Cloud Computing

Where We Stand and What Lies Ahead
Mobily; the official brand name of Etihad Etisalat Company, is the leading ICT solutions provider in the Kingdom of Saudi Arabia. Established in 2004, Mobily is the 2nd operator to launch mobile services in the Saudi telecommunication market and is publicly listed at Tadawul Stock Exchange in Riyadh.

Today, it offers the largest and most advanced portfolio of ICT Solutions in the Kingdom; encompassing Datacenter, Business Cloud, Information Security, Business Continuity, Infrastructure and Unified Collaboration solutions. Mobily presents its ICT portfolio as the most reliable, diverse and cost effective option for Saudi businesses by leveraging its industry-leading data network, superior connectivity and world-class infrastructure; which includes:

- Tier-II, Tier-III and Tier-IV Uptime™ Institute certified datacenter facilities located across the Kingdom. Thus, promising the highest level of availability, geographic redundancy, and physical as well as network security.

- ISO/IEC 27001:2005 ISMS, SAP® certified and Cisco® powered enterprise-grade cloud infrastructure offering fully scalable cloud solutions while guaranteeing resiliency, efficiency and availability that matches global standards.

- A Security Operations Center (SOC) certified to ISO 9001:27001 standards plus Coalfire and SAS-70 Type-II accreditations. The SOC is located in Mobily’s Tier-IV Certified Data Center in Riyadh which ensures your business critical data is highly secure and available around the clock.

Mobily has secured its position as the ICT leader in the Kingdom by dynamically and continuously enhancing its capabilities. Consistent with this approach, it has established strategic alliances with key international ICT players such as Accenture, Cisco, EMC2, IBM, Intel, Microsoft, SAP and Virtustream. The global expertise of these partners empower Mobily to offer cutting edge technologies with top-class support to the local market.

Mobily ICT solutions connect businesses of all types and sizes to limitless possibilities; offering them significant financial, operational and technological benefits. Meanwhile, the one-stop shop service model offered by Mobily helps to eliminate all hassles of managing multiple vendors and dealing with associated technology risks - giving businesses a complete peace of mind.
Executive Summary

Saudi Arabia has emerged as a leading IT market in the Middle East over the past decade, showcasing robust growth and strong opportunities among the regional markets, many of which are still emerging.

In 2013 alone, the Saudi IT market grew 17% year on year. With a booming economy, strong oil revenues, and various government-led initiatives to support the economic development of the country, various enterprises across different sectors in Saudi Arabia have embarked on technology revamps to support their growing business requirements. Through these modernization initiatives, Saudi enterprises are not only investing in their infrastructures and applications, but they are also evaluating new technologies and delivery models to help them function more efficiently with lower operating costs.

Cloud computing has emerged as an answer to this dilemma; companies can utilize virtual resources using online delivery platforms on a pay-per-use basis. With cloud computing, larger enterprises with their own datacenters have shown a preference for hosting private cloud internally. Small and medium-sized enterprises (SMEs) use public cloud services more often, with most preferring to use infrastructure as a service (IaaS*) in order to keep their hardware and maintenance costs low.

The past 12–24 months have seen considerable investments in cloud enablement initiatives across Saudi Arabia as service providers (both local and multinational) have invested in their services and have introduced their cloud offerings in the market. Local service providers have invested in their datacenter infrastructures to capitalize on increasing demand for cloud-based services. Multinational vendors, on the other hand, have been utilizing their consulting and delivery teams to consult and help customers transition to cloud hosted in their global datacenters.

Like any new technology this innovative service delivery model, with its ease of provisioning, comes with certain challenges. The majority of customers that were surveyed on cloud cited concerns around data privacy, security, compliance, and sovereignty, which often act as inhibitors to the usage of cloud-based services in Saudi Arabia. While no specific regulations govern data privacy, except in the financial services sector (as mandated by the Saudi Arabian Monetary Authority), customers are often apprehensive when it comes to using public cloud services, as the data may not reside in the country, unless the public cloud services are offered using local datacenters. Close to 27% of the IT heads surveyed by IDC indicated that their enterprises are bound by industry regulations, which inhibit the use of cloud-based services (Source: IDC End-User Survey in Saudi Arabia, 2013).
Cloud Spending in Saudi Arabia

Cloud Spending in Saudi Riyals, 2012-2017

![Chart showing cloud spending in Saudi Riyals from 2012 to 2017.]

Cloud Market Growth, 2012-2017

![Chart showing cloud market growth from 2012 to 2017.]


Total Cloud Spending in 2013

(SAR 99 Million) $26.34 M

Total Cloud Spending 2014 (F)

(SAR 151 Million) $40.31 M

Cloud spending is expected to almost quadruple from 2013 to 2016

X4

2013
Telcos are poised to exploit the upcoming growth in cloud adoption by developing partnerships and leveraging recent datacenter investments.

As per the 2014 IDC Saudi Arabia CIO survey, 20% of Saudi CIOs highlighted investments in private cloud as a key priority in 2015. 24% of Saudi CIOs showed interest in public cloud services not before 2016 displaying a significant growth in adoption of public cloud in the short term future.


**CAGR of 61.9%**
(Compound Annual Growth Rate)

Private cloud is currently the preferred model

**CAGR of 53.1%**

Public cloud adoption will pick up in the medium term

Public cloud services are forecast to record strong growth through 2016, with most demand coming from SMEs.

Private Cloud vs Public Cloud

- 24% Already implemented
- 22% Planning for in 2014
- 20% Planning for in 2015
- 17% Not planning to implement
- 7% Not before 2016

- 24% Not before 2016
- 24% Not planning to implement
- 20% Planning for in 2015
- 11% Already implemented
- 9% Planning for in 2014
The Saudi cloud services market has shown significant growth in 2013, as an increasing number of providers (both local and multinational) have invested in their services portfolios and introduced cloud-based services.

Typically, Saudi organizations have shown a strong preference for insourcing, retaining full control over their IT functions due to increasing security fears. With time, however, this trend has changed considerably, as companies in the country have started outsourcing elements of their IT management to third-party service providers through discrete managed services contracts. IT heads are evaluating different technologies to support growth plans and business objectives, including agility, optimization, and increased efficiency.
However, times are changing and local market dynamics are evolving. The Saudi ICT market is maturing very rapidly, and customers are becoming increasingly aware of their data requirements; thus they are opening up to new ways to support their businesses. Pure-play service providers specializing in cloud computing are increasingly partnering with local providers to offer customer awareness workshops and seminars, business development, consulting, and the migration of their IT environments to cloud.

Local telecommunications service providers have also expanded their offerings and developed their own cloud portfolios. Most of them started with IaaS offerings, followed by software as a service (SaaS). Local service providers stand to benefit from their strong positions and infrastructures in Saudi Arabia, which are key differentiators, particularly for customers that have concerns over data locality and sovereignty. Telecommunications operators are also forging alliances with local and global IT companies to further develop and mature their cloud offerings in the Saudi market.

Larger organizations in Saudi Arabia have raised concerns about the security of their data; hence they lean heavily toward deploying in-house private cloud. A number of large Saudi enterprises have converted their virtualized infrastructures to full-fledged private cloud environments hosted in their own datacenters.

Local datacenter service providers offering infrastructure and applications hosting services on a third-party basis have also extended their services by offering their datacenter facilities to customers to host private cloud. This is particularly beneficial for companies that do not have their own datacenters and want to avoid high capital expenditures. Cloud service providers are continuously investing in educating potential customers so they understand the benefits of features such as automation, metering (measure consumption as per the usage), and chargeback (The customer pays only what was really consumed and not for the provisioned capacity); which are part of a true cloud deployment.
The cloud services market in Saudi Arabia is expected to exceed SAR 151 million in 2014 and to total more than SAR 678 million by 2017, with a CAGR of 61.9% over this three-year period.

IDC expects the majority of the demand for cloud services to be driven by the SME segment, which is often handicapped by limited skills and resources. SMEs are expected increasingly to utilize public cloud offerings for their computing and storage requirements to achieve cost savings with consumption-based payment models.
Public cloud in particular is expected to generate strong interest in the professional services sector, with organizations in this vertical continuing to invest in public cloud IaaS- and SaaS, ranging from services such as email to office productivity tools, project management, accounting software, customer relationship management (CRM), enterprise resource planning (ERP) as a service, secure content management (SCM) as a service, and unified communications as a service.

The public sector is one of the biggest IT spenders in Saudi Arabia. IDC believes government organizations will be reluctant to use third-party providers for their cloud requirements. Preferences for private cloud services are strong in the Saudi government sector, with a number of ministries in the process of implementing private cloud.

The finance sector is also a prime candidate for cloud services. However, given the various compliance and regulatory requirements mandating that financial and customer data reside within the country, IT heads of financial institutions would prefer to have their own private clouds, particularly given that many public cloud offerings involve datacenters located abroad. Nevertheless, financial services institutions are expected to invest in specific elements of public cloud offerings, such as CRM services (Salesforce, Microsoft CRM, etc.), which they can utilize for their internal sales and marketing requirements.

Although a number of educational institutes are investing in private cloud, the education sector as a whole is a prime candidate for public cloud services. SaaS offerings such as online learning platforms (Blackboard) and collaboration tools such as Office 365 and Dropbox for file sharing among students and staff are popular services in this sector. IDC believes educational institutions will undertake considerable investments in various public cloud services through 2018.

The oil and gas (O&G) sector in Saudi Arabia is very large and is among the country’s leading revenue generators. O&G companies tend to favor insourcing and are likely to utilize services delivered through internally implemented private cloud. Nevertheless, it is very likely that O&G enterprises will increasingly utilize certain applications and workloads using public cloud, such as collaboration tools, project management applications, and office productivity and workspace tools, particularly for its increasingly mobile workforce.
Q1 What areas of cloud spending are going to drive growth over the next year?

Cloud is a strategic focus area for a number of leading service providers in Saudi Arabia. Local and multinational technology vendors are increasingly investing in cloud portfolios, positioning them to their target audiences. A number of service providers have already started providing their solutions using cloud as a delivery platform, with usage-based payments to help attract more customers. Cloud computing has been particularly beneficial for SMEs, which are often handicapped by budget and skills constraints.

The total cloud services market is expected to grow some 53% year on year in Saudi Arabia. IDC believes a considerable portion of these revenues will be driven by public cloud services, particularly IaaS and SaaS, with enterprises aiming to curb their overall operational expenses and avoid making high capital investments. A utility-based pay-per-use model would suit such enterprises best in terms of IaaS for their computing and storage requirements. Companies mostly use SaaS for email, office productivity tools, and CRM, among others.

Q2 How can CIOs benefit from using cloud-based services?

The Saudi services market is maturing very fast compared with the rest of the Middle East. Even though Saudi companies still rely heavily on local onsite support, outsourcing and managed services have shown steady increases. This also has led to increasing cloud adoption in the country. Both local and international providers are launching and positioning cloud computing services in the market. The costs of public cloud services have gone down over time, which has helped to drive the significant uptake of these services over the past couple of years in Saudi Arabia. A number of providers have decreased their subscription prices in order to capitalize on the increasing demand for cloud services in Saudi Arabia and have increased their market shares.

IT heads and CIOs in Saudi Arabia recognize that cost per user and a lack of upfront CAPEX as being among the major benefits of using cloud-based services. With cost being a key differentiator, local service providers are expected to struggle to stay competitive, considering that the introduction of cloud-based services is often accompanied through hefty investments in local datacenters. They will be able to compete by communicating the key differentiators of high-quality infrastructure and support services and local datacenters, which comply in terms of data residing within the country.

Q3 What are the key risks CIOs need to consider when using cloud-based services?

Like any service procured from an external provider, varying degrees of risk are involved — risks that CIOs need to consider. These risks can range from service delivery to outages. One of the biggest risks that CIOs consider, of course, irrespective of the size of the vertical in which they operate, is data security. Unlike situations in which companies host their infrastructures with third-party datacenters, hosting information in the cloud entails the data being hosted off-premise (outside of the country in most cases). The cloud provider is responsible for managing all maintenance and updates and ensuring tight security.

Even though loss of data and security are among the key risks, CIOs are open to using local service providers for cloud-based services. In addition, high service quality, multiple redundancies, and stringent service-level agreements are important for CIOs when considering the reduction of risk. Given the fact that cloud services are delivered over the Internet, another major risk to consider is loss of Internet connectivity. Loss of data and the provider’s own disaster recovery are among the key factors to consider when using third-party cloud-based services. Telecommunications operators are generally strong in terms of their infrastructure and have risk mitigation processes in place in order to ensure efficient service delivery with little or no service disruption.
The cloud computing market in Saudi Arabia has shown significant growth in the past few years. With the overall Saudi IT market growing rapidly, CIOs and IT heads are embarking on various initiatives within their enterprises to support business growth. Improving efficiency, standardization, and curbing operational costs are at the top of nearly every CIO’s agenda for the year ahead. Cloud computing addresses a lack of application standardization and lowers costs by offering standard user interfaces and utility-based payments.

Although SMEs are among the key targets for cloud-based services, CIOs of large enterprises are also increasingly considering cloud — specifically, private cloud from their own datacenters.

One of the major reasons for the strong preference among larger enterprises to implement private cloud using their own infrastructure is driven by CIOs’ concerns around data security and locality. Larger enterprises, particularly those in the government and finance verticals, value data security; hosting data outside of the country is not an option for them. This is because, in some cases, regulations in Saudi Arabia stipulate that particular data be hosted within the country’s borders; such cases inhibit the use of public cloud services located abroad.

In addition to data security, business continuity is a strong concern for potential customers of public cloud services. As such, service reliability is a strong consideration when selecting a cloud services provider. Customers generally prefer providers that offer stringent service-level agreements backed by service credits and/or penalties. Business continuity and security often rate high on the priority list of Saudi CIOs.
When compared with businesses in other mature IT markets, Saudi enterprises have been slower in adopting IT outsourcing, given their preference for managing their IT environments in house. However, this trend is changing, as CIOs and IT heads are under increasing pressure to cut costs and deliver services based on highly efficient IT processes that align with business objectives and support and sustain business growth. Advancements in technology and delivery models have increased the appeal of cloud computing. Local and multinational service providers are increasing investments in their services portfolios and introducing cloud-based services, which they are targeting at CIOs and IT heads across the country, highlighting efficient service delivery and flexible subscription-based payment models. In terms of services, local service providers and telecommunications operators have invested in their infrastructures to support their cloud-based services in Saudi Arabia with the launch of various IaaS-, SaaS-, and platform-as-a-service–based services delivered via public and private cloud. CIOs are recommended to have fully developed cloud strategies, including proof of concept, before transitioning to any form of cloud computing. Solid business objectives with the selection of the right cloud solutions to support technology and business requirements are absolutely critical for CIOs, and data loss, security, and loss of connectivity should be at the top of CIOs’ list of risks to evaluate and measure before transitioning to a cloud-based environment.

Definitions

**SaaS:**
Software as a Service includes Collaborative Apps, Content Apps, CRM, ERM, SCM, Ops & Manufacturing Apps, Engineering Apps delivered as a Cloud Service along with System & Network Mgmt, Security, Advanced Storage software.

**PaaS:**
Platform as a Service includes Cloud Testing, Database as a Service, Integration as a Service, Cloud Application Platform, Data Analysis & Access, Content Management, App Server Middleware, and Other AD&D delivered as a cloud service.

**IaaS:**
Infrastructure as a Service includes Basic Storage, Servers, Network and Desktops delivered as a service.