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It's Time to Get the Most Out of Your Cloud:

*Creating a strategy
for cloud management,
and getting it right*

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Executive summary

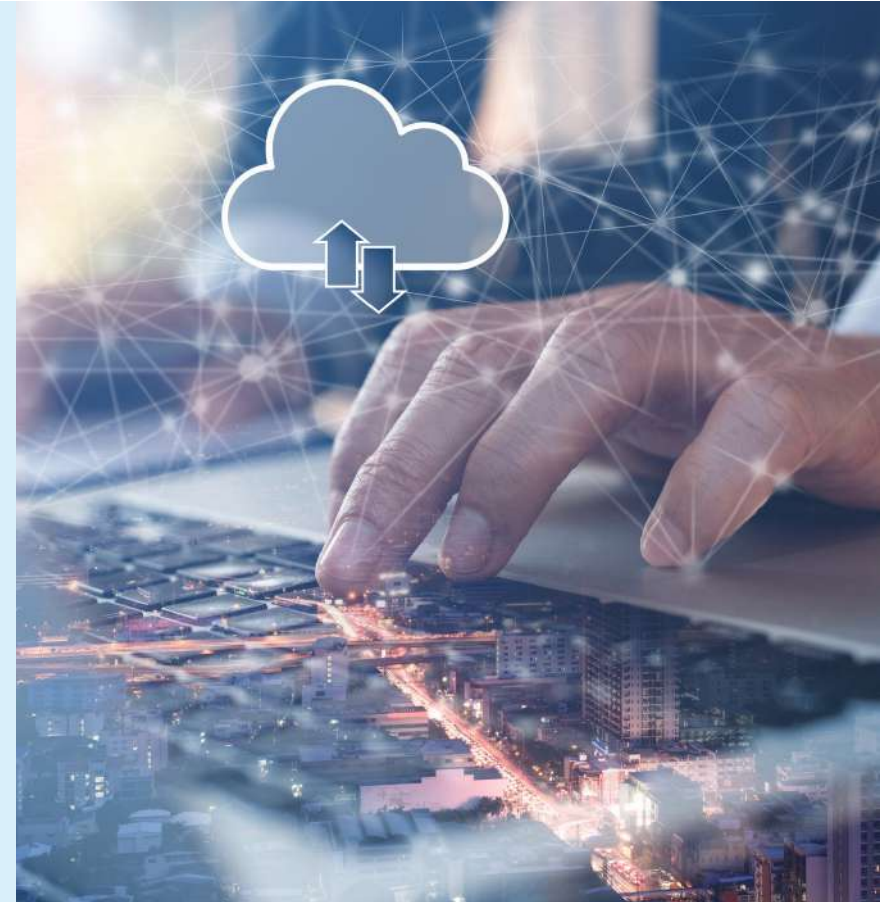
Globally, cloud continues to grow, but many organizations have held back on embracing the cloud due to cost concerns, security issues, and talent shortages.

What many tech business leaders may not realize is that their reluctance to embrace the cloud may actually be exacerbating these issues, such as added costs in infrastructure capex and depreciation in on-premises solutions, technical debt, churn of skills, and the delay of innovation.

Migration to the cloud requires a well thought out cloud management strategy. This will require new tools and processes, such as automation, to manage the complexity of cloud-based applications and services. Having a strong cloud foundation with the right platforms and processes will not only maximize business outcomes but could accelerate future digital innovation aspirations.

Read this InfoBrief to learn:

- ▶ The state of cloud adoption and budgets in the APAC region, and the maturity of that journey
- ▶ How organizations are facing barriers that impede both their cloud journey and the successful management of their hybrid cloud environments
- ▶ The implications of not fully embracing the cloud and mounting technical debt
- ▶ What the industry can learn from early adopters to access the biggest benefits and less obvious ones
- ▶ The questions organizations need to answer to build their road map to make sure their cloud journey ends in growth

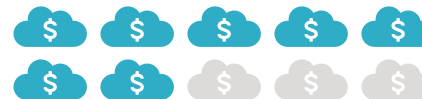


Tipping point: the imperative to transform cloud management

Amplified investment in the cloud across multiple workloads and environments will compromise business resilience if cloud management is not integrated. As the foundation of digital transformation, the cloud has already changed how IT is architected and operated.



On average, over a third of IT budgets are now allocated to cloud spending.



70% say public cloud budgets are growing compared to last year and this is being driven by the complexity of cloud environments.

But for many businesses, the journey is just beginning ...



54% of enterprise workloads are still deployed in on-premises facilities.



74% of cloud production application deployments are underutilized, undergoing proof of concept, trials or limited deployment stages.



Early adoption of public cloud has focused on discrete workloads, such as:



Communication and collaboration apps



Integration of existing business support applications with new cloud services (e.g., HR, financial management)



New container-based, cloud-native apps



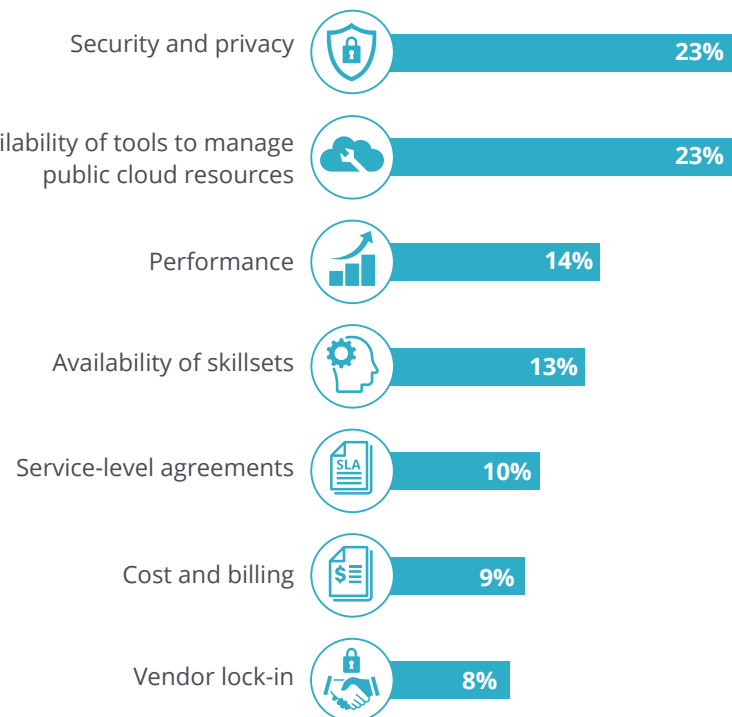
Without **appropriate, rigorous, and advanced cloud management processes in place**, your next stages of cloud adoption could bring unmanageable complexity, intensify technical debt, and increase organizational risk.

Sources: IDC Cloud Pulse 1Q21, APAC n=1150; IDC IaaSView 2021, APAC n=332

A lack of cloud literacy will slow progress in maximizing cloud benefits

Numerous concerns have slowed migration to public cloud, but not all concerns are technology issues. A poor understanding of cloud potentials and risks is at the root of many organizational barriers.

The most critical cloud concerns expose literacy roadblocks



This lack of cloud literacy is creating barriers to infrastructure resilience



Without strong cloud “literacy”, many concerns around security, tool availability, performance, and skillsets linger. These concerns will lead to shortcuts or worse, inertia.

Sources: IDC APJ IaaSView Survey, 2021 APJ; IDC CloudPulse Survey 2Q21, APAC

Shortcuts and legacy inertia can pile on technical debt

- ▶ Technical debt describes the **critical, unfunded technical liabilities that accumulate over time**, from both deliberate and inadvertent decisions about new technology investment priorities, implementation, architecture, governance, and funding. It can also occur when a "do nothing" approach is chosen.

- ▶ Inertia and technical debt can **immobilize an organization in its ability to develop new skills.**

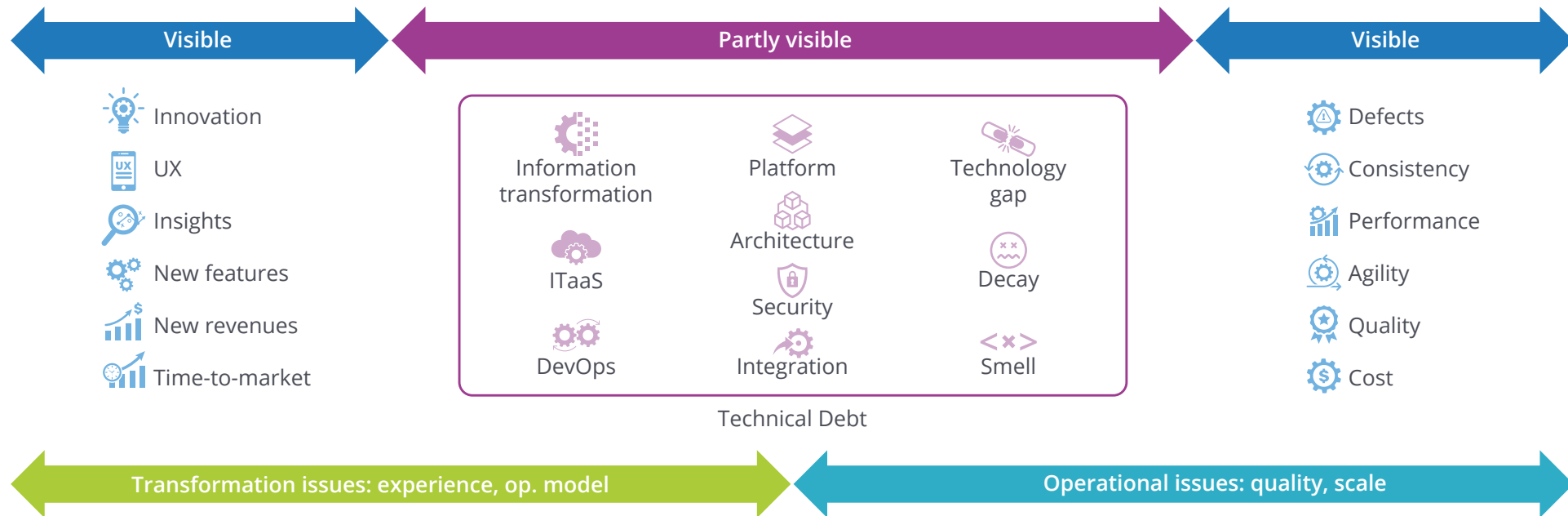
- ▶ Poorly managed **technical debt threatens every organization's ability to maintain normal operations**, as well as to **innovate and transform.**



Source: IDC Technical Debt Management Framework: Balancing Rapid Delivery and Long-Term Value, IDC #US45597419, Oct 2019

Most technical debt is not visible until it is too late

This creates a vicious circle of technical debt causing inertia, which in turn fuels the accumulation of more technical debt.



Smell (or code smell) refers to an underlying coding quality problem which affects the overall quality of implementation, or lack thereof.

Decay is the ageing of technology that, left unchecked, creates technical debt and potentially system instability.

Partially visible technical debt created by inadequate cloud management creates an obstruction creating friction for the organizations attempting to transform and create operational resilience. This is compounded by a lack of skillsets or awareness of tools available to handle the complexity of cloud management.

Source: IDC Technical Debt Management Framework: Balancing Rapid Delivery and Long-Term Value, IDC #US45597419, Oct 2019

Organizations spend too much time and money on cloud maintenance: Half of the IT Team now work on cloud migration and maintenance

Without a defined platform and processes for cloud adoption, enterprises risk 'cloud sprawl', where uncontrolled use of cloud services results in divergence from architectural standards and IT budget blowouts.



Portion of IT infrastructure budget on public cloud



Portion of IT staff on public cloud



Portion of application portfolio on public cloud

Deep penetration of public cloud through the IT organization

Despite only a third of an organization's apps running on public cloud:

- ▶ **Over half their team is working on the migration and maintenance**
- ▶ **Over 40% of their IT infrastructure budget is spent on public cloud services**



>7

Average number of cloud services used

>2x
/week

Average frequency of changes to public cloud configuration

>60%

Average percentage of developers modifying public cloud configuration

>4

Average number of cloud platforms (including public and private clouds)

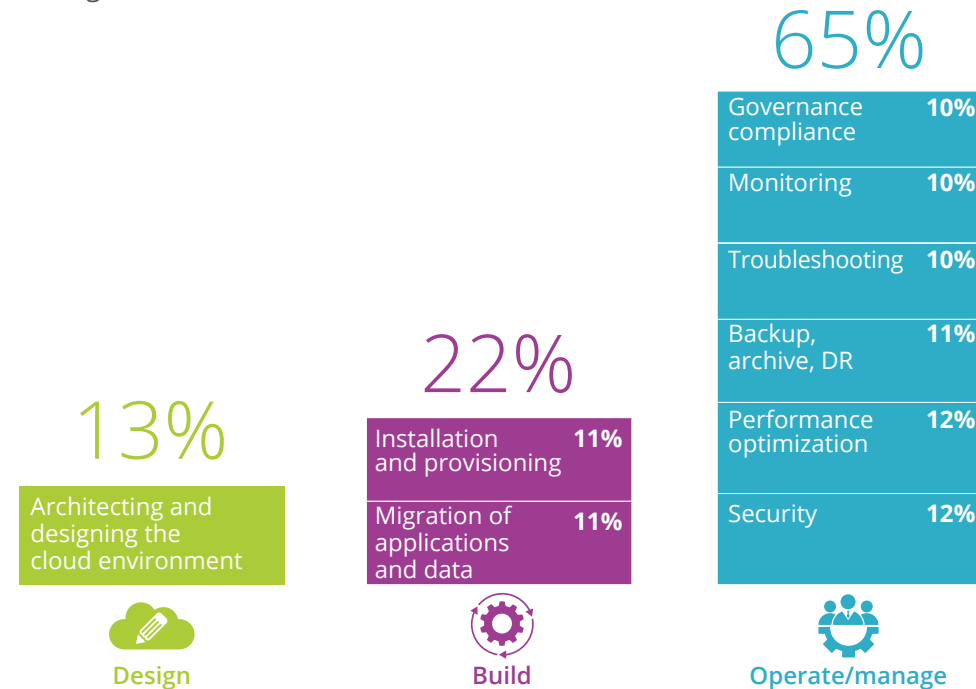
An unfocused approach to cloud migration will eventually lead to neglect of existing systems, unscheduled downtime, and declining customer satisfaction.

Source: IDC Worldwide Future Enterprise Resiliency and Spending Survey, Feb 2022, n=810

Cloud operations and management can consume 65% of an organization's cloud budget

Investment in cloud management and automation platforms can curb cost, drive productivity, and minimize risks.

As a percentage of your total cloud budget, how much do you spend for management of all clouds?



Some costs are unavoidable and difficult to minimize. But these costs can be optimized if best-practice processes are followed that focus on consistent design principles, DevOps, and use of standardized SLAs.



Source: IDC Cloud Survey 2021, APAC n=1012

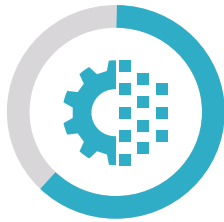
Cloud opex includes software/hardware dedicated to managing clouds, IT staff cost related to managing clouds, professional services cost related to cloud management etc.

The deepening skillset gap matters and presents further challenges to the cloud journey

“A lack of IT skills has...”:

Delayed DX

62%



of APAC organizations say that critical IT skill gaps have delayed their digital transformation journey.



 11 months

is the **average delay for transformation projects** in 2021 due to skills shortages.

Delayed deployment

65%



say that this deficiency has delayed their deployment of **new hardware/software, products and services** and **meeting overall quality objectives**.

Increased the importance of training

67%



recognize that the skills deficiency has elevated the importance of training in the organization.

Reduction in project delays with good training

33%



When reinforced with appropriate training programs, **organizations can gain a 33% reduction on project delays**. Technology spending alone is not sufficient when it comes to digital transformation and must be paired with the appropriate training programs.



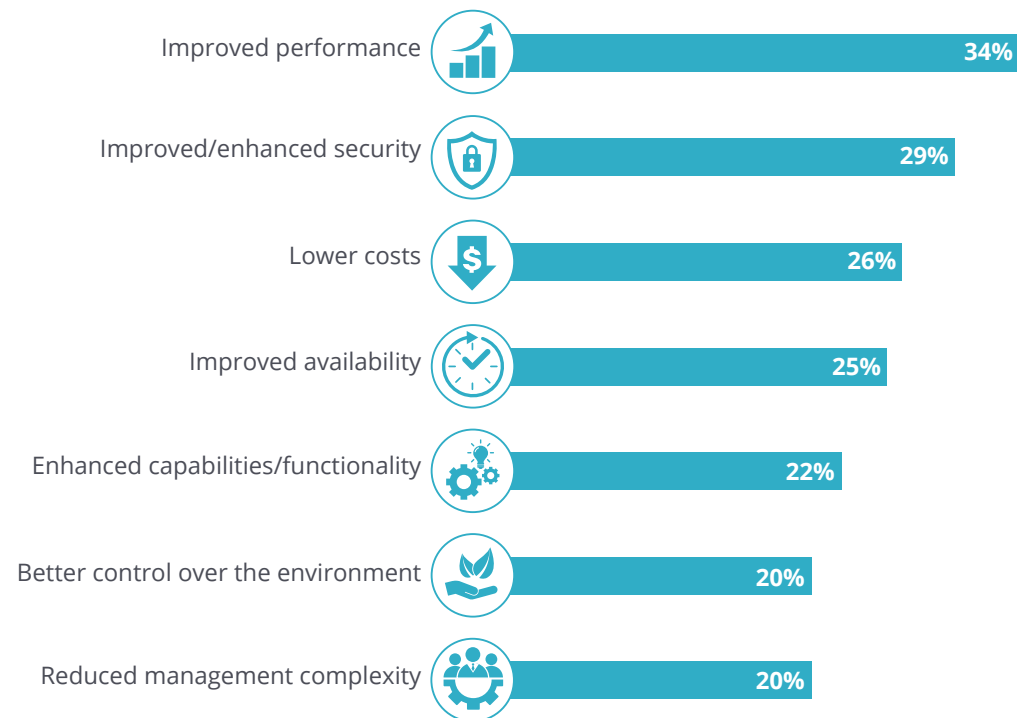
On average, organizations with training programs aligned to their strategic goals can deliver new services in half the time compared to those without such programs.

n = 1,885

Sources: IDC Technology Skills Survey, April 2021; IDC FutureScape: Worldwide Services 2021 Predictions (IDC #US44800319, October 2020); IDC Future Enterprise Resiliency and Spending Survey, April 2021

Successful organizations focus on developing strategies, platforms, and processes to extract maximum benefits from their cloud investments

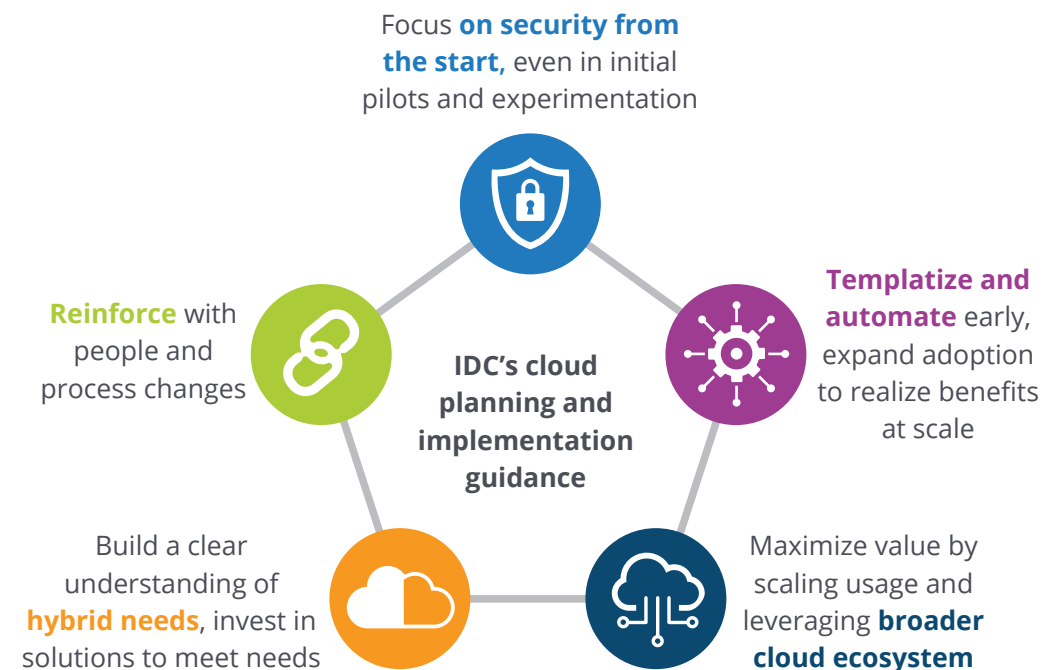
Substantial benefits achieved through cloud investments



Successful organizations report improved performance, security, and lower cost from their cloud investments.

Sources: IDC Cloud Pulse 1Q21, APAC, n=1150; Cloud Migration: Key Considerations Through the Journey. Doc#US45479719

These organizations focus on developing the strategy, process, and platforms that will support current and future cloud use that can deliver enhanced staff productivity, faster migrations, and improved workload performance.



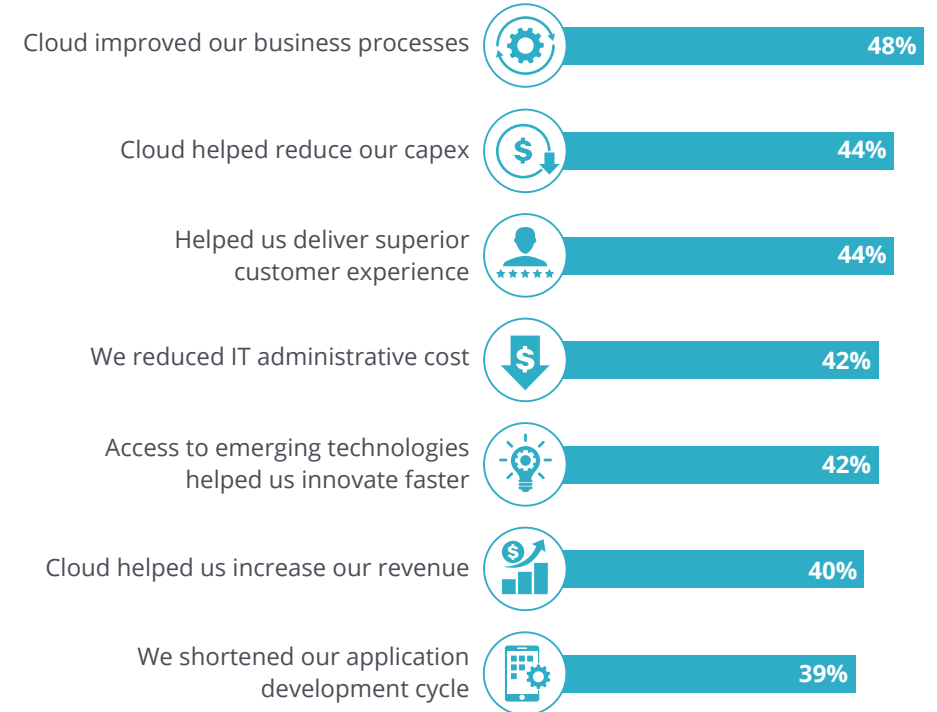
Highly effective cloud use results in the realization of substantial ROI benefits for an organization

82%

of highly advanced cloud users say that their cloud investments met or exceeded their return on investment (ROI) targets.



Areas of biggest ROI gains from cloud investment

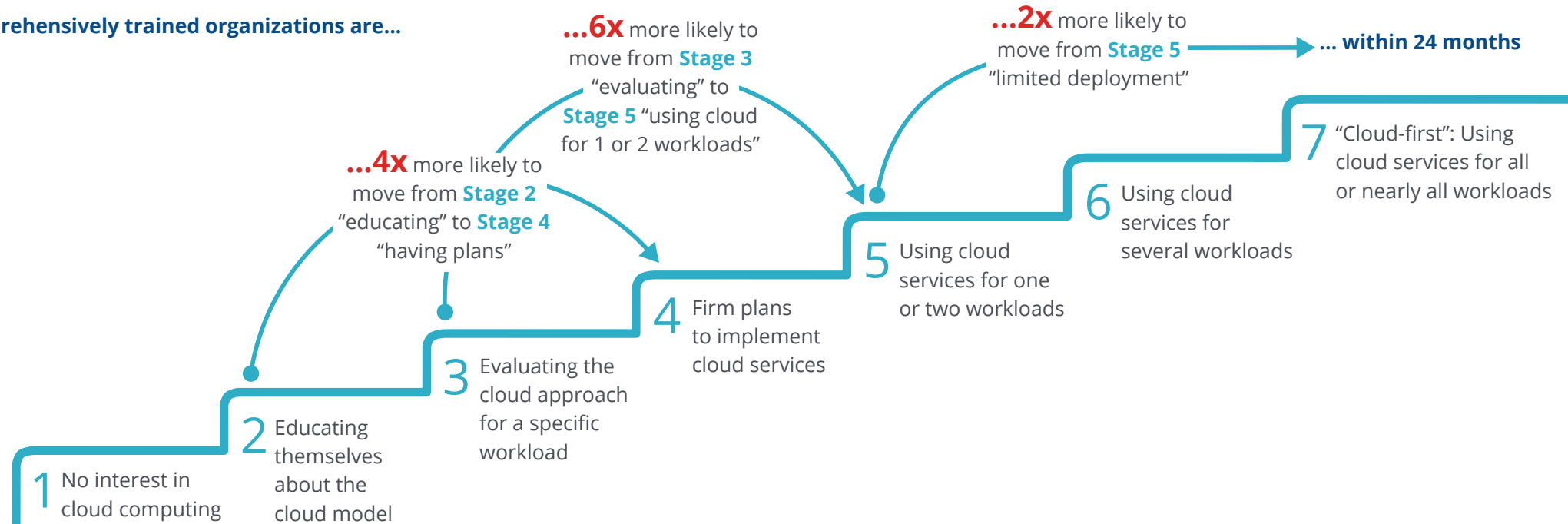


Sources: IDC Cloud Pulse 1Q21, APAC, n=1150; Cloud Migration: Key Considerations Through the Journey. Doc#US45479719

Cloud enablement and training will improve staff engagement and retention

Investment in tools and training can free resources to focus on valuable business outcomes, while making your organization more attractive to cloud experts. Educating and supporting business users' evaluation and adoption of cloud-based technologies is an essential success factor that is often misunderstood or omitted from business strategies.

Comprehensively trained organizations are...



n = 502

Source: IDC Impact of Training on Cloud Benefits Survey, 2016

Leading cloud users are capturing and retaining talent



Enhanced employee productivity: In 2021, businesses which had invested in cloud transformation experienced a **21% increase in worker productivity**. Good embedded cloud allows employees to focus on important tasks and avoid the time-consuming ad hoc tasks.



Cloud and automation tools are important to attract and retain IT talent. Once a business adopts automation, organizations are reporting that staff retention and talent attraction will be stronger.



Higher staff retention is occurring in best-in-class cloud workplaces. In an IDC survey of APAC employees, 41% said that the use of automation **technologies for augmenting human workforce** was a factor in motivating them to work for an employer.



Cloud democratizes innovation. Good IT staff will be attracted to companies that provide environments where they can work on more exciting projects, not time-consuming redundant tasks that don't lean into creativity and innovation in the cloud.



Maintaining high levels of engagement and enablement, through effective training, is especially important for modern IT organizations faced with constantly growing and changing demands. This is especially so in the post-pandemic period when staff recruitment and retention is a challenge, and provision of interesting tasks can keep staff focused and content.

Sources: IDC Cloud Pulse 1Q21, APAC, n=1150; Cloud Migration: Key Considerations Through the Journey. Doc#US45479719

Automation will play a critical role in addressing the skills gap and transformation project delays, while enhancing productivity

23% of IT executives believe that they must adopt automation capabilities to meet the needs of their digital enterprise.

Consistency, agility, and speed are mandatory to succeed in the digital landscape.

▶ Enterprise workloads are expanding from the core to the edge

▶ Complexity of multicloud/ hybrid cloud environment is growing fast

▶ Pace of digital demands ubiquitous, consistent cloud services



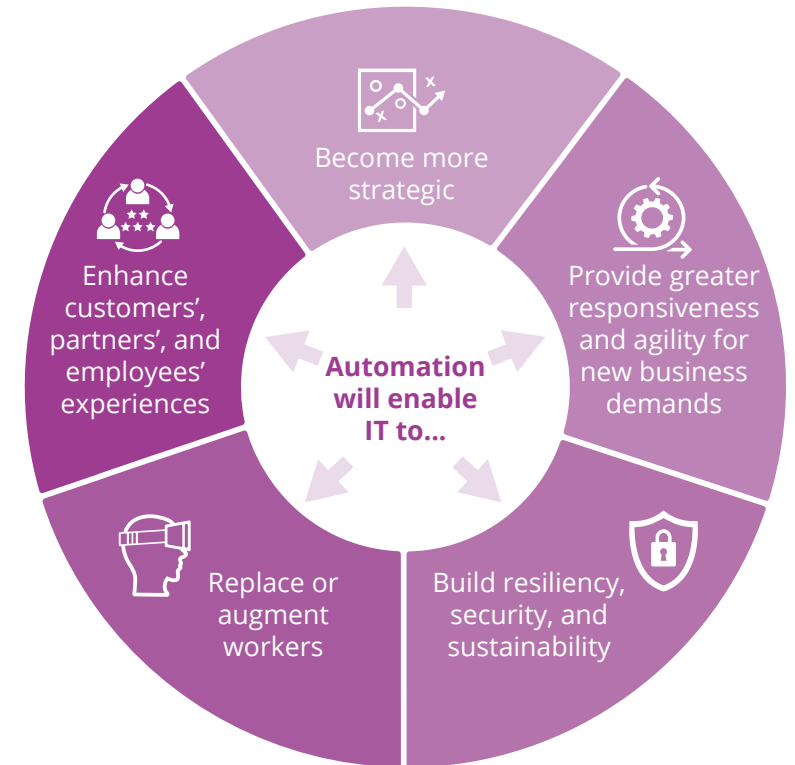
56%

of APAC organizations said that as a result of lessons learnt during the COVID-19 pandemic, it is vital to incorporate advanced automation into processes.



21%

of APAC organizations now use automated data management solutions to proactively maintain and enforce cloud data management policies.



Sources: IDC Cloud Pulse 1Q21, APAC, n=1150; Cloud Migration: Key Considerations Through the Journey. Doc#US45479719

Tackling the barriers to your cloud progress

Top 5 barriers to maximizing cloud benefits



1 Default to legacy tech for mission-critical workloads

How to tackle?

- Address cloud literacy, identify and break the vicious circle of technical debt causing inertia
- Build a targeted road map to the cloud by design and not by trial and error
- Use effective cloud management tools for consistent application delivery and availability across legacy barriers



2 Difficulty in integrating silos, because of unfamiliarity with new tools

- Create defined platform and processes for cloud adoption, failing which enterprises risk 'cloud sprawl'



3 Skills and capabilities of staff are not up to scratch

- Target education for users on how to get the most out of cloud-based technologies
- Cloud and automation tools are also a valuable tool to attract and retain IT talent
- Increased productivity through efficient cloud maintenance and automation frees up talent to work on projects that add business value rather than on keeping-the-lights-on activities



4 Governance is fragmented and inconsistent

- Reinforce governance processes through automation processes that capture the dynamic activities in a cloud environment
- Investigate the use of advanced automated security monitoring, control, analytics and reporting targeting your hybrid cloud environment












5 Lack of consistent automation and analytics

- Investment in cloud management and automation platforms to curb cost, drive productivity, and minimize risks
- Use automation to manage complex hybrid and multicloud environment, to avoid the dangers of cloud sprawl

Building a road map to get the most out of your cloud

To get the most out of your cloud, you must ask yourself these questions – and make sure you know the answers.

| Success factors | Key questions / Key decision points |
|---|--|
| Cloud management  | <ul style="list-style-type: none"> ● Do you have the headcount, technology, and skills to manage your cloud workloads through their lifecycles? ● Does IT have the right set of technology solutions to support the cloud journey? ● How are your processes being adapted to support the move to the cloud? ● What is your current technical debt? |
| Workload categorization  | <ul style="list-style-type: none"> ● Which workloads will create a business advantage by migrating from an on-premises platform to the cloud? ● Do you have workloads that are suited for the cloud? |
| Ensure regulated workloads remain compliant  | <ul style="list-style-type: none"> ● What regulations apply to your organization based upon your industry, business practices, and/or location? ● What information that you collect, store, process, and transmit is subject to those regulations? ● What workloads and data stores subject to regulation are we considering moving to the cloud? |
| Cloud-first strategy and culture  | <ul style="list-style-type: none"> ● What should be the required culture to accommodate the rapidity of business and technology change driven by cloud adoption? ● Do you have a cloud-first strategy? |
| Use cloud migration programs  | <ul style="list-style-type: none"> ● There have been significant advances in cloud migration programs, tools, and services. How have you planned your migration to maximize confidence in success, and minimize risks? |
| Service-based costing  | <ul style="list-style-type: none"> ● What are your current infrastructure costs? ● What IT cloud services and products should be delivered to the enterprise? What value does IT bring to lines of business for cloud choices? ● What price should be established for consumption of cloud capabilities? |
| Integrated ecosystem  | <ul style="list-style-type: none"> ● How should IT integrate other technology products and services with cloud service providers? How should IT integrate innovative projects with at-scale operations? |
| Incremental business advantage  | <ul style="list-style-type: none"> ● What are the advantages of cloud offerings for your business opportunities? How should these business advantages be achieved through cloud implementation? |
| IT capabilities for support/delivery  | <ul style="list-style-type: none"> ● What IT capabilities and cloud services should be available to transform your business? How should these IT capabilities and cloud services be efficiently delivered? |

About the analysts



Chris Morris
*Research Vice President,
Cloud Services and Partner Program, IDC APAC*

As the leader of research into the cloud services markets in APeJ, Chris manages the regional research into all facets of public and private cloud. This includes the IT-focused technology and services as well as the implications for digital business.

Chris comes to IDC with more than 25 years of extensive IT research and more than 35 years of industry experience. Prior to joining IDC in 2007, Chris worked as an independent IT industry researcher and consultant for six years. Some of his key clients included the Australian Taxation Office, the University of New South Wales (UNSW), as well as IT technology vendors. Prior to 2002, he was Gartner's Group Vice President and Director of Research for the APAC region with responsibilities ranging from business development to research delivery to client engagement activities. Beginning his tenure in Gartner in 1992, Chris was the first research analyst in the APAC region for the organization. Previously, he worked for a number of technology vendors including Fujitsu, Amdahl, and Hitachi Data Systems, in a variety of technical, product marketing, and management roles.

Chris holds a Bachelor of Engineering degree from the University of New South Wales, Australia.

[More about Chris Morris](#)



Louise Francis
*Country Manager and Head of ANZ Research,
IDC ANZ*

As the head of the ANZ research program, Louise is responsible for leading and managing IDC New Zealand's local team. Joining IDC in 2008, Louise has over 30 years of experience in the ICT sector within both vendor and end-user organizations.

Louise is responsible for providing customers with strategic advisory services to make more effective technology decisions by providing accurate, timely, and insightful fact-based research leveraging IDC's deep portfolio of expertise; acting as an interpreter and facilitator for change to IDC customers positioning themselves as digital leaders on the global stage; leading the NZ InTEP group to lift the level of engagement with NZ CIOs, digital decision makers, and business leaders; and representing IDC ANZ through presenting keynotes at key events, facilitating panels, and leading roundtable discussions.

Louise holds a Bachelor of Business Studies degree with First Class Honours from Massey University, graduating with a double major marketing and communications. She also holds a Bachelor of Science (Biology) degree from the University of Auckland.

[More about Louise Francis](#)

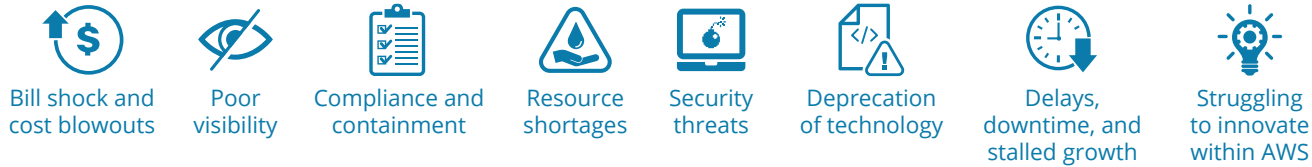
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Through prefabricated frameworks, Stax establishes a best practice cloud foundation, taking care of all critical components and fundamentals to help organizations of all sizes unlock the opportunities of AWS faster.

Too often, organizations invest in cloud transformation projects without the in-house expertise to maximize the expected benefits of the cloud. Consequently, resources are wasted in a lengthy build phase and day-to-day maintenance, with challenges surrounding recruitment, security, compliance, and risk management.

The mastery of our platform ensures we deliver a frictionless experience to remove daily challenges like:



Our mission is to help AWS customers accelerate their cloud journey with preconfigured, enterprise grade controls for security, network, connectivity, real-time monitoring and identity and access management.

By choosing Stax, organizations are empowering their people to work with confidence, ensuring they are actively maximizing time, spend, efficiency, security, and compliance.

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