Playing catch-up

As infrastructure-as-a-service and platform-as-a-service models gain popularity in the U.S. and Western Europe, adoption amongst Middle East enterprises remains low. Ben Rossi asks why, and analyses the challenges that organisations face with IaaS and PaaS in order to predict the movement of the market.

A few years ago the debate was similar, only with software-as-a-service (SaaS) - the benefits were apparent, but the adoption was low. Now, with SaaS far more common place across organisations, it is infrastructure-as-a-service (IaaS) and platform-as-a-service (PaaS) that are getting the same treatment. But will they follow the same course?

Answering that question is not possible without addressing the topic of cloud as a whole – the foundation of these as-a-service models. It is a rising phenomenon, but again one where currently the adoption has not matched the hype.

"The Middle East is still lagging behind when it comes to cloud infrastructure – and the rise of cloud computing could accelerate the rate of adoption of the latest solutions," says Ian Harris, leader, system integrators at Ciena EMEA.

Pappu R. Rao, director of technology services at GBM, points out that, though the concept of IaaS and PaaS makes economic sense to customers, the idea has yet to gain wide acceptance as a reliable and secure way

Ian Harris, leader, system integrators at Ciena EMEA

of provisioning infrastructure.

"Overcoming apprehensions regarding data security and liberalisation of financial regulations to allow data to reside across borders are necessary to accelerate the adoption," Rao says.

Farid Faraidooni, chief commercial officer at du, adds: "There is a lack of a critical mass of credible providers in the region offering IaaS and PaaS services and

cost of bandwidth has still not reached a critical mass in terms of making it easily available and affordable – although, this is rapidly changing."

Cloud is ideal for startups with little money that are growing very fast, according to Gregor Petri, research director at Gartner. "So if a region has few of these typically consumer oriented startups, cloud is less needed," he says.

Ready

Sachin Bhardwaj, head of business development at eHosting DataFort, believes the Middle East is now ready for SaaS because applications on this platform don't require high levels of security and can be used on the public cloud.

For IaaS and PaaS to reach the same stage, he says the region must change its mindset. He also predicts greater adoption of private cloud environments in the Middle East.

"We are already seeing a few customers using these technologies. It is these early adopters who will gain the most in the long run as they will achieve economies of scale

Pappu R. Rao, director of technology services at GBM

Farid Faraidooni, chief commercial officer at du

and a faster ROI compared to those that don't," he says.

According to Sam Tayan, regional director MENA at VMware, the region needs more choice in terms of offerings from service providers.

"Customers have a higher degree of confidence when dealing with household names and, when it comes to this region, there are some but there isn't a great deal of variety," Tayan says.

On the other hand, George DeBono, GM MEA at Red Hat, emphasises the privacy laws across the region as an inhibitor of IaaS and PaaS adoption. But he also believes the region is seeing a "very mature" approach to cloud overall.

"Many organisations are heeding the view to not blindly accept that cloud is for everything. Instead, they are defining exactly what it is that they expect from cloud and where it is that cloud will fit in their delivery equation. We also really need to move away from some of the views that cloud is only an end delivery platform. Cloud can be used for many things," he says.

Whilst the "approach" to cloud in the region could be described as mature, it does remain that the adoption is low compared with other markets. Tayan says this will improve with natural progression.

 "I think the benefits will start to materialise clearer and organisations will start to see the advantages of scale, speed of deployment, flexibility and so on. These benefits will become more obvious to customers."

Harris goes as far as saying the Middle East must invest in cloud infrastructure in order to remain competitive.

"If that happens, there will be more supply of high-availability data centre infrastructure (tier 2 and 3 data centres) with the attributes required for high-end enterprises to adopt cloud services," he says.

Benefits

In terms of benefits, Tayan says there are three clear advantages – cost, flexibility and speed.

Rao also emphasises cost, stating IaaS and PaaS will lower TCO based on economies of scale with charging based on utilisation and no initial investments.

"This is ideal for new startups, time-bound projects and development and test environments which have an intermittent need for computing power. Cloud provides access to world-class infrastructure without the need to have technological expertise thereby reducing operational costs," he says.

For SMBs with a limited capital budget, IaaS shifts the capital requirements to an operational expense that tracks with the growth of business, according to Bhardwaj.

Despite the benefits being clear, there are also challenges and limitations that organisations must bear in mind.

"The main challenge is they are giving up control, so they become more dependent on

Gregor Petri, research director at Gartner

the providers of these services. Gaining trust in these providers and understanding how to manage risk if you have no control will take time and will require these providers to prove they can be trusted," says Petri.

Faraidooni, however, believes the main challenges come with security and data privacy.

"It is also a question of trust in the provider that comes into being and the availability of regulation and standards. While in the western world this is being strengthened by laws and compliance regulations, the Middle East is slightly lagging in this area," he says.

Rao agrees, adding: "Being located in the cloud, there are inherent security concerns and in some sense a lack of clarity on the ownership of data and associated consequences. Due to limited service providers and lack of standardisation, organisations may be locked-in and could face difficulties in changing service provider."

DeBono says organisations can avoid these problems by opting for private, rather than public, cloud solutions.

"Open source IaaS solutions, such as OpenStack, allow organisations to instantiate a full cloud computing environment within the confines of their own data centre, thereby alleviating any concerns about security," he says.

Also from a PaaS perspective, limitations are due to the platform and its flexibility itself, according to Faraidooni.

"As technology matures, platform deficiencies will be addressed. Availability of APIs and DIY easy-to-use tools for development and deployment will make it easier for enterprise to use PaaS.."

Babysitting

Bhardwaj says that many feel IaaS requires a "constant babysitting" of operating systems, data stores, messaging queues and application containers.

"It's clear that most IaaS platforms require a substantial IT know-how and understanding when it comes to deploying instances and managing load-balancing, elasticity and scalability mechanism," he says.

Ultimately, however, whether to use SaaS or to deploy an IaaS or PaaS depends on the needs of each organisation.

"Is the company looking for standard functionality they want to use as easily as possible, in which case they more likely

George DeBono, GM MEA at Red Hat

may choose SaaS, or do they want to offer a unique function to a specific audience and the function they offer a differentiating capability, in which they are more likely to go with PaaS and IaaS," Petri says.

The next couple of years are now very important in dictating the relevance of IaaS and PaaS in the Middle East.

Tayan says he thinks they will transition from something people are thinking about to something people are actually adopting.

"IaaS and PaaS will be those enablers that allow IT teams to reach the bar in the work place. Many companies now see their IT teams as a mini service provider within their organisation and that is contributing to the popularity of infrastructure and applications as a service," he says.

With more companies entering the market to offer infrastructure and platform services, this year and 2013 will see increasing popularity for IaaS and PaaS, according to Bhardwaj.

Sam Tayan, regional director MENA at VMware

"Companies are cutting down budgets on infrastructure and are looking at IaaS and PaaS as it is more viable and cost effective. Also companies are being forced to consider not investing in IT equipment, which is considered a depreciating asset. As a result IaaS will see greater adoption as more companies are squeezed for budgets," Bhardwaj says.

Petri says the main change will be local companies using these offerings to create localised and specialised services for their customers.

"Thanks to cloud they will be able to do that faster and more cost effectively. Using cloud computing will become the standard way of doing things for specific areas like running websites and doing test and development work," he says.

"Cloud will not evaporate local data centres and in-house IT - it will become a new option that exists next to existing ones and it will grow a lot faster than the existing models," he concludes. ∎

Sachin Bhardwaj, head of business development at eHosting DataFort

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✱ BY THE NUMBERS

$12.3bn
Worldwide Software-as-a-Service (SaaS) revenue in 2011.

$14.5bn
Forecasted worldwide Software-as-a-Service (SaaS) revenue for 2012.

17.9%
Forecasted increase from 2011 worldwide Software-as-a-Service revenue to 2012.

$22.1bn
Forecasted worldwide Software-as-a-Service (SaaS) revenue for 2015.