





The Saudi Arabian ICT market, the largest in the Middle East, will continue to grow at a strong pace in 2014

with an estimated YoY growth rate estimated at 6.1%; which is much higher than many developed market. Driven by a strong oil revenues and high political stability, the market is poised to benefit significantly from modernization efforts in various sectors and citizen centric initiatives of the government.

The key ICT investment priorities of Saudi organizations include datacenter consolidation, expansion and upgrade of networks, application modernization, and deployment of business intelligence and analytics, ICT security, private cloud, and mobility.

However, Saudi CIOs face significant challenges in managing IT. Shortage of IT skills, maintaining security, regulatory compliance and driving innovation through technology projects are the key challenges.

Info graphics Section

ICT spending comprises of telecommunication and IT spending. IT spending further comprises of spending on hardware (systems, storage, network, peripherals, and mobile phones), packaged software and IT services.

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Telecommunication and IT services contribute to 74.4% of ICT spending in Saudi Arabia in 2013

Strong secular growth in ICT spending, primarily driven by mobile services



Moderate growth in fixed line services

High penetration and increasing competition



TOTAL IT Spending in 2013 (IDC blackbook Q2 2013)- 36.8 Bn SAR



TOTAL IT Spending in 2017 (F) (IDC blackbook Q2 2013)- - 50.02 Bn SAR

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Total ICT Spending 2013 (IDC blackbook Q2 2013)- - 107.8 Bn SAR



Total IT Spending - 36.8 Bn SAR

IT spending to increase 35.6% from 2013 to 2017.



IT services spending will witness strong growth till 2017 and is expected to form the largest share of IT spending.

4.1% CAGR * - Total ICT (2013-2017)



Within the IT market, spending on IT Services (12.6% CAGR) and packaged software \ast (12% CAGR) will grow the fastest.



Telecommunication services spending are forecasted to show low levels of growth (1.9% CAGR) primarily due to intense competition and stagnating subscriber growth.



Young technology savvy population to drive smart devices growth (spending on smart phones to grow at 9.3 % CAGR)

5

61.9% - CAGR - Cloud Services (2013 - 2017)



CIOs have a cautious approach to cloud adoption.



Private Cloud is the currently preferred model (53.1 % CAGR between 2013-2017) while public cloud adoption will pick up in the medium term (70.7% CAGR between 2013-2017)



In an IDC CIO survey conducted in 2013, 66% of Saudi CIO's highlighted investments in private cloud as a key priority over the next 12-18 months. 34% of the Saudi CIO's showed interest in public cloud services in the short term.

Telco's are in the driving seat to exploit the upcoming growth in cloud adoption by developing partnerships and leveraging recent datacenter investments.

* CAGR (Compounded Annual Growth Rate) - The year-over-year growth rate of an investment over a specified period and is calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the period being considered.

* Software includes off the shelf software packages, licenses, annual maintenance for software solutions like updates and upgrades.

The Saudi Arabian ICT market is rapidly maturing and is driven by major initiatives from the government aimed at significantly upgrading the Kingdom's overall transportation, communication and public sector infrastructure.

The government attaches great importance to ICT development and the recent years have seen an unprecedented commitment on the part of the government to achieving leadership in ICT.

As part of the drive to diversify the economy, a number of key initiatives have been pursued, including the development of the economic cities, major expansion of airports across the country, and transformation of the education and healthcare sectors.



Currently, there is substantial focus on the implementation of the second stage of the Saudi e-government initiative, and many government entities are planning to integrate their e-government services' portfolios with Yesser, the national e-government authority.

The financial services sector has seen a surge of investment in infrastructure in the past few years. Banks are now expanding their presence across the Kingdom and are looking to optimize their infrastructure by undertaking transformation projects.

2 **The oil and gas sector** has embarked on a path towards greater intelligence and reflected in the deployment of Intelligent Fields (I Fields), digital oil fields and integrated operations. Advanced security solutions, big data and analytics solutions and private cloud deployments are emerging as key investment areas in this sector.

Telecommunication services spending by businesses continue to grow relatively slowly, primarily due to high levels of current penetration of services, and increasing competition. Operators are expanding their distribution networks to improve service reach and at the same time are investing in network upgrades to enhance customer experience, especially for mobile broadband services. The simultaneous launch of Long Term Evolution (LTE) networks, in late 2011, by all three mobile operators made Saudi Arabia the first country in the region to offer LTE services.

Telco's are also increasingly looking to bolster their IT services revenues to try and compensate for slowing telecommunication revenues, and to achieve this, they are looking to forge alliances with global and local IT companies to further develop their offerings.

Saudi Clos are increasingly looking to deploy "business need oriented", emerging technologies and models such as mobility, analytics and cloud. However, they are also quite wary of the skills needs and security implications of new technology adoption.

Forecast

ONE Public Sector

Public sector IT spending is expected to cross 4.71Bn SAR in 2014 and is expected to grow to reach 6.79Bn SAR in 2017 representing a growth of 44.2% between 2014 and 2017. The public sector spending represents 11.3% of the Kingdom's overall IT spending in 2013.

The Yesser e-government program now includes more than 875 electronic services offered by over 100 public sector agencies. Some public sector agencies deliver over 50 percent of their e-services as full transactional services. Recent examples include: Abshir from MOI, Baladi from MOMRA etc.

The second action plan for the e-government program, scheduled to be executed during the period 2010-2016, is presently underway. Three major projects, namely Government Service Bus (GSB), Government Secure Network (GSN) and the Saudi Government Portal have been implemented. Together, these three projects constitute the infrastructure backbone of the Yesser program.

New investments are expected in areas such as : Government Service Bus (GSB) on-boarding, Messaging Gateways (SMS and email), Business continuity, Government-wide Enterprise Architecture, Cloud computing, Open source, GSN Product Enhancements - Voice and Video, Datacenter consolidation, Mobile Government (m-government).

PUBLIC SECTOR IT SPENDING



THE YESSER E-GOVERNMENT PROGRAM



Education

Healthcare

Saudi Arabia allocated 210 Bn SAR (3% increase from 2013) to education in the 2014 budget, which amounts to a significant 25% of the annual national budget.

Both the Ministry of Education (that finances and manages all public schools) and the Ministry of Higher Education (that finances and supervises public universities) have been executing their respective National Plans which include large scale build out of infrastructure and further upgrade of universities across the Kingdom.

As of now, all 25 public universities in the Kingdom have deployed Student Information Systems and 23 of them have deployed Learning Management Systems.

To further strengthen education of nationals, Saudi Arabia also intends to send 185,000 students abroad for higher studies. The Ministry of Higher Education (MOHE) has invested in Safeer, a cloud based system built to serve Saudi students outside the Kingdom, through 230 interconnected electronic services to support the educational and administrative processes.

Technology Focus areas: Education institutions are deploying solutions such

as classroom and learning technologies, mobility, campus systems, and content management, as well as administrative systems such as student management systems, Learning Management Systems, productivity solutions etc. The 2014 budget allocated 108 Bn SAR (8% increase from 2013) to healthcare and social welfare, which amounts to 13% of the annual national budget.

Major initiatives are underway to increase the number of hospitals under the Ministry of Health and over 132 new hospitals are under construction in the Kingdom which offer a combined capacity of 33,750 beds including the construction of 5 medical cities and 750 primary health centers in 2014

The Al Hanouf Group and US based Mount Sinai Hospital recently signed an agreement to build a medical city 'Al Hanouf-Mount Sinai Medical Rehabilitation' with a capacity of 1,000 beds at the cost of SR 700 Mn for special needs patients in Riyadh.

Technology Focus areas: Increased spending on digitization and content management systems, E-services, cloud, mobility, Server and desktop virtualization, healthcare management systems, picture archiving and communication system (PACS), telemedicine, patient monitoring systems, hospital management systems.

^{*} Public Sector as defined for KSA covers Government agencies, the Education sector (public schools and universities) as well as the healthcare industry financed and managed by the Government (Ministry of Health and all armed forces healthcare providers and hospitals) administrative systems such as student management systems, Learning Management Systems, productivity solutions etc.

Forecast

TWO Banking, Financial services and Insurance (BFSI)

IT spending in the Banking, Financial services and Insurance (BFSI) sector is expected to cross 3.79Bn SAR in 2014 and is expected to grow to reach 5.01Bn SAR in 2017 representing a growth of 32.2% between 2014 and 2017. The BFSI sector spending represents 9.08% of overall IT spending.

Recently Fitch, a global rating agency, upgraded the Kingdom's sovereign rating from AA- to AA, denoting a stable outlook for the Kingdom. Saudi Arabia Monetary Agency's (SAMA) professionalism in handling the Kingdom's financial reserves has been a key contributing factor to this upgrade.

3

The rising income of Saudi households is expected to boost the demand for financial services, and banks will install more branches and Automated Teller Machines (ATMs).

Use of online and mobile banking services in the kingdom is expected to surge as customers gain greater confidence with their usage.

Growing regulatory demands from authorities such as SAMA and CMA for regulations such as BASEL III are driving Saudi banks to adopt international best practices by improving processes, control and traceability capabilities. Compliance requires deployment of more sophisticated ICT solutions including strengthening of existing banking systems, security and risk management systems.

 Technology Focus Areas: ICT Security (Identity and Access Management, Data Loss Prevention & two factor authentication), online and mobile banking platforms, disaster recovery sites, advanced analytics tools, virtualization and cloud implementations, specific banking applications for core banking, retail banking, etc.

IT SPENDING IN THE BANKING, FINANCIAL SERVICES AND INSURANCE (BFSI) SECTOR



THREE Oil & Gas

- IT spending in the Oil & Gas sector is expected to cross 2.64Bn SAR in 2014 and is expected to grow to reach 3.60Bn SAR in 2017 representing a growth of 36.4% between 2014 and 2017.
- Initiatives to maintain crude oil production, development of the natural gas production capacity and development of downstream industries (such as refining and petrochemicals) and modernization of the upstream processes (where the focus is on investing in digital oilfields, smart wells, big data and analytics) are gathering momentum.
- Security breaches in the Oil & Gas sector were perceived as a "game changer" for IT security and a "shock to the sector" and as a result IT security investments have picked up significantly in the industry.
- Focus Areas: ICT Security (holistic IT security approach and deployment of advanced IT security solutions), intelligent systems for upstream operations, big data & analytics.

IT SPENDING IN THE OIL & GAS SECTOR



A GROWTH OF

36.4%

Questions & Answers

Q1 What areas of ICT spending are going to drive growth in the next 3 years?

The Saudi government has placed significant emphasis on ICT at a time when the Kingdom has undertaken a series of transformational initiatives that include large scale infrastructure projects and public sector initiatives that include investments in the healthcare and education sectors. These initiatives are expected to drive demand for IT investments. Growing acceptance of remote delivery models like cloud and managed services, increasing dependence on mobility and continued investments in advanced security solutions will contribute substantially to the ICT growth in the coming years. Significant investments are being made in datacenter expansion and consolidation. An IDC CIO survey conducted in 2013 showed that nearly 50% of respondents had deployed some level of virtualization in 2012 itself and many were considering private cloud deployments. Consumerization of IT continues at an unabated pace. The shift towards more portable devices is accelerating and the number of tablets shipped in the Kingdom is expected to grow at a CAGR of 46.5% between 2013 and 2017. Bring-your-own-device (BYOD) trends are gathering pace but may face resistance due to security concerns.

Q2 What would a larger acceptance of remote delivery models change in the ICT industry?

Even though Saudi organizations generally prefer to manage their IT operations inhouse, the growing complexity of IT and scarcity of advanced IT skills is forcing a rethink. Saudi ClOs rated skill shortage as their biggest challenge in an IDC ClO survey conducted in 2013. As a result, outsourcing is gradually being accepted as an option. Regulations in some industries stipulate that data needs to be hosted within the Kingdom. For example, SAMA strictly prohibits processing of data from Saudi banks outside the kingdom. The need for control and security concerns are also driving organizations in other sectors such as oil and gas, government and retail to build their datacenters to cater to their needs. However, rapidly growing capacity needs and lack of resources are persuading ClOs to consider remote delivery models. Such models will provide them cost savings, access to modern technologies and enable faster delivery of services.

Q3 What are the biggest risks and inhibitors of the high growth areas?

Despite being in the midst of rapid economic growth, business organizations lag behind in process maturity. This immaturity affects IT adoption adversely. As discussed earlier, the Kingdom also faces a shortage of advanced IT skills. Saudization initiatives will take time to bear fruit and in the meantime, most sectors face a serious challenge in satisfying the growing technology needs. An IDC CIO Survey conducted in 2013 highlighted that the shortage of skills led to project delays, increased dependence on vendors and inhibited adoption of new technologies. Although universities are taking initiatives in that regard, the supply of local ICT talent remains far below market requirements - despite the additional number of post-graduates coming from Ibtiath (oversea higher education program). Another inhibitor to IT market growth is the lack of intellectual property policies and their effective enforcement. Software piracy in the Kingdom continues to remain high hampering ICT investments from vendors and IT entrepreneurs.

Q4 Where is the current and future focus of government spending in ICT?

The increased spending on computerization of processes in government departments, along with the government's focus on public services through education, healthcare and transportation will drive ICT spending in the public sector. Several projects in mobility, datacenter consolidation and virtualization are underway and investments are expected in private cloud, analytics and advanced security solutions.

Q5 Which verticals of the private sector will drive the future growth in ICT?

The Saudi government's diversification drive is driving investments in the private sector, particularly in the transportation, communications, and others. Private sector organizations are striving to expand operations but also trying optimizing their infrastructure investments, and enabling and automating business processes.

The financial services sector is also witnessing significant ICT investment, mainly driven by an increased focus on regulatory compliance and business expansion to cater to new geographies and customer segments.

Saudi organizations will gain significantly from the economic growth and ongoing infrastructure development; however, this will also result in unprecedented levels of competition, and increased pressure to automate and improve efficiencies and productivity.

The Saudi Arabian ICT market will continue

to grow at a robust rate in the near term with government ICT spending being one of the main engines of growth, mainly focused on projects for the development of healthcare, education, social welfare and transportation sub sectors. Spending on packaged software and IT services will grow faster than the spending on infrastructure hardware as organizations look to improve utilization of IT assets and improve automation.

Increased awareness of IT security risk and importance of business

Continuity will push major organization to look for reliable partners who can help mitigate any risks that could affect IT operations. Disaster Recovery, Business Continuity and similar security related concepts are high on the priority list of Saudi ClOs.

Cloud computing in the kingdom is moving

from "hype" to "test" phase and Saudi ClOs are scoping projects in this domain. The current preference of private cloud will gradually change as the market matures and local service providers continue to expand their public cloud offerings. Progressive telecom operators are expected to dominate this market based on their superior offerings and early market advantage.

The Unified Communication and Collaboration solutions market in the

kingdom is expected to grow significantly with the increasing adoption of integrated services such as telepresence, collaborative business applications and fixed-mobile converged voice solutions. The rapidly growing small and medium businesses (SMBs) segment will find the seamless communication, cost savings and ease of adoption of such solutions attractive and will have a greater appetite for them.









IDC Opinion

Saudi organizations have benefitted significantly from the Kingdom's rapid economic growth and the investments made by the government in various development projects. However, keeping pace with business expansion and an increasing demand for greater efficiencies and improved productivity is a challenge for CIOs. Organizations are keen to adopt ICT, however, lack of skills, process immaturity and increasing technology complexity are inhibiting them. Outsourcing options are becoming increasingly attractive but security concerns often prevent or hamper such initiatives. Having said that, IDC believes Saudi organizations are gaining confidence in remote service models and the adoption of managed services and cloud will gain momentum in the next few years.

SAUDI ARABIA IT SPENDING - 2012 - 2017 (IN SAR MN)











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