For a growing number of organisations, adopting a multi-cloud strategy has become an integral part of their digital transformation initiatives, which allows them to adopt best-of-breed technologies and avoid vendor lock-in.

According to Gartner, most adopters of the public cloud services use multiple providers. In fact, in a recent Gartner survey of the public cloud users, 81% of respondents said they are working with two or more providers.

“Digital reinvention is at an inflection point as businesses enter the next chapter of their cloud journey. Most enterprises today are approximately 20 percent into their transition to the cloud. In this first chapter of their cloud journey, businesses made great strides in reducing costs, boosting productivity and revitalizing their customer-facing innovation programs. Chapter two, however, is about shifting mission-critical workloads to the cloud and optimizing everything from supply chains to core banking systems,” says Tamer Elsawy, director, cloud & cognitive software, IBM Middle East & Pakistan.

The challenge is that most of our clients already use up to 15 different...
clouds – on prem, public and private. Clients moving to chapter two of their cloud journey need to embrace a hybrid multi-cloud approach that allows them to manage multiple clouds from multiple vendors with consistent management and security protocols, using open source technology, he adds.

“The reasons behind companies moving to a multi-cloud strategy aren’t hard to fathom. In essence, companies are both switching on to the benefits of the public cloud – on-demand scalability, pay per use economics and so on - and, at the same time, becoming wise to the fact that not all clouds are the same. Indeed, putting all their application eggs in one basket might be counterproductive,” says Aaron White, Middle East regional director at Nutanix.

Yasser Zeineldin, CEO of eHosting DataFort, agrees: “A single cloud approach works well for small businesses and start-ups. However, an enterprise’s different business units have diverse requirements and workloads, which cannot be met by a single cloud model. A multi-cloud approach offers organizations a number of benefits from low costs, unlimited scalability, agility, and improving disaster recovery and security. By working with multiple cloud services providers, enterprises can lessen their dependence on a single provider and can also avoid vendor lock-ins, data center outages, and bandwidth issues. Compliance regulations and data sovereignty requirements have also led companies to implement the multi-cloud approach.”

Chris Pope, VP Innovation, ServiceNow, says benefits from a multi-cloud or multi-vendor strategy can be realized in multiple ways, and not just solely cost. “It provides the ability to find the best in class providers, for the tasks or workloads required. This ensures you get the best of both worlds, with a diverse set of offerings but also ensures that you can align fit for use or purpose services to those you seek. It provides a high level of agility and flexibility, and also robust resilience in that should an issue or event occur, you can move to another provider, or even geographic area, away from service disruptions.”

Jeff Ogden, GM - Middle East & India, Mimecast, says apart from cost and flexibility, one of the substantial benefits of a multi-cloud strategy is increased security. “Organisations’ tendencies to rely exclusively on single cloud service providers for day-to-day operations have exposed them to undue risk. With services such as Office 365, organisations are not only putting all their eggs in one basket; they are putting all their eggs in the same basket that everyone else. Criminals know they have only one lock to pick to gain access, so they focus their attention on these cloud services because of the potentially large payoff.”

Before taking the plunge, organisations need to follow some industry best practices without which the move to a multi-cloud environment can lead to complexities.

Pope from ServiceNow says having a realistic target or end state is a key enabler for a successful strategy. There is no magic wand or silver bullet to say once in the cloud, it’s all going to work just fine. This is just the start of the journey, and it is imperative to ensure that requirements are met continually and evolve over time, for the better.

He warns data is a major risk if it starts to be used in an uncontrolled way across multiple clouds. “In the age of privacy and GDPR type regulations, the impact on an organisation that doesn’t have strong data governance controls in place can be far-reaching. Bigger isn’t always better and can lead to spiraling costs. Ensuring the environment is
right-sized and reviewed regularly will drive optimisation and consolidation opportunities, minimising risk but also unnecessary wastage and cost.”

Ogden from Mimecast says organisations should start by mapping out detailed data flows and then testing ‘what if’ scenarios for continuity and resilience. Failing to manage complexity at scale is the biggest risk for a multi-cloud approach. Disparate systems require tight identity and access management, authentication, and encryption controls. Many organisations rely on built-in security by single cloud providers like Office 365, which isn’t always effective against advanced evasive threats. An additional layer of security on any cloud service is necessary for adequate protection against ever-changing threats, he says.

Along with due diligence and best practices, organisations would also require new skill sets for adopting multi-cloud. “This includes understanding the framework requirements and designing the cloud infrastructure, as well as handling cloud migration, cloud governance and management, application deployment, cloud security, cloud cost management, and more. The good part is there are lots of mature tools in the market that can handle cloud environments, and some require minimal training,” says Srinivasa Raghavan, product manager, Site 24x7, ManageEngine.

White from Nutanix adds: “Cloud platforms change the application development lifecycle. To succeed, IT teams may need to become adept at using new, emerging technologies and be able to efficiently manage cloud resources during PoC, test, staging, and production—across multiple different environments. Because hiring people with these skills is a challenge, the organisation may have to re-train existing staff and supplement with consultants and professional services.”

Zeineldin from eHDF offers another perspective: “Adopting a multi-cloud strategy comes with its own set of challenges. Managing multi-cloud solutions from different vendors across different cloud environments can be difficult and time-consuming. If not monitored and managed properly, it can lead to several operational issues. Many regional organizations are signing on managed cloud services providers to assist them with their multi-cloud solutions, where they will manage issues with interoperability, infrastructure, network, storage, backup management and monitoring, security and other challenges.”

Though one of the selling points of the cloud is cost reduction, users moving to multi-cloud environments have to keep an eye on costs; if you are not careful about the cost of managing multi-cloud environments, it can easily spiral out of control. Pope from ServiceNow says elimination of waste is a key concern for many workloads that are over-sized or under-utilized can make costs rise and spiral. Transparency of costs, alignment to requirements, and who is using what should put accountability back on the owners of applications or resources, highlighting where costs are occurring. “Providing a single portal or store experience will ensure that there is only one way to go, to request, procure and deploy (using automation) cloud resources, ensuring full traceability and process governance.”

In agreement, White from Nutanix says cloud services are priced differently from the simple fixed-price models of the traditional data centre. “Budgeting and managing costs in the public cloud is still a worry for many businesses, and there are plenty of horror stories about companies that have been saddled with huge and unexpected costs. With a well-designed cloud architecture, and a comprehensive, multi-cloud management plan, you can not only keep private and public cloud costs under control, but you can also optimize your spending and completely avoid bill shock. You should consider dynamically provisioning and decommissioning system resources based on parameters such as workload, user traffic, etc.” he sums up.