CIO PULSE REPORT

The IT Transformation Imperative

Driving meaningful change to make tangible difference

In summary

An important part of the CIO's role has always been to monitor technology industry developments and figure out when and how to take new ideas and solutions on board. But more recently it seems as if a whole range of trends have reached inflection points over a very short space of time - not least in areas such as cloud, DevOps and AI/ML. The widespread digital transformation that ensued was then accelerated by recent global events. In this research report, we look at how the IT organisation itself needs to change in order to keep up and get ahead.

Key Takeaways

01

CIOs agree that IT transformation has become critical
Against the backdrop of recent health-care and geopolitical disruption, and the ongoing march of digital transformation, 85% of CIOs in a recent study agreed that internal change is necessary within the IT organisation to keep up with demand.

02

The changes taking place are fundamental and broad
IT transformation is not just about systems modernisation or the shift to cloud. Over the past two years, CIOs have defined change agendas covering everything from business alignment through application lifecycle activities to risk management.

03

Activity is firmly centred on driving business outcomes
While most initiatives in this space are focused on changing the way IT operates, the actual objectives include improving the top and bottom lines, enhancing business innovation and competitiveness, and driving customer-related success.

04

There's still lots to be done and challenges to overcome
For the vast majority of initiatives declared in our study, work is either still ongoing or just kicking off. However, progress is often constrained by time and resource limitations, skills shortfalls, or fighting with inflexible legacy systems and processes.

05

The need for help from partners is strongly recognised
Five out of six CIOs say they can't go it alone and are either using or seeking help from partners to fill skills, experience, knowledge and resource gaps. A range of services is seen as relevant, with a particular focus on more targeted offerings.
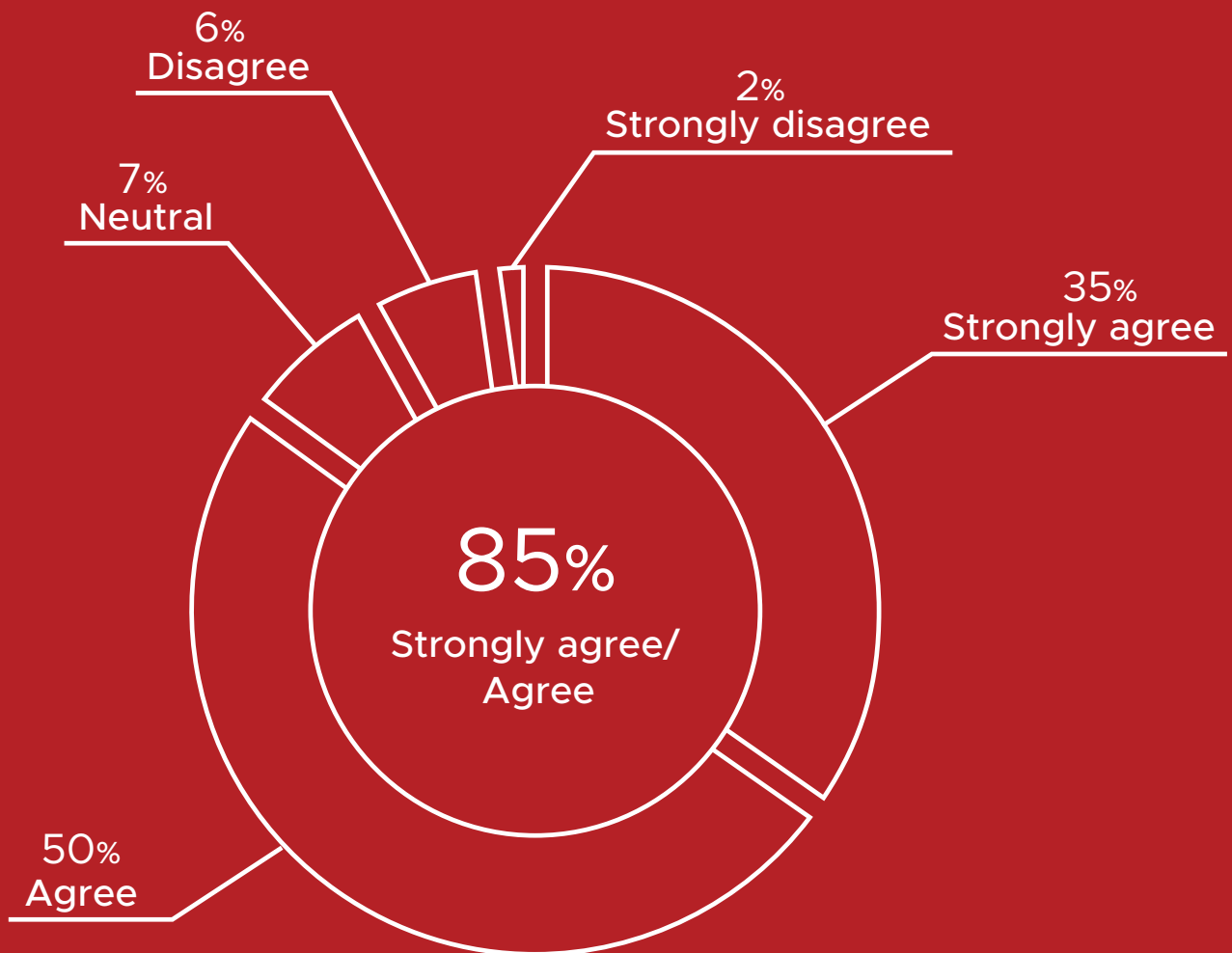
For details relating to the research sample, please see the 'About this research' section at the end of the report.

The IT transformation imperative

Digital transformation is now a well-established priority in most boardrooms, and there are high expectations for how technology-enabled change can be used to create competitive advantage. This in turn shines the spotlight on IT teams, and in particular on how well they are keeping pace with both escalating demands and the evolving technology landscape.

Against this background, we surveyed a group of IT leaders from the CIO WaterCooler community, 85% of whom acknowledged the need to drive their own transformation agenda within the IT organisation itself.

6%
Disagree

7%
Neutral

2%
Strongly disagree

35%
Strongly agree

85%
Strongly agree/
Agree

50%
Agree

We need to do things differently in IT to keep up with business demands

What does IT transformation actually mean?

The term 'IT transformation' is often used in different ways. Some, for example, regard it as synonymous with legacy systems modernisation, while others put the emphasis on the shift to cloud computing or maybe the adoption of DevOps. We therefore took a broader view, designing our study to encompass a range of key areas of IT delivery in which ideas, best practices and supporting technologies and services have evolved rapidly in recent years. These include:

FOUNDATIONAL (THE BASICS)

Keeping IT and the business aligned in today's highly dynamic, on-demand world, in which agility is key, often means rethinking the way you plan, budget and make decisions. As part of this, it is natural to put business services at the centre of your approach to portfolio management and IT delivery, and to place a greater emphasis on automation and self-service.

APPLICATION LIFECYCLE

Agile methods, continuous integration and cloud-native architectures are not new to software development, but adoption has been patchy, and the state-of-the-art continues to evolve rapidly. The same is true in IT operations where concepts such as Infrastructure as Code, AI Ops and observability can be transformational. Overarching all of this we've seen DevOps become mainstream-ready, with continuous delivery, release automation and enhanced feedback solutions maturing nicely.

BUSINESS INFRASTRUCTURE

Legacy modernisation, including the upgrade of application estates and the 'cloudification' of infrastructure, is important here. So too is embracing the multi-cloud approach through the adoption of cloud operating models and cross-platform solutions for delivery and management. In the end-user computing space, we then have the move to digital workspaces, VDI, and modern collaboration tools tuned to hybrid working.
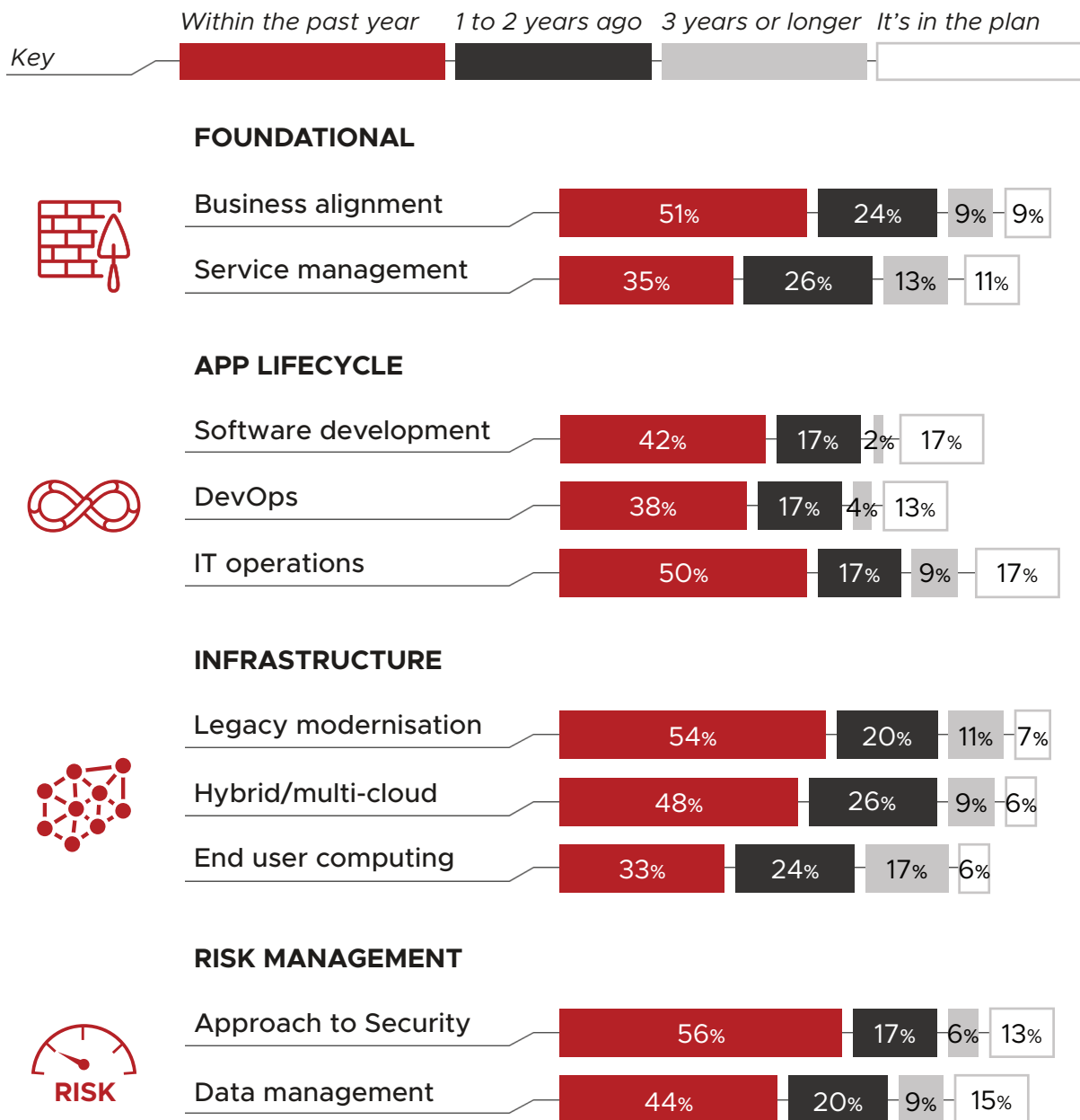
RISK MANAGEMENT

Key in this area is transforming your approach to IT security, e.g. through adoption of zero-trust principles, SASE architectures and application or data-centric models. Also important is how you govern and protect data, respond to threats and recover business, areas where we have seen huge advances, driven both by external threats and by the increasing volumes of data, levels of data distribution and speed of movement of data.

Responding to recent disruption

When we drill into how much different kinds of IT transformation activity have made it onto the agenda, our survey data suggests that the need for change has become more accentuated over the last two years across a whole range of areas.

When did you last set a meaningful transformation agenda (with clear objectives) in the following areas with a view to driving fundamental change?

Key: Within the past year | 1 to 2 years ago | 3 years or longer | It's in the plan

FOUNDATIONAL

Area	Within the past year	1 to 2 years ago	3 years or longer	It's in the plan
Business alignment	51%	24%	9%	9%
Service management	35%	26%	13%	11%

APP LIFECYCLE

Area	Within the past year	1 to 2 years ago	3 years or longer	It's in the plan
Software development	42%	17%	2%	17%
DevOps	38%	17%	4%	13%
IT operations	50%	17%	9%	17%

INFRASTRUCTURE

Area	Within the past year	1 to 2 years ago	3 years or longer	It's in the plan
Legacy modernisation	54%	20%	11%	7%
Hybrid/multi-cloud	48%	26%	9%	6%
End user computing	33%	24%	17%	6%

RISK MANAGEMENT

Area	Within the past year	1 to 2 years ago	3 years or longer	It's in the plan
Approach to Security	56%	17%	6%	13%
Data management	44%	20%	9%	15%

This picture at least partly reflects the disruption most businesses have felt as a result of recent public health and geopolitical events, as these often highlighted the shortcomings of existing infrastructure and processes. But alongside this, we shouldn't forget that IT transformation agendas are also influenced by more positive factors, e.g. the desire to exploit modern solutions and best practices to gain business advantage. This brings us to the topic of transformation drivers.
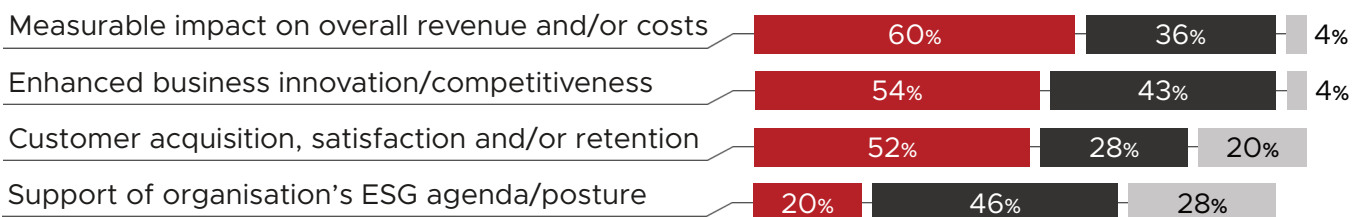
Keeping your eye on the prize

Whether transformation initiatives come about in response to disruptive events, new and escalating business demands, or simply a desire to exploit the latest developments in technology and best practices, it's important to define clear and measurable objectives. To begin with you will want to make a tangible difference to core business metrics, whether financial, market or customer-related. Other strong motivators include risk reduction and greater operational resilience. In line with this, the emphasis when it comes to IT performance is on delivering against stakeholder needs - although cost-efficiency remains a notable driver for many.

When defining IT transformation objectives, how much emphasis have you placed on the following indicators or metrics?

Key — **High emphasis** | **Some emphasis** | Little/no emphasis

CORE BUSINESS METRICS

Metric	High	Some	Little/no
Measurable impact on overall revenue and/or costs	60%	36%	4%
Enhanced business innovation/competitiveness	54%	43%	4%
Customer acquisition, satisfaction and/or retention	52%	28%	20%
Support of organisation's ESG agenda/posture	20%	46%	28%

RISK/OPERATIONAL INDICATORS

Metric	High	Some	Little/no
Security and risk related metrics or indicators	65%	32%	4%
IT resilience specifically (minimisation of downtime)	50%	44%	6%
Meaningful SLA's to the business (including QoS)	23%	49%	28%

IT PERFORMANCE MEASURES

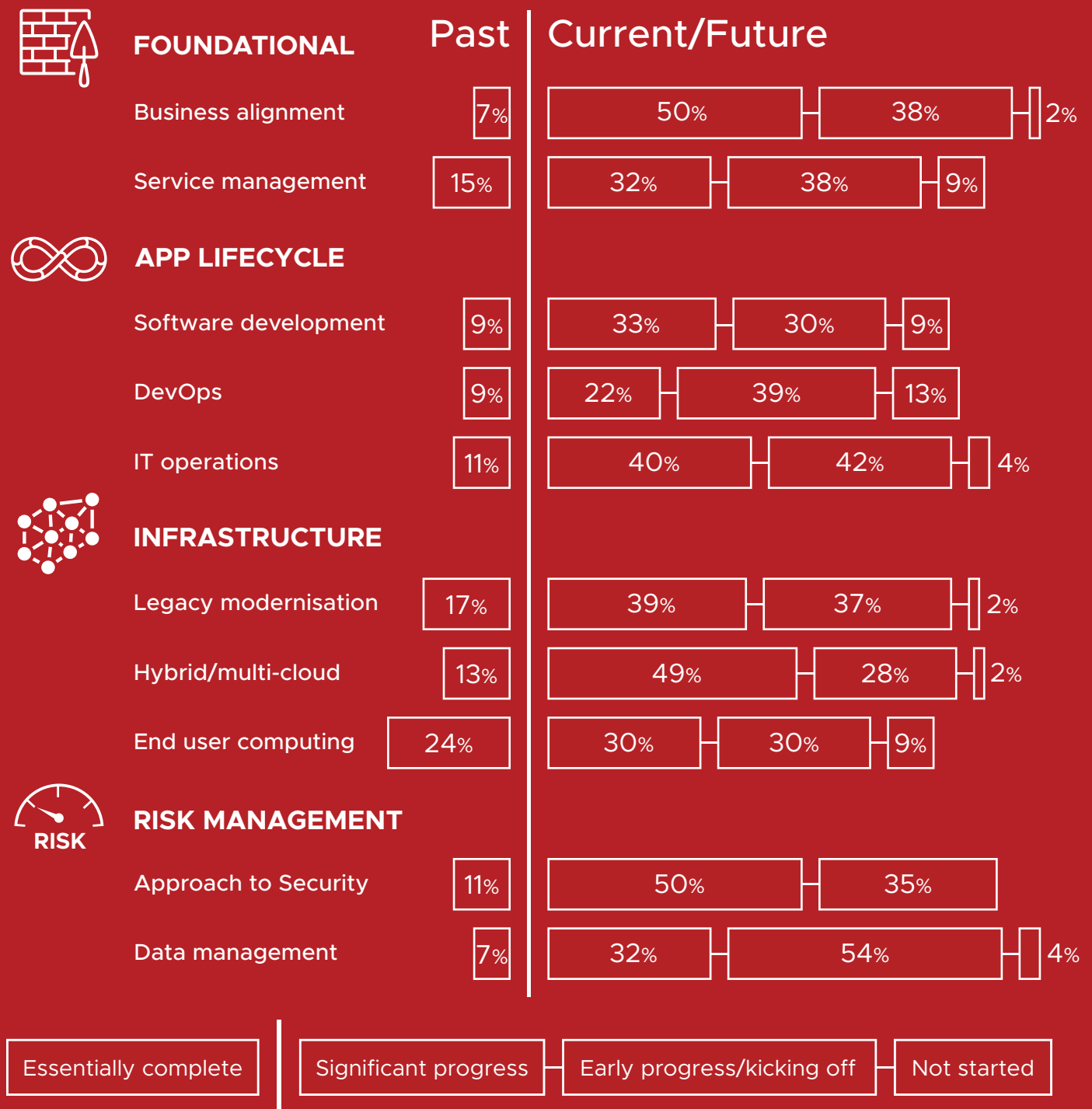| Metric	High	Some	Little/no
Business user/stakeholder satisfaction	63%	37%	
Measurable impact on IT costs and overheads	39%	48%	13%
Value for money from IT suppliers and partners	39%	57%	4%
Satisfaction within the IT team	32%	47%	21%

This is clearly not an exhaustive list of indicators, but this kind of data strongly suggests that IT transformation tends to be driven less by internal IT motivations, and more by a desire to achieve better business outcomes. This makes sense when you consider how technology has become a strategic enabler in many parts of the business. If your ability to compete and grow depends on digital innovation and transformation, then IT is on the critical path to success.

Progress checkpoint

For the vast majority of initiatives declared in our study, work is either still ongoing or just kicking off. Sometimes this reflects first-time adoption of new systems and methods, but in other areas, it is more about scaling up/out from early adoption activity. For example, if a particular team has proven an alternative approach, the initiative might now be to propagate it across the rest of the IT organisation.

How would you sum up the progress you have made in meeting your transformation goals and objectives in the following areas?

	Past	Current/Future		
FOUNDATIONAL				
Business alignment	7%	50%	38%	2%
Service management	15%	32%	38%	9%
APP LIFECYCLE				
Software development	9%	33%	30%	9%
DevOps	9%	22%	39%	13%
IT operations	11%	40%	42%	4%
INFRASTRUCTURE				
Legacy modernisation	17%	39%	37%	2%
Hybrid/multi-cloud	13%	49%	28%	2%
End user computing	24%	30%	30%	9%
RISK MANAGEMENT				
Approach to Security	11%	50%	35%	
Data management	7%	32%	54%	4%

Legend: Essentially complete | Significant progress | Early progress/kicking off | Not started

Challenges to progress

When we look at where CIOs are struggling as they try to drive progress, top of the list is limited time and resources, with 4 in 10 citing this as a major impediment, and over half citing it as a frequent challenge. Other notable challenges that often feature are funding shortages, skills shortfalls, baked-in processes and practices that are hard to change, and the related issues of legacy thinking and culture, and a lack of imagination.

How much do the following stand in the way of you making progress?

IT Challenges

Resource/time limitations	Knowledge and skills gaps	Hard-to-change processes
39% / 52% / 9%	11% / 65% / 17%	13% / 43% / 22%

Legacy organisation structures	Inflexible legacy architectures	Out of date delivery practices
22% / 26% / 26%	17% / 28% / 28%	7% / 30% / 26%

Legacy culture and mindset		Technology or vendor lock-in
19% / 25% / 26%		6% / 17% / 17%

(!) Major impediment   **(!)** Frequent challenge   Unwelcome distraction

Business Buy-in

Lack of management commitment	Inadequate funding
11% / 15% / 15%	11% / 37% / 15%

Other

Limited understanding of the 'Art of the possible'
15% / 32% / 33%

Working with partners to overcome challenges

Against the backdrop of some of the challenges reported, one of the most enlightening findings from this study relates to a problem many will recognise. When knowledge and awareness of the latest ideas and best practices is limited, it can be easier to identify where a change is required than it is to figure out how best to actually implement that change. 70% of our CIOs acknowledge this as an issue. And with time and resources already in short supply, it's difficult to schedule the necessary research and investigative work to fully explore relevant options. Add in the extra skills and bandwidth needed to implement any IT transformation initiative, and it's understandable that 83% see a clear role for partners.

2%
Strongly disagree

11%
Disagree

22%
Strongly agree

17%
Neutral

70%
Strongly agree/
agree
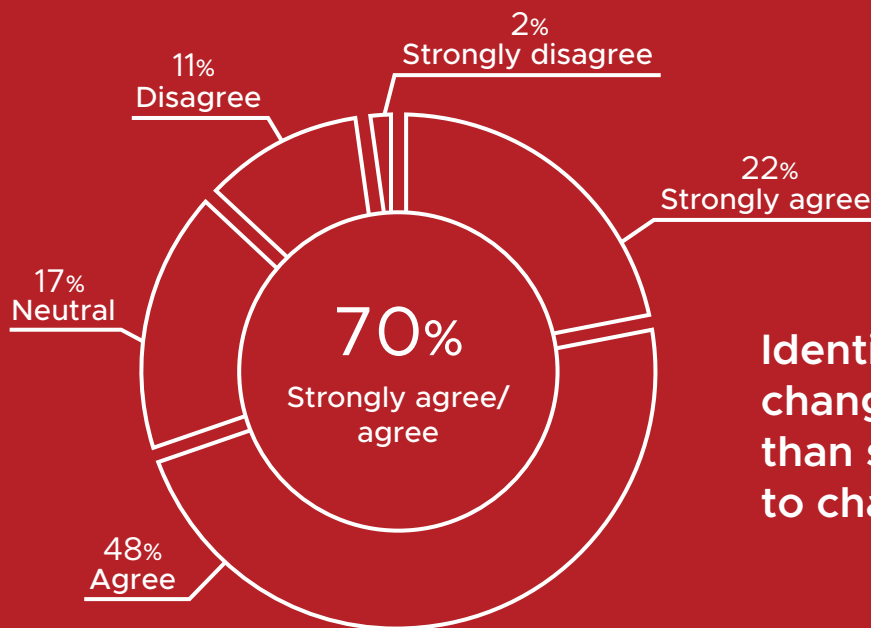
Identifying what to change is often easier than specifying how to change it

48%
Agree

2%
Disagree

15%
Neutral

39%
Strongly agree

We can't go it alone; we need partners to fill skills, experience and resource gaps

83%
Strongly agree/
agree

44%
Agree
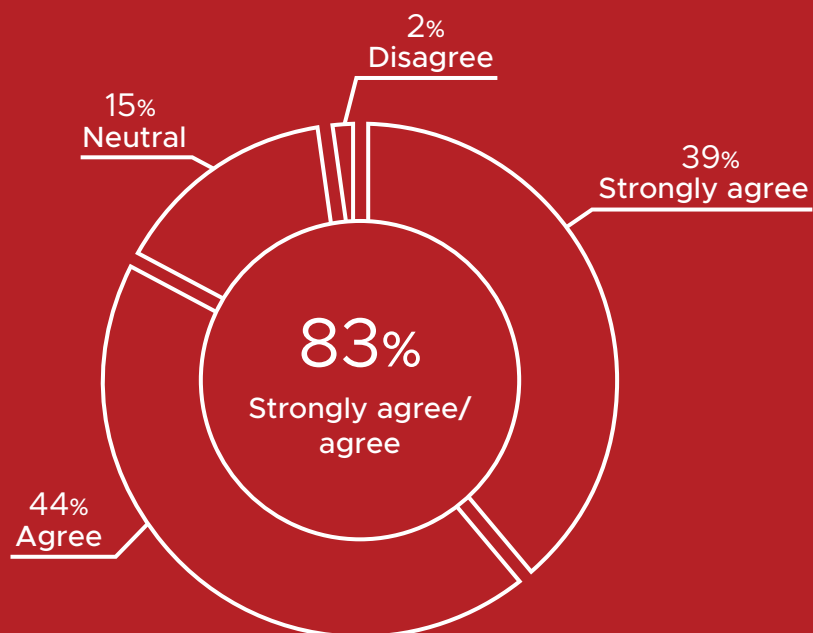
Appetite for specific partner services

When we look more closely at how partners can help, targeted services focused on particular aspects of IT delivery come through strongly. This is consistent with IT transformation typically being executed as a series of discrete initiatives, rather than as a total overhaul. This also explains the spread of demand, as different services are needed at different times, depending on what is currently prioritised.

How likely are you to use the following types of services from IT suppliers and partners when scoping and executing IT transformation initiatives?

CONSULTING AND ADVISORY

20%	28%	17%
15%	26%	17%
37%	33%	32%

Strategic consulting to help transform IT delivery at an overall level
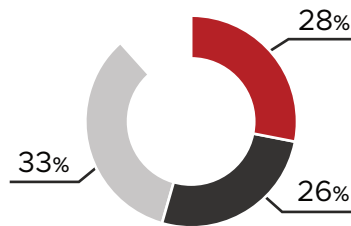
Targeting consulting to help transform a particular area or aspect of IT delivery
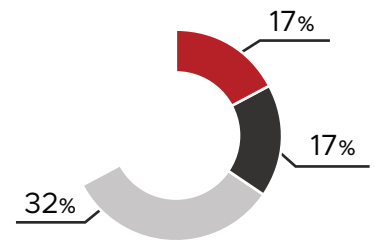
Traditional project-based software development and/or systems integration

SPECIALIST SERVICES AND VALUE-ADD

26%	22%	22%
24%	20%	19%
33%	32%	28%

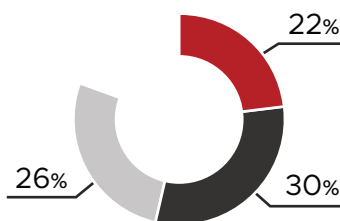Reviews, audits and health checks in key areas of IT delivery
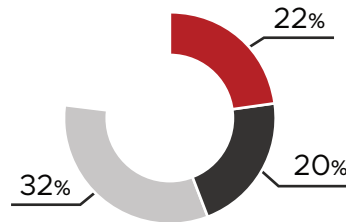
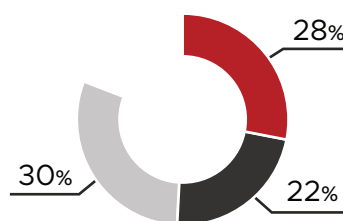Implementation of supplier's existing frameworks, models and best practices
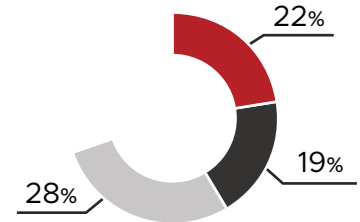
Specific help with your approach to hybrid/multi-cloud implementation and operation

OUTSOURCING AND MANAGED SERVICES

22%	28%	21%
30%	22%	21%
26%	30%	34%

Strategic outsourcing based on the principle of continuous innovation by the partner

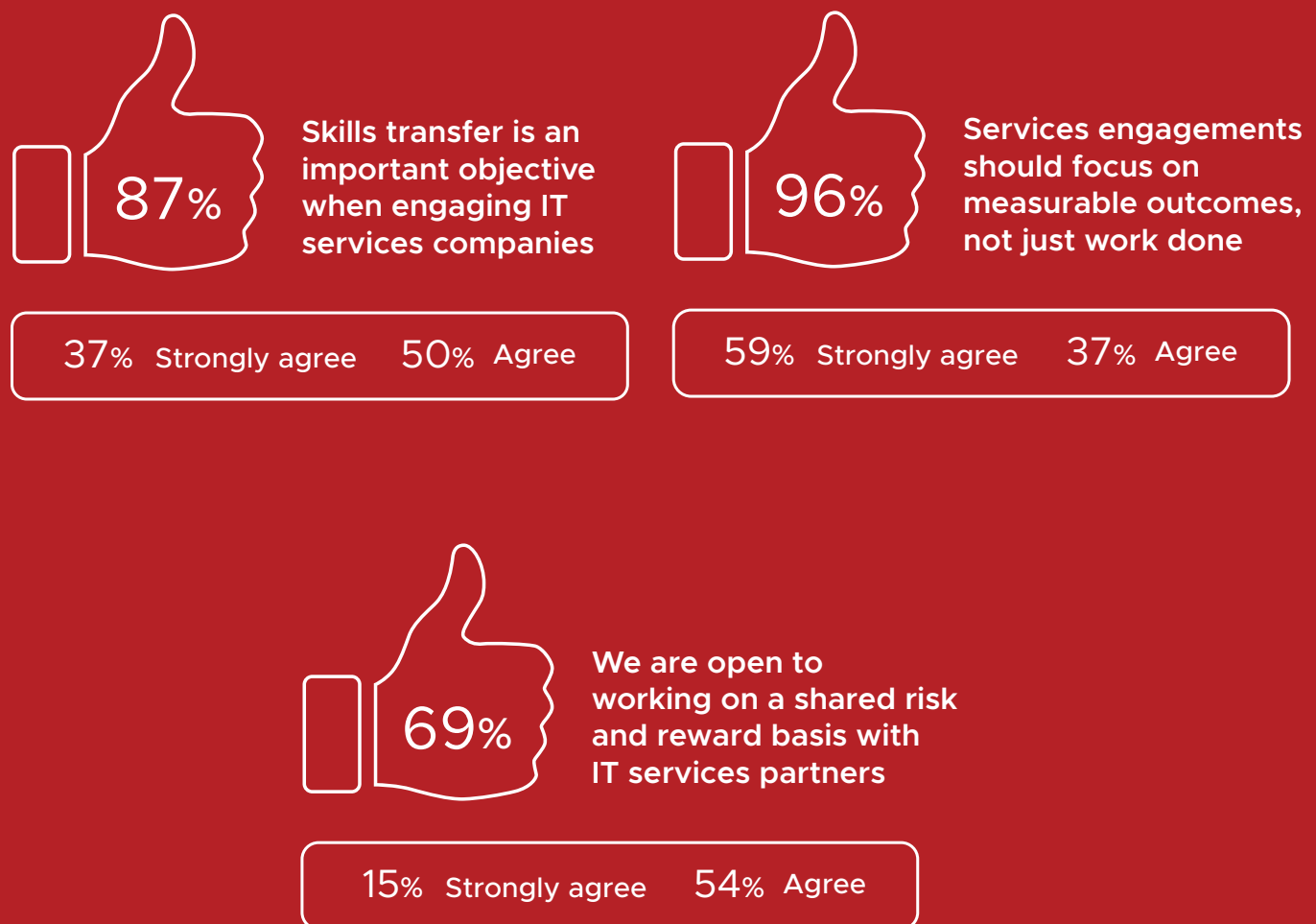Tactical outsourcing simply to free up time to spend on transformation elsewhere

Specific application migration and/or management services

Already using

Possible   Highly likely

Emphasis on partners vs suppliers

Regardless of the specific types of services on offer, a sentiment that comes through very strongly is a desire for services firms to become genuine partners. Engagements that revolve solely around activity, e.g. with charging based on consultants simply being present for an amount of time, are not good enough. Whether it's embracing the need for skills transfer, signing up to measurable outcomes, or even engaging on a full risk/reward basis, CIOs are looking for services firms to work 'with' them, not just 'for' them, and to have skin in the game.

87% Skills transfer is an important objective when engaging IT services companies

37% Strongly agree   50% Agree

96% Services engagements should focus on measurable outcomes, not just work done

59% Strongly agree   37% Agree

69% We are open to working on a shared risk and reward basis with IT services partners

15% Strongly agree   54% Agree

When looking at findings like these, it's easy to see them as idealistic, especially when the 'just take care of it for me' spirit still prevails for a lot of consulting and outsourcing work.

However, it's important to remember that engagements that aim to help define and implement fundamental changes in how IT itself operates are a lot more 'intimate' than many other projects and initiatives. CIOs and their teams are personally impacted and need to live with the results over the long term.

Final Thoughts

While this research focused on IT transformation in relation to specific functions, the reality is that change rarely takes place discretely within silos.

The march of convergence

Many of the developments we see here represent the convergence of previously separate categories and/or disciplines. For example, the 'cloudification' of on-site infrastructure has also blurred the lines between server, storage and network administration. Hybrid roles with an understanding of how everything hangs together in the context of a specific application, say, have then emerged to handle day-to-day operations, supported by automation. It's not that specialists are no longer needed, it's that they now tend to be focused more on up-front architectural design and on in-depth support and troubleshooting.

Challenging traditional barriers and lines of demarcation

Beyond technology, modern best practices frequently cut across traditional team and discipline boundaries. For example, in the context of DevOps you can't implement continuous integration, continuous testing and continuous delivery without automated workflows and feedback mechanisms spanning the entire application lifecycle. This in turn requires a cultural shift, as IT staff must increasingly interact with colleagues that they've previously had no reason to deal with directly.

The drive towards an adaptive and resilient business, and the use of advanced automation, are also driving the emergence or evolution of roles to coordinate and enable activity at a higher level. For example, in this flexible future, security specialists could spend as much time defining policy and coaching developers and ops staff as they do managing defences or remediating breaches. And when we look across IT as a whole, roles with a similar emphasis on coordination and enablement are becoming more important in relation to architecture, service quality and delivery, security and compliance, operational resilience and reliability, cloud strategy, information management and much more.

Holistic and purposeful - two important watchwords

The above is a reminder that IT transformation is not just about technology modernisation. At the same time, there's no sign that all this change will stop and settle. Driving fundamental change therefore means reshaping organisational structures, roles and processes, and rebuilding or redefining organisational culture, so you need to think and act holistically.

It is very likely that you don't have the luxury of investing time, money and effort simply for the sake of 'keeping up to date'. So define tangible, and ideally measurable, business outcomes, and bring in relevant partners where appropriate. This helps keep initiatives focused and purposeful, which may also make it easier to secure and maintain business stakeholder support.

About this research

The data in this report is based on a survey of 54 UK-based IT leaders conducted by Freeform Dynamics in collaboration with the CIO WaterCooler. Respondents were drawn from mid-large size organisations across a range of industries. The study was sponsored by Kyndryl and completed in the Summer of 2022. Note that for clarity on the graphics presented in this report, we have included only those responses that indicate a strong sentiment or intention of action, therefore totals may not always add up to 100%.

About Freeform Dynamics

Freeform Dynamics is an IT industry analyst firm. Through our research and insights, we help busy IT and business professionals get up to speed on the latest technology developments and make better-informed decisions.

For more information, visit www.freeformdynamics.com.

About CIO WaterCooler

The CIO WaterCooler is a free, open and supportive community that provides resources to help IT leaders develop and identify solutions, gain knowledge from their peers and build networks to support them in becoming leaders in both their industry and business.

For more information, visit www.ciowatercooler.co.uk.

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Kyndryl (NYSE: KD) is the world's largest IT infrastructure services provider. The company designs, builds, manages, and modernises the complex, mission-critical information systems that the world depends on every day. Kyndryl's 90,000+ employees serve over 4,000 customers in more than 60 countries around the world, including 75 percent of the Fortune 100.

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