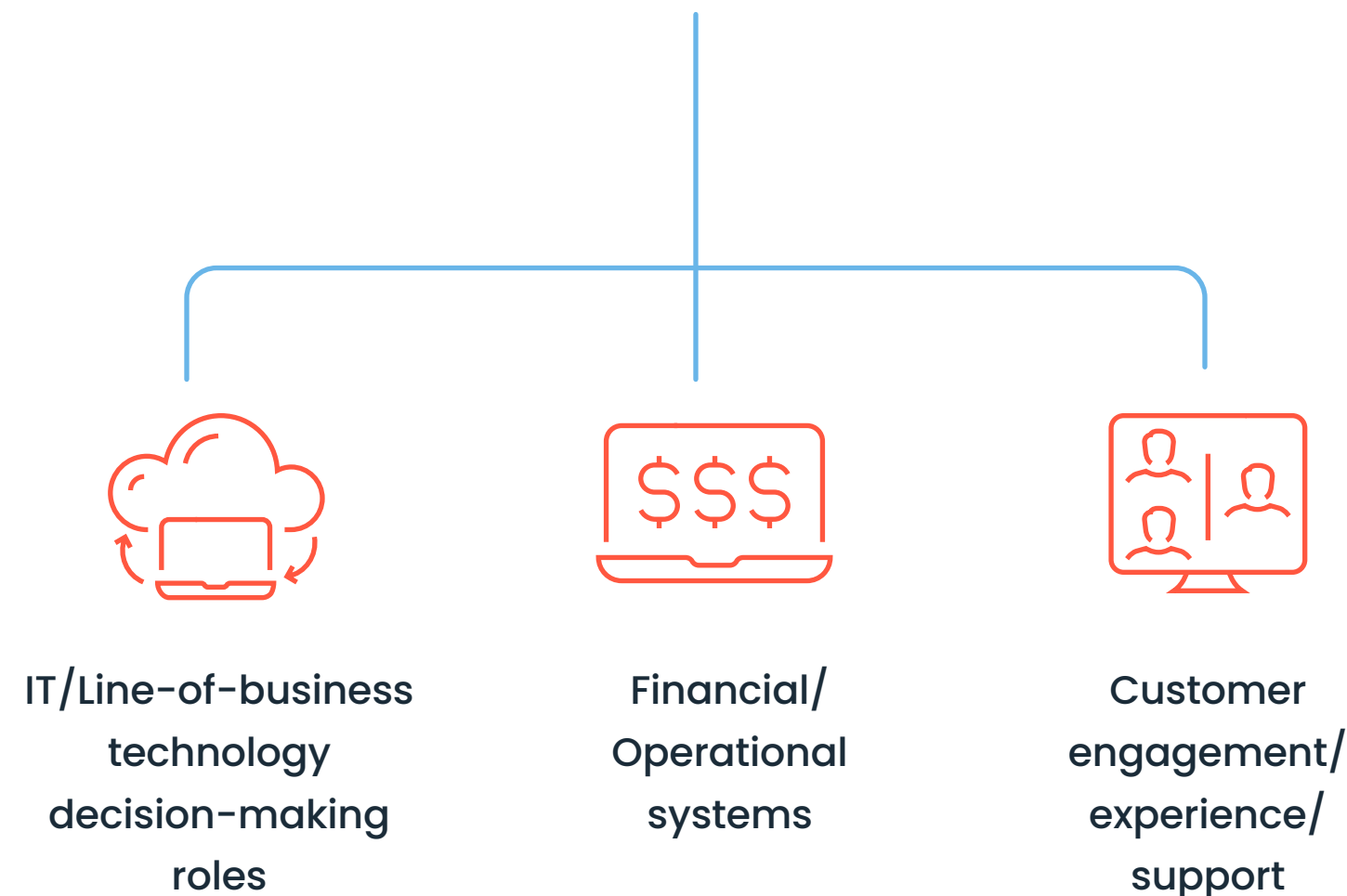will be significantly impacted.

Q. To what extent do you believe broad access to generative AI foundation models, platforms, and application technologies will disrupt your organisation's competitive position or business operating model in the next 18 months?

Competition a strong motivational factor in driving AI investments

1	It will give us a competitive advantage.
2	Doing nothing poses too much risk.
3	Competitors are actively implementing the technology.

Q. Which of the following are the main reasons for pursuing Gen AI initiatives?

While all aspects of the business are affected by disruptions associated with generative AI, the leading affected areas span tech decisions, systems, and customer interactions.

IT/Line-of-business technology decision-making roles

Financial/ Operational systems

Customer engagement/ experience/ support

Q. What are the top 2 business areas in which you believe disruptions associated with generative AI technologies are affecting your competitive position or business model?

Areas of positive impact for IT and operations?

Organisations believe that generative AI will have the most positive impact on team efficiency and effectiveness in *IT and cloud infrastructure automation and support* in the next 18 months.

While that is also true for finance and manufacturing organisations, healthcare/life science firms view *data management* as the leading area.

Q. In which IT technology/operations area do you think generative AI will have the most positive impact on team efficiency and effectiveness in the next 18 months?

Leveraging partner expertise vital

But, with AI, as with many other technology areas, organisations are not always able to satisfy their needs internally.

The business areas in which support from external services providers will be most important are **AI strategy, maturity assessment, and operating model**.

This demonstrates the importance organisations must place on selecting service-provider partners capable of engaging beyond pure IT activity.

The importance of clean data

The AI technology stack is complex and fast paced. Infrastructure, tools, platforms, and model iterations are evolving rapidly.

But the one constant in the equation is the **data** upon which AI models are based.

1 in 3 firms

cite

poor quality of data and poorly labelled data sets

as factors preventing higher success rates in generative AI projects. In fact, organisations experiencing high success rates in their generative AI projects cite **access to the required high quality data sets** as a key contributor to success.

Yet the influence of data in AI project success is not always abaout data quality. **Data access** is also a key issue.

28%

of firms cite inability to access the required data sets

as the leading factor preventing them from achieving higher success rates in their generative AI projects.

Access to the required data sets and high-quality data are critical to the success of AI initiatives – regardless of AI type.

Organisations must coordinate AI efforts across IT and line-of-business teams and seek to overcome the challenge of data silos.

With data quality and data access being factors that can *limit* or contribute to the success of generative AI projects and initiatives, their influence on the organisations' AI ambitions are critical:

38%

of organisations believe generative AI will give them a competitive advantage.

The importance of core modernisation

As organisations look to embrace AI, the importance of **infrastructure** in the AI equation cannot be understated:

1 in 3 organisations

find that inadequate *infrastructure performance and availability* is the greatest factor preventing them from achieving higher success rates in their **generative AI projects**.

But, when considering deploying generative AI, organisations must be aware of the **layer effect** – when one strategic initiative is impacted by or impacts another. Such as in the case with generative AI, which has implications for cybersecurity and core infrastructure initiatives:

First layer:

The desire to deploy generative AI

⌄ ⌄

Second layers:

Cybersecurity implications

Core infrastructure implications
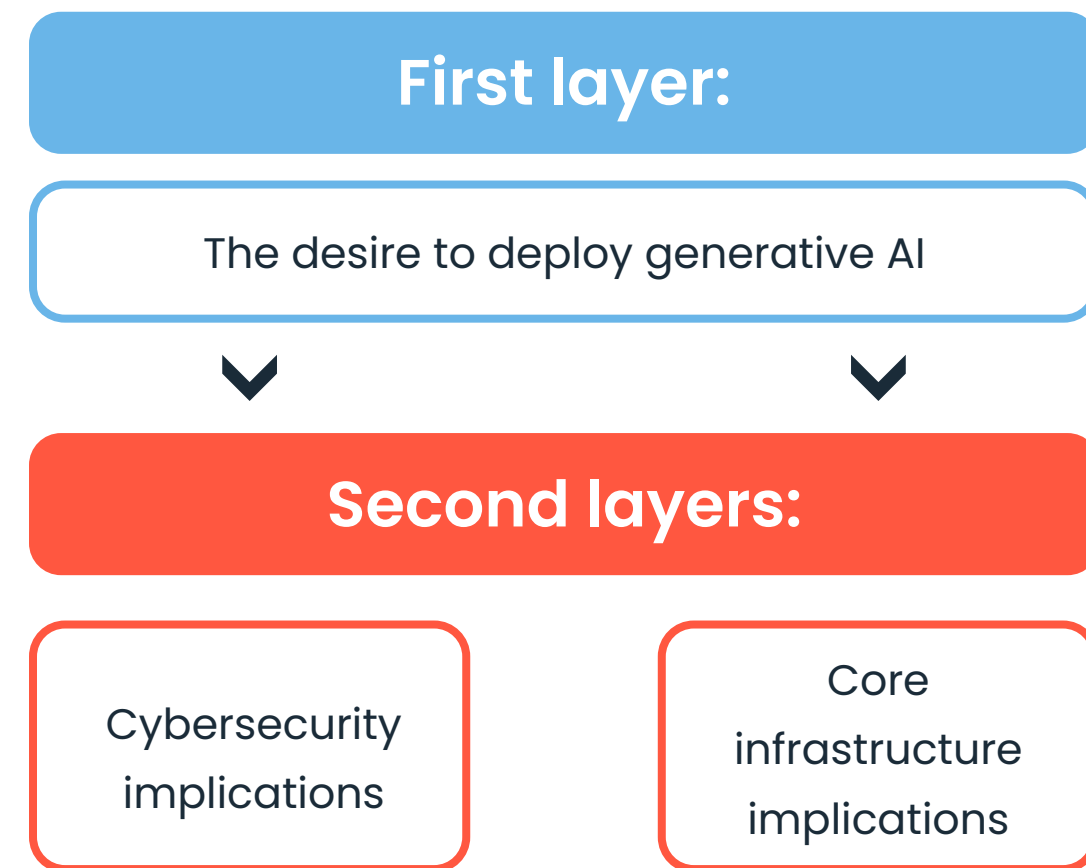
If not managed carefully, technology initiatives can end up competing, potentially inhibiting the return on the investment and, most importantly, preventing objectives and desired outcomes being achieved.

Therefore, **external partners must work together** when addressing each client's needs, ensuring they have a **holistic view** of all technology and business initiatives.

The layer effect illustrates how strategic technology initiatives, such as generative AI, cannot be considered in isolation. This is underlined by the fact that 84% of organisations globally believe generative AI to be a **major new corporate workload** (like ERP or ecommerce).

The infrastructure that generative AI runs on must be designed accordingly, allowing other workloads to continue operating as intended – without diminishing performance for internal or external customers.

While organisations recognise the impact that AI will have on infrastructure – *developing a strong business case for AI infrastructure spending* is the leading short-term digital infrastructure priority – striking a balance between new and old infrastructure demands is a challenge.

Technical debt can be a drag on new initiatives, compounding the pressure on IT budgets:

49%

of organisations state that the cost of keeping older apps running is the number 1 reason for overspending on digital infrastructure.

Modernising core infrastructure can alleviate the challenges and costs associated with legacy systems, potentially freeing up financial resources for strategic initiatives aligned with business goals.

Success factors: Embrace change and respect infrastructure

AI as a key driver of change

As technology advances and market demand evolves, a critical step in rising to the challenge is to accept that disruption is coming and to embrace it. This can be difficult, as foundational changes in the organisation may be required. But the organisation must be laser focused – from top to bottom – on meeting business goals and outcomes.

70%

of organisations, globally, believe that generative AI has either begun disrupting their business or will do so in the next 18 months.
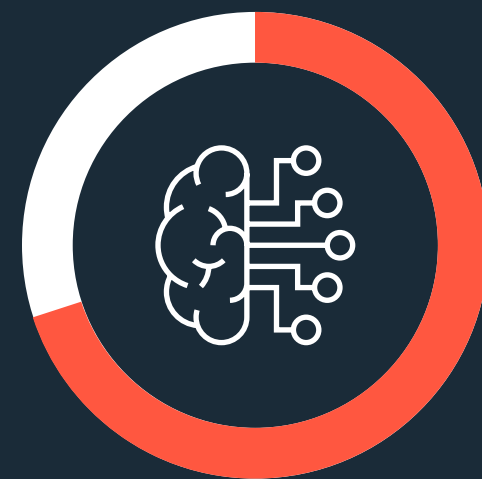
Those firms slow to recognise and react to disruption will be at a disadvantage or will find themselves playing catch-up with competitors that embrace disruption and seek to use it as a lever for competitive advantage.

Not underestimating the importance of core infrastructure

In creating plans to explore, develop, and roll out AI initiatives, organisations must recognise the impact of their core infrastructure.

Inadequate infrastructure performance and availability is a key factor preventing organisations from realising higher rates of success with their generative AI projects.

Core infrastructure planning must consider how infrastructure will need to support *corporate workloads in addition to AI*. Failure to do so may jeopardise performance and experience.

Immunity to budget reductions

2nd

The importance placed on **infrastructure optimisation initiatives** is high. As such, it is relatively immune to budget reduction in the next 12 months – second only to security in this regard.

Factors causing infrastructure overspending

1. Excessive tech debt – the cost of keeping older apps running
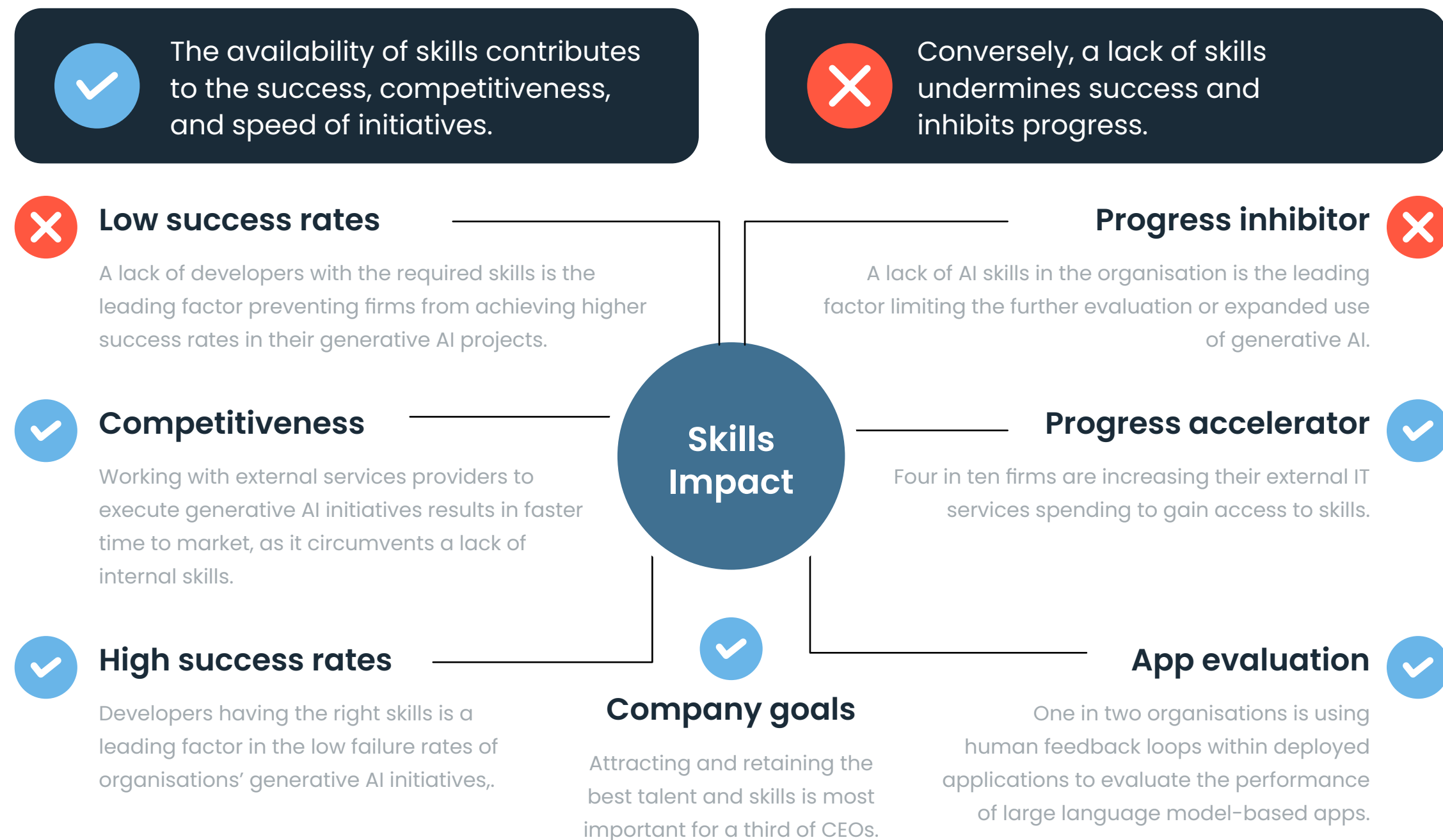2. Lack of a business-aligned infrastructure strategy

Modernising to mitigate overspending

Yet core infrastructure is susceptible to overspending due to technical debt and no infrastructure strategy. Modernising the organisation's core infrastructure and the approach to aligning infrastructure with business needs are critical to reducing infrastructure overspending.

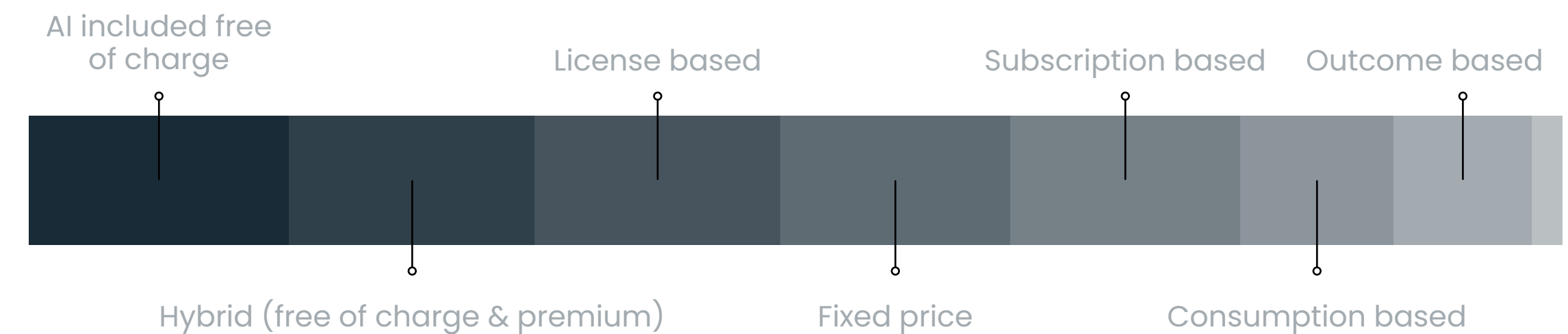# Success factors: The human impact and an eye on price

The considerable impact of skills

Digital transformation skills are critical in enabling organisations to embark on the next phase of their digital journeys. But the impact of skills underlines the human factor involved in organisations achieving their business goals.

The availability of skills contributes to the success, competitiveness, and speed of initiatives.

Conversely, a lack of skills undermines success and inhibits progress.

Low success rates
A lack of developers with the required skills is the leading factor preventing firms from achieving higher success rates in their generative AI projects.

Progress inhibitor
A lack of AI skills in the organisation is the leading factor limiting the further evaluation or expanded use of generative AI.

Competitiveness
Working with external services providers to execute generative AI initiatives results in faster time to market, as it circumvents a lack of internal skills.

Skills Impact

Progress accelerator
Four in ten firms are increasing their external IT services spending to gain access to skills.

High success rates
Developers having the right skills is a leading factor in the low failure rates of organisations' generative AI initiatives,.

Company goals
Attracting and retaining the best talent and skills is most important for a third of CEOs.

App evaluation
One in two organisations is using human feedback loops within deployed applications to evaluate the performance of large language model-based apps.

AI pricing models – flexibility key

Organisations have yet to decide upon a de-facto standard concerning pricing models for external services delivered with AI.

AI included free of charge

License based

Subscription based

Outcome based

Hybrid (free of charge & premium)

Fixed price

Consumption based

Q. Which of the following pricing models for external services delivered with AI do you expect your organisation will most likely adopt in the next 18 months?

Technology vendors are now ramping up their AI products and services, but organisations are still in the experimentation phase of their AI journeys. As such, pricing models are not yet fully established.

As organisations progress on their AI journeys, they must make sure they consider the pricing implications of their intended use cases. They must evaluate and establish pricing models that deliver the maximum value against the planned and actual usage of those solutions – both now and in the future.

It is critical that strategic technology partners are flexible in meeting such needs.

While skills deficiencies can negatively impact AI initiatives, engaging with external partners can mitigate skills issues and deliver positive impacts.

Success factors: Strategic partnerships and ecosystems

Leveraging strategic partnerships to drive success

No provider type is the clear leader regarding organisations' preferred partners for their generative AI activities. Technology partners must therefore offer a high level of flexibility to potential clients.

- Hyperscalers
- Enterprise app vendors
- Generative AI model/tool vendors
- IT consultants and systems integrators
- Digital infrastructure providers
- Business consultants

But strategic partners are critically important for organisations as they work through their AI plans.

47% of firms cite *strong relationships with their strategic partners* as the most important factor in achieving low failure-rates with their generative AI projects.

Organisations that build strong relationships with their partners will be better positioned in AI terms than those that fail to do so. Relationship building should be viewed as a lever for competitive advantage.

Leading areas of required support from external services providers:

Evaluating partners on both their business capabilities and their technology capabilities is critical:

Business focused:	Strategy, maturity assessment, and operating model	Responsible AI policy development	Staff reskilling and change management
Technology focused:	Security, privacy, and trust	Data architecture design	Infrastructure modernisation and implementation

AI adds complexity to ecosystem management: Half of organisations expect to **increase** and **diversify** their partner ecosystems due to AI.

Larger ecosystem (partner diversification to meet specialised needs)	No impact	Smaller ecosystem (consolidation to reduce complexity)
50%	30%	18%

Q. How do you expect AI to affect the size of your organisation's external services provider ecosystem over the next few years?

Industry expertise is a key criteria used by organisations in selecting IT services providers, but ease of doing business must also be a consideration in view of larger ecosystems.

Organisations must identify the core capabilities critical to their internal AI endeavours and use them as key criteria when selecting additional vendors.

Recommendations

With AI in the centre of the next phase of the digital journey, organisations are presented with an opportunity to fundamentally change their business – perhaps unlike ever before.

Seizing opportunity involves showing courage, taking risks, and being flexible, but it also necessitates identifying the target state of operation for the business and aligning it with the organisation's strategic goals. Organisations must ensure awareness of evolving regulations and employ governance policies that are ethical and secure.

While no opportunity is guaranteed, organisations must recognise, embrace, and react to challenges along the way, striving to position themselves optimally for the journey ahead.

Organisations must embrace the disruption of AI. Organisations that do not react or adapt risk being left at a disadvantage to competitors that have embraced the technology.

Stakeholders from IT and lines of business being fully involved in the infrastructure design and planning stages is critical. They must accurately assess all current and future workload requirements – including AI.

Core infrastructure modernisation should be viewed as a mechanism to free up spending from maintaining technical debt – finances that can be diverted into priority initiatives that align with strategy and enable the achievement of corporate goals.

The goal of maximising data quality and data access across the organisation should be built into infrastructure and application modernisation initiatives to avoid potential pitfalls that inhibit AI project success rates.

Organisations must look to find, develop, and harness relevant skills, internally or externally, to maximise the human impact as they progress to the next phase of their digital journeys.

Strategic partners (e.g. IT services providers) are perceived as enablers of future company growth. Organisations' failure to leverage partners' experience, skills, and thought leadership will place them at a disadvantage to competitors that leverage such partner assets.

Message from Endava

Digital transformation by Endava

Endava is a leading provider of next-generation technology services dedicated to enabling its customers to drive real impact and meaningful change.

For over 20 years, Endava has successfully delivered digital transformations by combining world-class engineering, deep industry expertise, and a customer-centric mindset. Its holistic approach builds on leveraging innovative technologies and enhancing its customers' core systems, increasing their competitive edge and enabling them to navigate the AI-driven digital shift.

A snapshot of real-world outcomes

A top 5 US pharmacy benefit manager failed multiple times to modernise its legacy systems due to high costs, poor documentation, unpredictable timelines, and lack of internal expertise. Endava's core modernisation approach – using comprehensive discovery, reverse engineering, and automation – resulted in 50% delivery cost savings, 35% faster delivery, and a 70% reduction in effort for impact analysis, achieving predictable high-quality outcomes.

A global leader in AI-driven energy storage partnered with Endava to devise an AI roadmap, build a proof of concept, and deliver a custom-made solution to forecast peak electricity demand. This enabled efficient energy storage management, which led to 60% savings on overall electricity costs in some cases, while also improving operational efficiency and supporting renewable energy integration.

Get in touch to learn how Endava can help transform your business.

endava

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets.

With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight help IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives.

Founded in 1964, IDC is a wholly-owned subsidiary of International Data Group (IDG, Inc.), the world's leading tech media, data, and marketing services company.

IDC Custom Solutions

This publication was produced by IDC Custom Solutions. As a premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets, IDC's Custom Solutions group helps clients plan, market, sell, and succeed in the global marketplace. We create actionable market intelligence and influential content marketing programs that yield measurable results.

IDC UK
5th Floor, Ealing Cross, 85 Uxbridge Road, London, W5 5TH, United Kingdom
T 44.208.987.7100

X @idc   in @idc   idc.com

Privacy Policy | CCPA