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Cloud computing in the Middle East

**New opportunities for
companies and cloud
providers**



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The Middle East is quickly catching up to other markets in terms of cloud computing adoption. Government investments and the increasing presence of public cloud¹ providers are making cloud solutions more accessible. These developments are providing organizations in the public and private sectors with a faster route to capturing value from the technology. PwC and Strategy& recently surveyed companies in the region to gauge the level of cloud impact—the first such publicly available research in the region (see “About the survey,” p. 4). This publication summarizes our analysis and provides vital insights for cloud computing customers and Cloud professional and managed services providers (Cloud PMSPs).

Specifically, our analysis indicates that cloud adoption has passed the initial adoption phase and is poised for accelerated growth. Jointly, PwC and Strategy& Middle East identify how leading companies are capturing the benefits of cloud technology, and then present key considerations for cloud PMSPs in the Middle East.

CLOUD ADOPTION IS ABOUT TO TAKE OFF

Although the Middle East lags behind North America and Europe in terms of cloud market maturity as measured by the size of the cloud market relative to GDP, adoption is rapidly gaining momentum, and there is ample room for further expansion. Our survey of Middle East companies reveals the following:

32 percent have started implementing the cloud in at least one area of their operations.

35 percent have adopted cloud computing across multiple domains of their business and have developed their operating model accordingly.

18 percent are going all in on the cloud and have scaled it throughout the business.

Significant growth is coming



68%

68 percent of Middle East companies plan to migrate a majority of their operations to the cloud within the next two years.

76%

To fund these initiatives, approximately four out of five companies intend to increase their cloud budget over the coming year.

That growth creates a significant opportunity for cloud providers. If the Middle East were to catch up with Europe in terms of market maturity, our analysis suggests that cloud providers could potentially secure approximately US\$5.6 billion in new revenue. If the Middle East were to match North America in maturity, the new revenue potential could be closer to \$14 billion. Notably, a substantial 73 percent of companies in the region utilize multiple public cloud providers. Even companies with a primary provider often employ others for specialized purposes, creating ongoing opportunities for vendors to access new customer segments.

Furthermore, companies are moving beyond a simple migration (“lift and shift”) of existing workloads to the cloud, which is often the initial step in a cloud adoption journey. According to our survey, 90 percent of organizations have moved at least to the next phase: modernizing applications to take full advantage of cloud opportunities or developing new cloud-native applications (see *Exhibit 1*). These measures tend to create more value and result in a quicker return on investment.

About the survey

To assess the state of cloud technology in the Middle East, PwC and Strategy& surveyed 420 technology and business leaders in Saudi Arabia and the United Arab Emirates, the region’s largest cloud computing markets, across a range of industry sectors. This analysis is part of PwC’s broader Cloud Business Assessment,

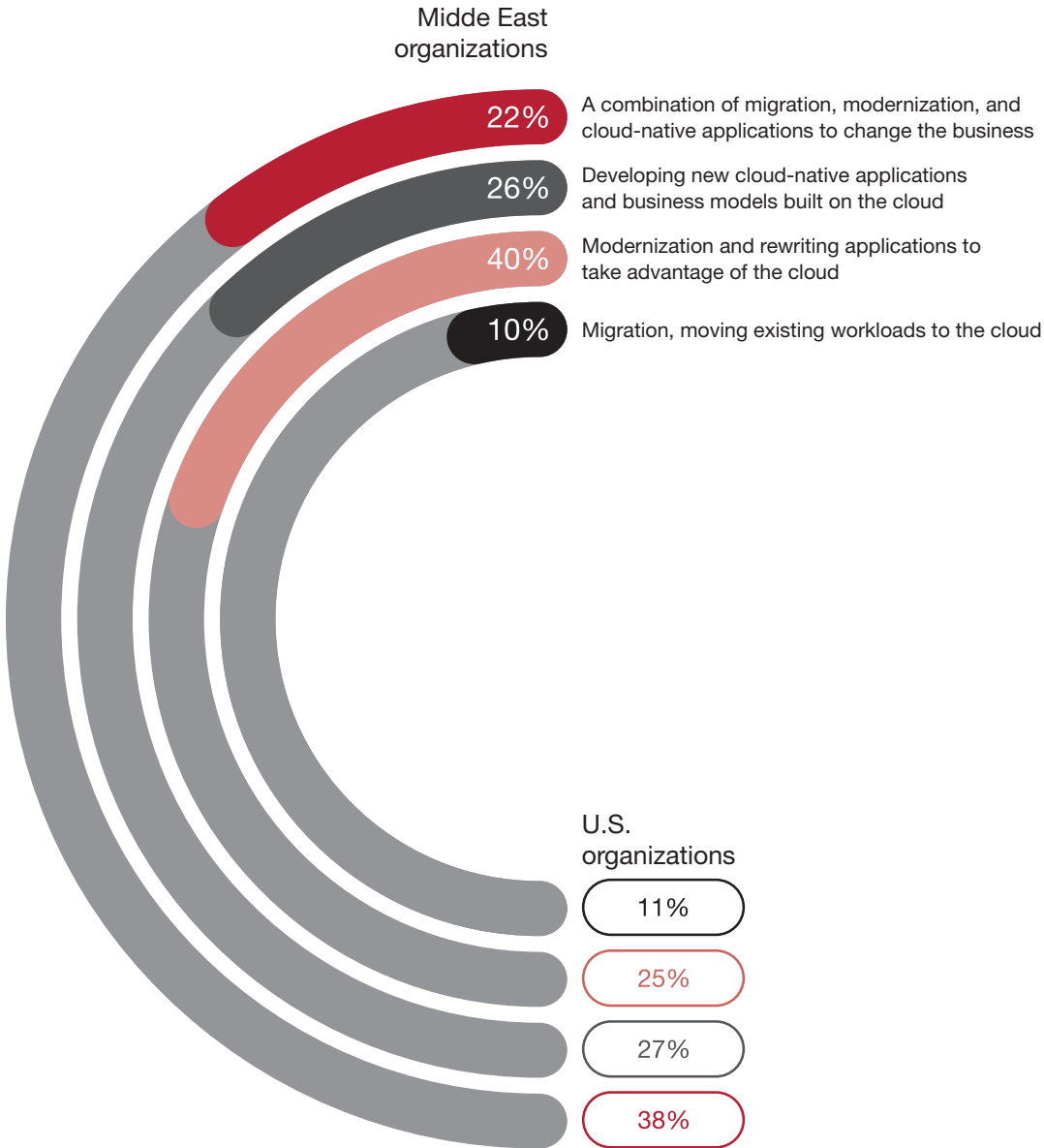
which covers Europe, the Middle East, and Africa. The fieldwork was conducted in March 2023. We compared results with those of the U.S. from a 2022 survey. We excluded organizations with no cloud adoption plans and those whose leaders were uncertain about their reasons for not adopting cloud technology.

EXHIBIT 1

Most companies in the region are modernizing their applications to capitalize on the technology

Question: Which of the following best describes your current focus in implementing cloud technology?¹

Middle East compared with U.S. organizations



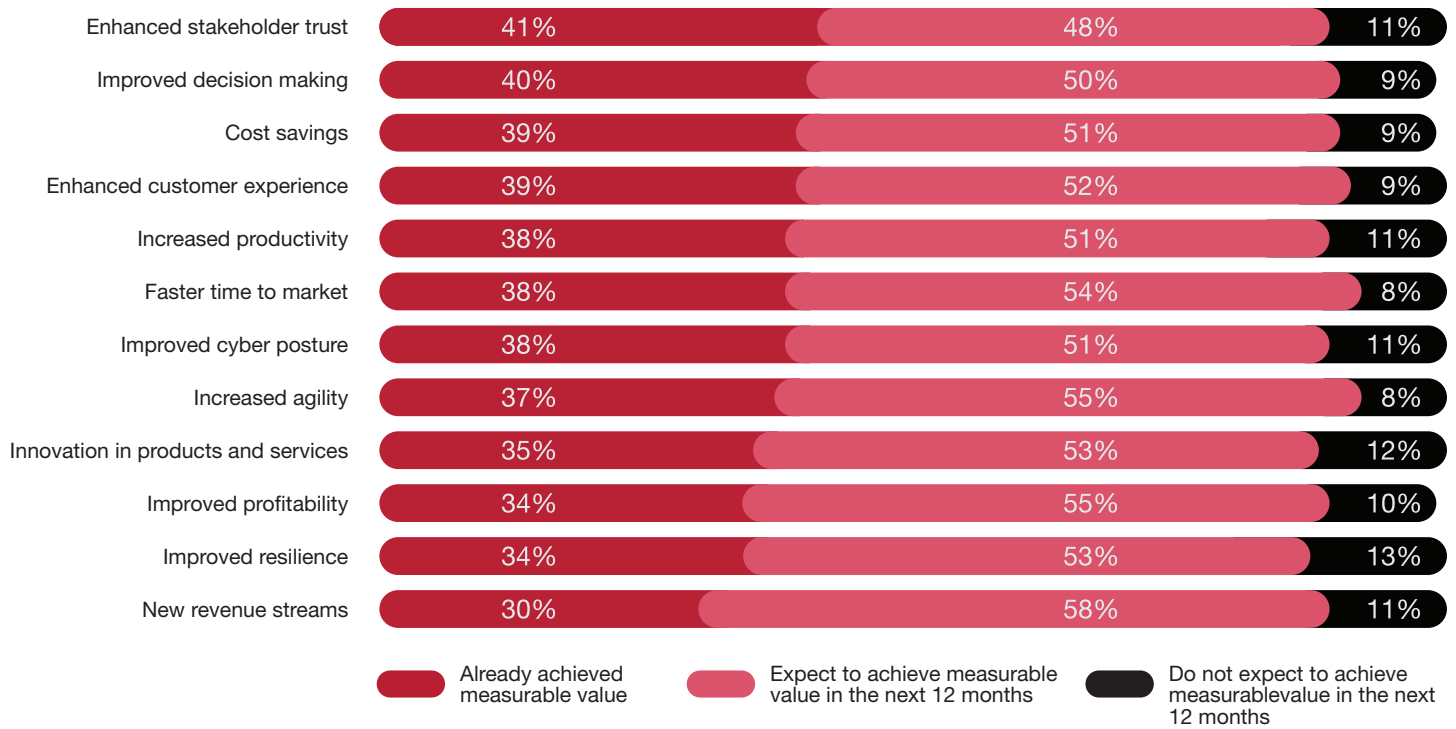
¹ Excludes organizations that were unsure or did not answer.
Source: PwC and Strategy&, Cloud Business Survey—Middle East edition, 2023

Case in point: Approximately 40 percent of the companies in our survey have already realized measurable value from their cloud initiatives, and they expect larger gains in the future. When asked about specific sources of value already captured through cloud implementation, respondents pointed to intangibles such as enhanced stakeholder trust (cited by 41 percent of respondents) and improved decision making (40 percent). A smaller number said that they had experienced an increase in profitability (34 percent) or new revenue streams (30 percent) (see *Exhibit 2*).

EXHIBIT 2
Organizations report greater value thus far from intangibles

Question: Which of the following best describes how cloud technology is, or is not, delivering measurable value in your organization?¹

Cloud technology delivering measurable value



Note: Totals may not sum due to rounding.
¹ Excludes organizations that were unsure or did not answer
 Source: PwC and Strategy&, Cloud Business Survey—Middle East edition, 2023



Cloud-powered companies in the Middle East still have room for improvement when it comes to capturing value.

CLOUD-POWERED COMPANIES LEAD THE WAY IN SEIZING THE VALUE OF THE CLOUD

Our analysis has identified a distinct group of “cloud-powered” companies that consistently outperform peers in terms of value realization from cloud transformation. We define cloud-powered companies as those in the top quartile in achieving measurable value from the technology. This group is two to three times as likely as non-cloud-powered companies to be achieving measurable value in any given area covered by our survey (see *Exhibit 3*). Members of this group are also nearly three times as likely as their counterparts to have fully embraced cloud technology and integrated it comprehensively throughout their business operations.

We uncovered a statistically significant correlation between cloud impact and revenue performance. Indeed, 88 percent of cloud-powered companies have reported an increase in revenue over the past six to nine months. In contrast, among companies not categorized as cloud-powered, only 76 percent have experienced such revenue growth.

Despite their strong performance, cloud-powered companies in the Middle East still have room for improvement when it comes to capturing value. Consider that cloud-powered companies in the U.S. are even more adept at extracting value in all areas.

Cloud-powered companies in the Middle East do face certain challenges in realizing measurable value from cloud technology. However, many of these challenges are external, and organizations can address them with vendor support. For instance, 47 percent of cloud-powered companies said they experienced problems related to cloud providers, such as concerns about service quality. In contrast, non-cloud-powered companies were more inclined to attribute their challenges to such internal factors as budget constraints, limitations in technology capabilities, and leadership issues.

47 percent of cloud-powered companies said they experienced problems related to cloud providers.

47%

88%

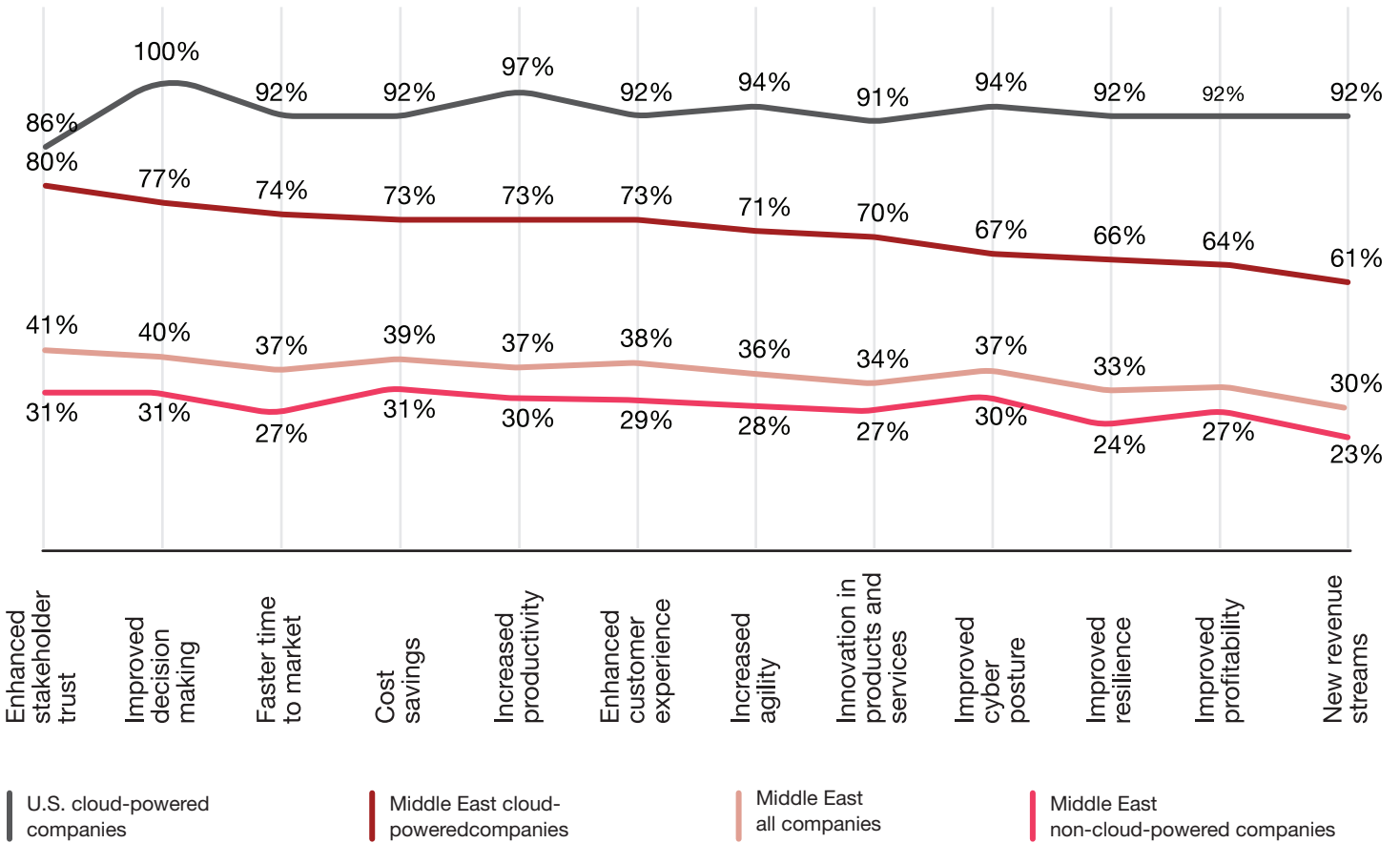
88 percent of cloud-powered companies have reported an increase in revenue over the past six to nine months.

EXHIBIT 3

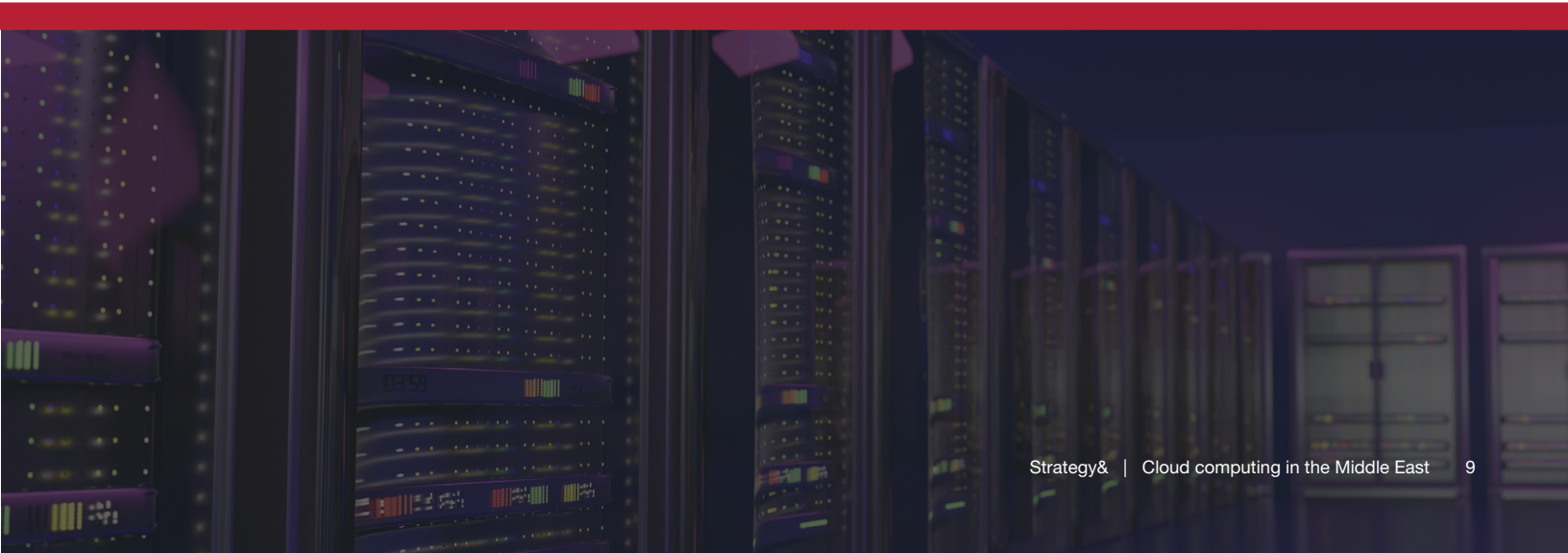
Cloud-powered companies are more likely to capture all aspects of value

Question: Which of the following best describes how cloud technology is, or is not, delivering measurable value in your organization?

Cloud-powered versus non-cloud-powered realization of measurable value

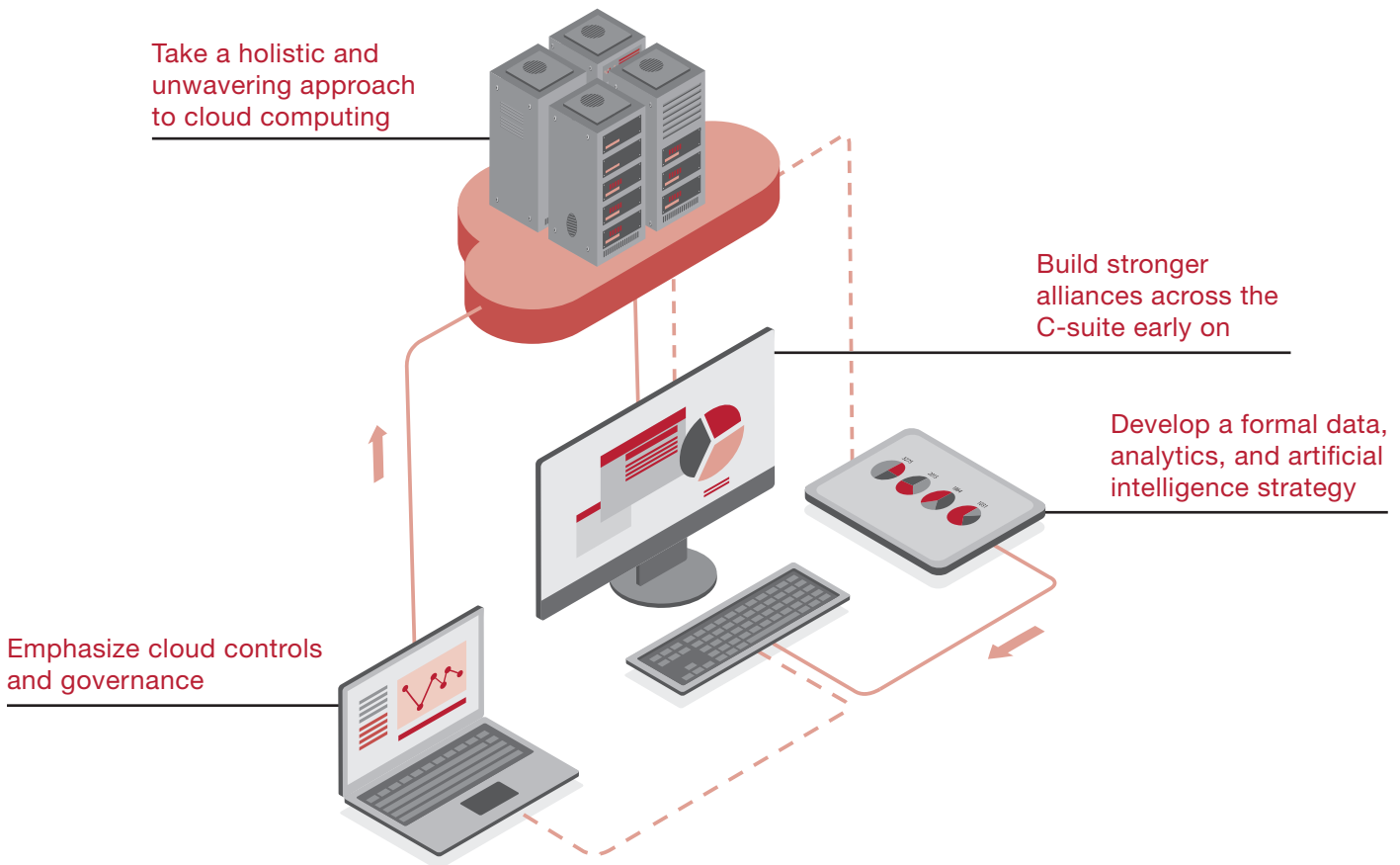


Source: PwC and Strategy&, Cloud Business Survey—Middle East edition, 2023



KEY ACTIONS HELP ORGANIZATIONS ACHIEVE THE FULL VALUE FROM THE CLOUD

The question naturally arises: What is the secret to the success of cloud-powered companies? Our analysis revealed four actions they take that make a difference between cloud-powered companies and those that have yet to fully exploit the cloud.



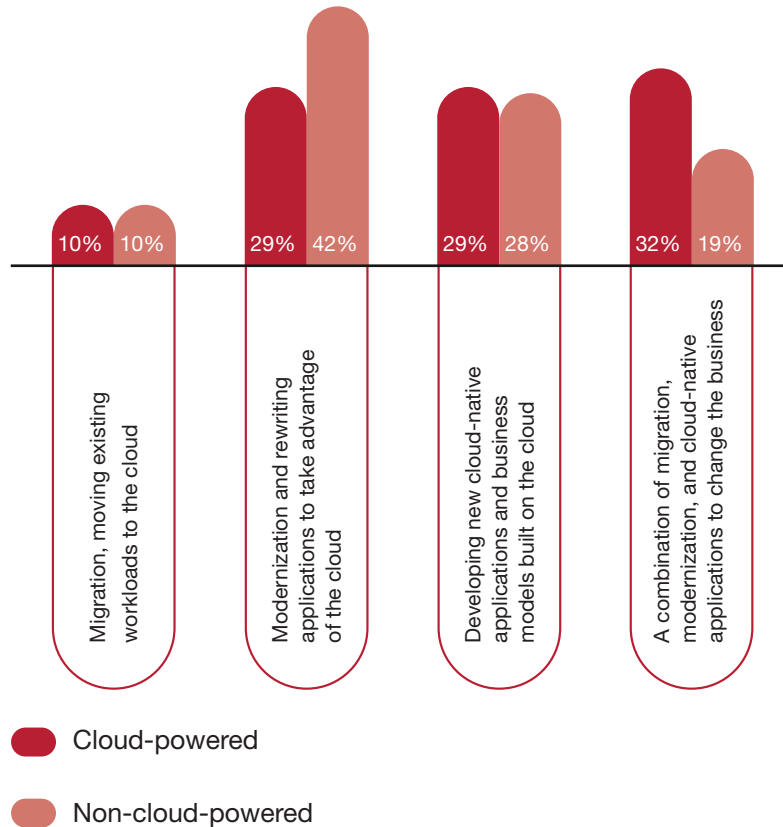
Take a holistic and unwavering approach to cloud computing

Cloud-powered companies outperform by not following a linear path from workload migration to asset modernization to cloud-native development. Instead, they adopt a holistic approach, driven by a well-defined vision and supported by a robust architectural road map and governance framework aligned with specific business goals. Cloud-powered companies are more likely to deploy the cloud for a combination of uses (see *Exhibit 4*). This enables them to prioritize infrastructure strategies and migration methods on an application-by-application basis, ensuring effective value creation. It is crucial to avoid shortcuts in planning migration strategies, as these can diminish potential value and lead to the accumulation of technical debt,² which is costly to address later.

EXHIBIT 4

Cloud-powered companies are more likely to deploy the cloud for a combination of uses

Question: Which of the following best describes the primary reason your organization is using cloud technology?



Source: PwC and Strategy&, Cloud Business Survey—Middle East edition, 2023

Build stronger alliances across the C-suite early on

Cloud-powered companies excel at building strong alliances within the C-suite, encompassing both business and technology roles. These alliances facilitate a unified approach to cloud transformation closely tied to business objectives. Chief information officers and technology teams in these companies recognize that transformation is a collective effort. Hence, they establish these alliances with key business functions at the earliest stages of planning, budgeting, and requirement gathering.

Emphasize cloud controls and governance

Across all the areas we evaluated, we found that cloud-powered companies are more advanced than other companies when it comes to adopting leading practices in cloud governance, risk, and controls. For example, they are more likely to have resources dedicated to cloud governance, formal and distinct cloud controls, and robust evaluations of shared responsibility with cloud providers. In their efforts, they focus on a variety of issues, including cybersecurity, data privacy, and compliance.

However, even within this group there is room for improvement, as evidenced by a comparison with cloud-powered companies in the United States. Realizing the full benefits of cloud-based services and maintaining compliance with security and privacy standards hinges on organizations applying clearly defined processes and strict discipline in how they deploy cloud computing, and doing so daily. It is essential to adhere to the principles of scalability, usability, and automation. Every permitted exemption, work-around, or one-off solution increases friction and imposes additional effort that will prevent scarce resources from creating more value in the future.

Develop a formal data, analytics, and artificial intelligence strategy

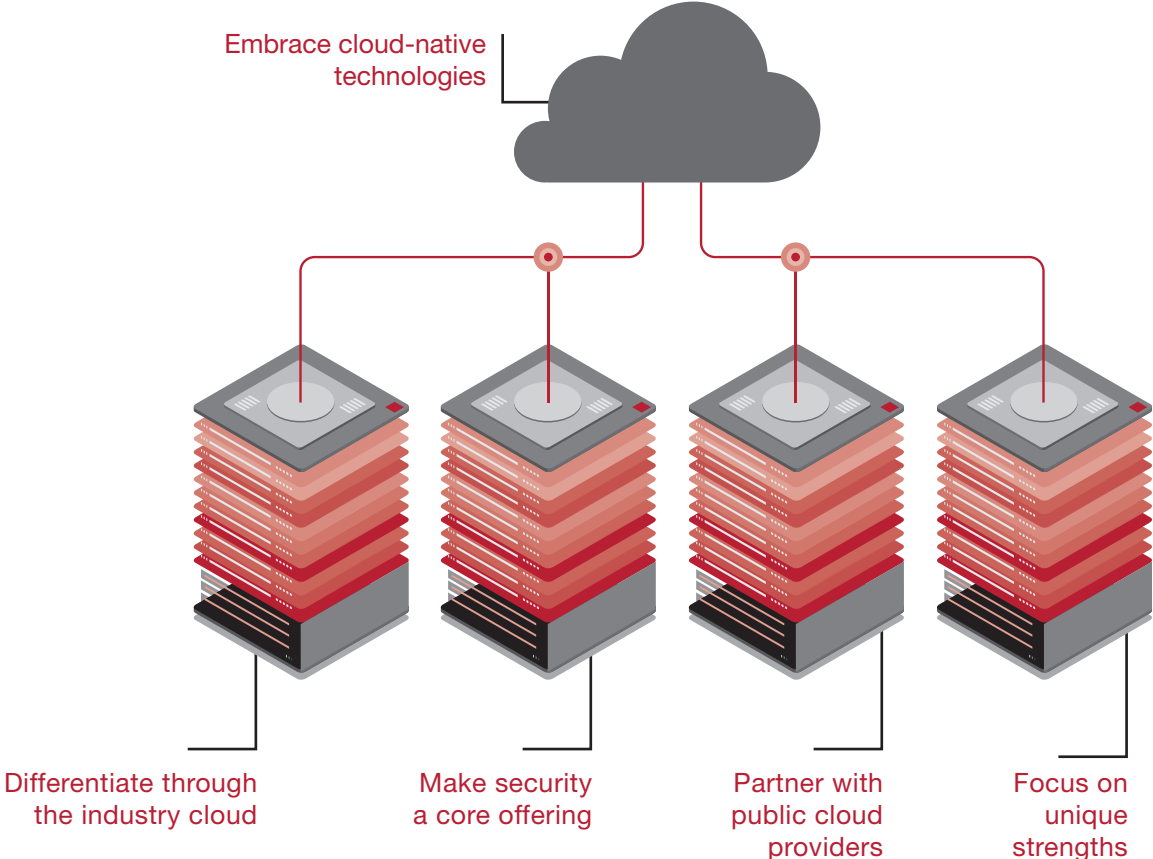
Executives at cloud-powered companies understand the all-too-common issue of siloed, untapped, and ungoverned data. This being the case, cloud-powered companies are much more likely to have an enterprise-wide data strategy than other companies (73 percent versus 42 percent). That means they develop a streamlined architecture to modernize their data into an integrated view, create governance structures, and develop the necessary skills and operational changes needed to become data-driven organizations. They also tend to choose technologies specifically designed to work with multiple public cloud providers for a variety of data, analytics, and artificial intelligence services, indicating that they prioritize flexibility and want to avoid being locked into working with any particular public cloud provider.

CONSIDERATIONS FOR CLOUD PMSPs

Our analysis also holds implications for Cloud PMSPs in the region. There are five key considerations for Cloud PMSPs that want to remain competitive and meet changing customer demands.

Embrace cloud-native technologies

An impressive 90 percent of the organizations in our survey have moved beyond simple “lift and shift” of workloads to the cloud. They are actively modernizing existing applications or developing new cloud-native applications to realize the advantages of scalability, agility, and cost savings. Notably, 53 percent of the organizations plan to focus more on cloud-native development in the next 12 months. Cloud PMSPs must adopt cloud-native technologies. That entails enhancing their expertise in technologies such as Kubernetes,³ Docker,⁴ and serverless computing platforms,⁵ as well as developing proficiency in managing infrastructure and deployment pipelines that support cloud-native applications.



Differentiate through the industry cloud

A noteworthy 20 percent of survey participants said they intend to adopt industry cloud solutions in the next year. Industry cloud platforms integrate traditional cloud platforms and solutions services with tailored, industry-specific functionality to accelerate time to value and minimize complexity. Cloud PMSPs with strong industry expertise can play an active role in shaping modern cloud architectures by neatly integrating best-of-breed vendor solutions and industry-specific components, using common data models, cross-cloud connectors, workflows, and application programming interfaces.

Make security a core offering

Inadequate cyber and privacy controls are the number one barrier to value, according to the respondents to our survey (34 percent included this barrier among their top three barriers). Therefore, Cloud PMSPs must prioritize security as a core offering and incorporate it into every facet of their services. By providing robust security controls and data privacy measures—and offering key services such as managed threat detection and response, regular security audits, and vulnerability assessments—Cloud PMSPs can instill confidence in their customers. A proactive approach to security helps build trust and sets Cloud PMSPs apart in the market.

Partner with public cloud providers

Among survey respondents, 72 percent use multiple public cloud providers. Specifically, 58 percent of respondents use one primary provider and others for specialized purposes, whereas 14 percent use a variety of public providers for different purposes without a dominant vendor. The average number of public cloud providers varies, from 2.9 for small to medium-sized businesses to 3.4 for large and very large companies. In this context, Cloud PMSPs are likely to opt for multi-cloud positioning.⁶ Cloud PMSPs beware! A multi-cloud approach increases complexity, requires deep understanding of the offerings and specifics of each public cloud provider, and can complicate relationships with them. Thus, expanding partnerships with public cloud providers over time may be a more prudent approach.

Focus on unique strengths

Our survey underscores the abundant opportunities available to Cloud PMSPs, across a diversity of services throughout the value chain, customers of varying sizes, and multiple industry sectors. The opportunities require a wide range of capabilities, but focusing solely on a particular service or customer segment may limit opportunities for deeper customer engagement. Cloud PMSPs must carefully evaluate these trade-offs and define their way to play based on market demand along with existing capabilities and investment capacity.



Our survey underscores the abundant opportunities available to Cloud PMSPs, across a diversity of services throughout the value chain, customers of varying sizes, and multiple industry sectors.

CONCLUSION

The Middle East's cloud journey offers possibilities for innovation, growth, and transformation. By taking a holistic, well-planned approach to cloud migration, public-sector and private-sector organizations can achieve significantly higher value from their cloud transformation. For Cloud PMSPs, the opportunity is even greater, with the opportunity for billions of dollars in new revenue.

ENDNOTES

1. *The cloud* in this report refers to computing infrastructure managed by a third party. *The public cloud* is third-party computing infrastructure provided and managed by hyperscale cloud service providers.
2. *Technical debt* refers to the accumulation of inefficient design and development choices in software, which require disproportionate future work to address and improve, leading to increased costs and complexity.
3. Popular open-source container orchestration platform.
4. Platform automating deployment and management of applications within containers.
5. Serverless computing is a technology enabling event-driven execution of software functions without the need for management of underlying infrastructure.
6. Positioning as a professional and managed services provider that enables transition and operation in a multi-cloud computing environment.

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